Vision 2020 - A world-leading actuarial education programme for Africa

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As part of creating an education vision, we need to ask some very deep questions.
Maybe not quite the meaning of life, but something just as important

What is the core competency of an actuary?
1. Background to this paper
2. Criteria for a successful education system in 2020
3. Core competency of an actuary
4. Specialisations
5. A four-phase education system
6. Implementation and conclusions
Background To This Paper I

- Actuarial Society education system launched 2010
  - Localisation effort was largely in establishing an infrastructure around already localised education capability
  - UK curriculum structure retained
- Drivers towards establishing a long-term view of South African actuarial education
  - During extensive debate about incorporation of ERM subject, it was realised there was a vacuum in terms of a long-term view of our education structures
  - Other drivers include Africa, transformation, pass rates, international initiatives
Background To This Paper II

- Bellis Framework
  - 3 aspects of a profession
    (technical/normative/organisational)
  - Used in normative skills development, new ASSA PCS, IAA
- Principles of Professionalism
  - Relatively little thinking around ASSA strategy regarding technical skills
Background To This Paper III

- Curriculum developments in English-speaking countries over the last 20 years have seen:
  - Less traditional life insurance work (e.g. detailed exposed to risk methods)
  - Most concepts taught in a generic context (rise of A301 and similar subjects) rather than practice-area specific
  - Greater specialisation
  - More normative skills
The Magnificent 7...criteria for a successful education system

1) Best current international practice to the extent that the system is regarded as world-leading, with full international recognition

2) A lifelong learning approach with integration of technical and delivery skills from the start of the process
The Magnificent 7...criteria for a successful education system

3) Strengthening the core component of the education system to ensure the core competencies of an actuary are instilled

4) Ensuring that actuaries are leaders in the fields where specializations are offered
The Magnificent 7...criteria for a successful education system

5) A syllabus and system that allows transformation of the profession in South Africa

6) Relevance and access to the rest of Africa

7) Improved pass rates for students without compromise on standards
Core Competency

- Researched a number of frameworks, including ASSA Vision
- Common threads around risk and modelling
- Possible core competency statement derived from these common threads "the ability to understand risk (predominantly, but not exclusively financial), specifically by being able to develop, apply and communicate models of risk and uncertainty."

2013 Convention 31 Oct & 1 Nov
A possible framework for the core syllabus

BACKGROUND SUBJECTS

- Mathematics
- Statistics
- Economics
- Finance/Acc
A possible framework for the core syllabus

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Mathematics  Statistics  Economics  Finance/Acc  

Core Actuarial Toolkit of Models Of Risk And Uncertainty
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BACKGROUND SUBJECTS

Mathematics

Statistics

Economics

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Core Actuarial Toolkit of Models Of Risk And Uncertainty

Assets (different classes, financial ecos, behavioural finance)

Liabilities (pricing, reserving etc. in detailed context)
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- Mathematics
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Core Actuarial Toolkit of Models of Risk and Uncertainty

Assets (different classes, financial ecos, behavioural finance)

Liabilities (pricing, reserving etc. in detailed context)

Risk Management
- Capital
- Profits
- ALM
- ERM

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NORMATIVE (DELIVERY SKILLS) TAUGHT THROUGHOUT (ETHICAL, LIFE SKILLS, COMMUNICATION, BUSINESS)

Mathematics

Statistics

Economics

Finance/Acc

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Specialisation

• Personal view is that specialisations should be more in-depth to accommodate greater bodies of knowledge – increasingly there will be an analogy between the Associate as a GP and the Fellow as a specialist doctor.

• In areas that we choose to specialise in (and this will be limited by practicalities), actuaries should be seen as thought leaders. Requires both in-depth technical understanding and practical business outlook.
A four phase education system

• Premise is that the four phases of normative skills are also useful for technical education and will allow four phases of integrated actuarial education
  • Phase 1 - Undergraduate
  • Phase 2 - Honours/Preliminary Working Phase
  • Phase 3 - Associateship
  • Phase 4 - Fellowship
Phase 1 - Undergraduate

- Covers basic actuarial toolkit, should include some normative skills so that students understand context and also early exposure to practical modelling etc.
- Focus should be on performance in overall degree, and less on individual subjects (already UK approach)
- Careful thought around those who don’t go to accredited universities (including Rest of Africa)
- Suggest completion of this phase leads to a qualification
Phase 2-Honours/ Preliminary Working

• Focus on in-depth understanding of assets and liabilities, especially in context of main financial services

• Normative focus on communication, language skills- preparing students for more conceptual exams
Phase 3 - Associateship

- Critical integrative phase for first level of professional qualification – should be tougher than current Associateship

- Technical focus on integrating asset and liability understanding through concepts of risk management, capital, profitability (include a number of ERM concepts)

- Normative focus consistent with current Actuarial Professional Practice subject being developed
Phase 4- Fellowship

- Focus on in-depth knowledge, application, judgment in a specific field
- Similar volume to F1 and F2 in single field but can be more focussed
- Normative skills development to focus on strategic, business skills
- Possibility of Research Fellowships at Doctoral level?
Implementation

• Vision needs to be co-created; this is a straw-man starting point

• International dialogue on core competencies has also just commenced - we can also work with other actuarial societies on many aspects of this vision

• Critical role for universities as partners

• Need to develop greater capacity to teach and examine ERM
Conclusion

• Need to dream big to achieve the seven criteria but we have done a lot already

• Current projects in normative skills, banking, pensions are consistent with this thinking and world-leading

• Dream big on education – or go home!
Discussion And Feedback

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