Actuarial education in universities: Where to now in the big wide world?

Dr David Knox, Sydney
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And .... the first university programme with actuarial exemptions began. The actuarial profession would never be the same again.
The world has changed since 1968
How has it affected our profession?

- Technology is everywhere
  - We can do so much more

- We are a global profession
  - Country boundaries are becoming less relevant
  - Actuaries and actuarial graduates are mobile

- Actuaries have greater competition
  - We no longer have a right; we have to earn it

- Most actuaries work in financial services but …
  - This is an ever changing industry
    - Long term employment is unusual
  - Life insurance and DB super no longer dominate
  - There is no longer a natural home for actuaries
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How has it affected the universities?

- Universities now perceive an actuarial programme to be desirable
- Remuneration packages for universities are more flexible
- Universities are under greater financial pressure
- Australian universities are seeking overseas students
- HECS is a fact of life
- There are many more actuarial graduates
- Actuarial employers are more selective
- Actuarial university programmes are established
What are some capabilities that actuarial education should produce?

- An ability to think through issues and not just get the right answer
- A questioning approach – Is the answer reasonable?
- Diversity in graduates ⇒ diversity in the profession
- A sound ability to use IT and modelling skills
- Strong mathematical and analytical skills
- Interpersonal skills, including
  - teamwork skills
  - communication skills
- An ability to think “outside the square”
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Are our current approaches limiting the profession?
The traditional accreditation process

- Traditionally
  - Does the university programme “match” the Institute syllabus on a subject by subject basis?
  - This was a new venture and some actuaries were suspicious!
  - Macquarie could not be allowed to produce weaker students!
  - Such an approach was needed in 1968

- The profession has moved on during 40 years
A revised accreditation process

- Engineers Australia

- The criteria for accreditation is based on
  - The operating environment
    - Staff numbers and funding
    - Leadership
  - The academic program
    - Specification of educational outcomes
    - Targeted graduate capabilities
    - Alternative pathways (e.g., electives, thesis options, etc)
  - Quality systems
    - Engagement with external constituencies
    - Processes for setting and reviewing outcomes
    - Benchmarking
What are some of the outcomes?

- A “macro” approach to accreditation
- The program could focus on desirable capabilities, not “all the details”
  - The requirements will not be solely based on content knowledge
- Flexibility and some electives would give students greater freedom and engagement. For example:
  - overseas students from different markets
  - research skills
- Students will engage in a wider range of topics ⇒ diversity
- “Exemption pressure” will not drive the education experience
- Universities will have greater freedom in their educational programme
  - They will have a greater incentive to lead!
The next step – a college after university but before work

- Colleges of Actuarial Practice (Law)
  - Practical skills and training
  - Work management
  - Business skills
  - Strategic thinking
  - Group work
  - Professional values (the new “actuary”)

A graduate who has actuarial understanding and is able to apply his/her skills in a range of situations in different businesses and different countries

- Note: The actual structure of the College has many possibilities
Where to now in the big wide world?

- Actuarial graduates will increasingly work in diverse fields
- We need to give them flexible skills that attract them and engage them
- We should make very few assumptions about their future work
- If we help them develop the right capabilities they will be more
  - useful to employers
  - useful to our global community
  - likely to associate with the actuarial profession.
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Bernard Benjamin and Alfred Pollard took a huge risk 40 years ago; the actuarial profession is very thankful they did.

Are we willing to take the next visionary steps?