



## **Actuarial Education**

#### "The Business Element"

Tuesday, March 19, 2002 12:00pm



## What is an Actuary?

"... someone who is qualified to evaluate the risks and probabilities and their financial consequences and applies those skills in the solution of business and social problems, particularly those involving future uncertainty."



#### Agenda

- Problems with current system
- Proposed changes
- Results anticipated
- Value of taking this approach



## **Challenges Facing the Profession**

- Longevity
- Growth
- Recognition

New Challenge for



#### **Solutions**

- Well-rounded actuary
- Training in a business context
- Different forms of business exposure
  - actuarial control cycle
  - early orientation course
  - modules on business skills
  - seminars, case studies
  - personal financial education

### **Actuarial Control Cycle**

- Diagnose the problem
- Develop a solution
- Carry through the solution
- Measure the outcomes
- Communicate ideas and recommendations
- Operate within a professional context



### Vision through the Ages

- "An actuary must be a mathematician, but a mere mathematician will be a very incompetent actuary" *A.H. Bailey, 1880*
- "Should we not see ourselves as mathematicians applying our skills in the business world?"
  - C.D. Daykin, 1994





#### **Credentials**

- Previous papers on the subject
- Committee reports on education reform

Own experience with exam system and in the workplace



#### **Benefits for All**

- Increase visibility
- Public outreach ensures our usefulness
- Attract students suited to be leaders
- Open doors with solutions for governments
- Retirement security, heath care provision, long-term care, housing, transportation, food supply



#### **Actions to Take**

- Deflate the myth: a narrow expert
- Bridge the gap between actuarial science and practice
- Structure early training to show how actuarial work is interwoven with other disciplines
- More explicit ethics content
- Explain the models and the commercial and social benefits



## **Challenge to Survive**

- Competition from related disciplines
- Perceived narrow field of expertise
- Relegated to "technical work"
- Poor communications with non-actuaries



#### Survival of the Fittest

- Better equipped to engineer and manage future projects
- Manage and meet expectations of stakeholders
- Adapt to diverse demands
- Practical, beneficial and cost-effective solutions



#### Join the Team

"Should we not be looking to apply our skills in the widest possible range of contexts, not necessarily replacing those with other skills, but seeking to complement them as part of a team, to the greater public good?"



### Whose Interests are we Serving?

- Stakeholders' interests
  - employees
  - employees' families
  - company management, shareholders, creditors
  - policyholders
  - pensioners, trustees
- No conflict of interest when working for client and serving the public

## **Quality Service Means ALL Parties Benefit**

"Above all, we are members of a profession committed to serving the interests of our clients and principals - the wider public interest."



## **Ground Lost Following Litigation**

- Members' expectations not fulfilled
- Ignoring clients' interests
- Feeling of mistreatment
- Loss of trust and respect





## **Restore Trust and Respect**

- Incorporate business ethics in training
- Responsible for ordinary people
- Develop sound public policy
- "The profession exists for the protection of others, not for the protection of its members."



### Challenges to Growth

- Expand boundaries of actuarial science
- More interaction with "non-mathematical" disciplines
- Acquire vision and entrepreneurial skills to anticipate and provide for evolving social needs
- Global trends => moving from local to international
- Communicate concise practical information



#### "Think Outside the Box"

- Expand to non-traditional work
  - Adapt to society's changes
  - Cope in this expanding environment
- Serve wider public interest
- Expert to advise and implement
- Anticipate future needs
- Potential for diverse applications



#### Much More than Technicians

"...we must also affirm clearly that we are not only mathematicians. We are specialists in the application of mathematical skills to problems in the real world of business and finance...We are much more than technicians."



## Challenges for Greater Recognition

- Communicate better with non-actuaries
- Design relevant products and services
- Expert in the security of funds
- Objective in spite of powerful commercial pressures
- Human resource management



### Spread the Word

- Increase visibility with non-actuaries
- Increase understanding of social benefits
- Increase understanding of actuarial work
- Image of generating wealth
- More public recognition for actuaries as professionals not technicians



# Talent Needed for the Profession to Prosper

- Actuarial and financial capabilities
- Business and communication skills
- Adapt to change
- Think critically
- Apply professional judgement



## Rise to the Top

Multi-faceted financial engineer

Expert with uncertainty

- Social awareness
- Thought leader
- Innovative thinker
- Culture of creativity





#### Summary

"We must build the confidence of our clients, our employers and the ultimate consumers of our services, so that we can fairly say 'You can trust an actuary'. We are the profession that turns financial promises into reality."



#### Recommendation

"We must adapt to the changing environment...we must retain our distinctive world view, based on a rigorous mathematically-oriented education combined with broader skills of analysis, synthesis, critical evaluation and communication"



#### **Recent Developments**

- Institute of Actuaries
  - Career Development Day
  - Knowledge Portal
  - Mentors and Peers Program
- Combined Universities Tuition and Education company



#### Web Sites for Career Development

www.actuaries.org.uk/finance\_invest/careers\_frameset.html
www.actuaries.org.uk/finance\_invest/conferences\_frameset.html
www.actuaries.org.uk/finance\_invest/mentors\_frameset.html
www.actuaries.org.uk/finance\_invest/peers\_frameset.html
www.actuaries.org.uk/finance\_invest/career\_dev\_day/index.html



## Acknowledgements

- Colleagues
- Friends
- Family
- Students



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### Invitation for discussion

