ASSA Education

Mike McDougall
Petrus Bierman
Andrew Gladwin
Agenda

• Office update
• Education update
• International actuarial education developments
Office Update
Purpose of the Office

- Enhance the standing of the Society
- Serve members
- Ensure sustainability of the Society
Recap from 2013

• Reorganisation & relocation
• CPD Review
• Education changes
• Broadening the profession’s role
• Maths and science developments
Reorganisation & relocation

• Completed in April 2014

• Successful implementation

• Invigilators and students – best exam session yet!
CPD Review

• Pilot study underway
• 30 volunteers
• Alignment to employers and Normative skills
Education changes

• Free choice at F100 – implemented successfully
• Normative skills – in development
• Banking fellowship – in development
• Employee benefits rewrite – in development
Broadening the Profession’s Role

Environmental

- Data analytics;
- Private equity / venture capital

New area of practice / interest

Interest group develops

Formalise as committee

Develop guidance

Education & certification

Damages

Review
Maths & Science

- Significant web activity
- Trust registered
- Getting PBO status
- Excellent feedback
- How can we do it better?
Education Update
Education update

- Education seminar
- Mutual Recognition Agreements
- Examination results
- Projects
Education update

- Education seminar
- Mutual Recognition Agreements
- Examination results
- Projects
Education strategy

• Equip the actuary with the necessary knowledge and skills to be an effective professional actuary.

• To have a curriculum that is dynamic, appropriate to South Africa and internationally recognised.

• To have a world leading actuarial education system.

• To provide education opportunities in Africa and to address demographic transformation challenges.
Education update

- Education seminar
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Education update

• Education seminar
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• Examination results
• Projects
Mutual Recognition Agreements

• Institute and Faculty of Actuaries
• Actuaries Institute, Australia
• Society of Actuaries, Ireland
• Agreement with Actuarial Association of Europe
Education update

- Education seminar
- Mutual Recognition Agreements
- Examination results
- Projects
2014 Examination summary

• Examination process
• Electronic examinations
• Quality of examinations
## 2014 Examination results

<table>
<thead>
<tr>
<th>Series</th>
<th>Nr</th>
<th>Passes</th>
<th>2014 Rate %</th>
<th>2013 Rate %</th>
<th>UK 2014 Rate %</th>
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<td>A100</td>
<td>115</td>
<td>59</td>
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<td>F100</td>
<td>285</td>
<td>70</td>
<td>31*</td>
<td>27*</td>
<td>41</td>
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<tr>
<td>F200</td>
<td>145</td>
<td>43</td>
<td>30</td>
<td>28</td>
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<td>Total</td>
<td>1549</td>
<td>623</td>
<td>40</td>
<td>42</td>
<td>50</td>
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</table>

* Results include university results, based on average performance in the past.
Education update

- Education seminar
- Mutual Recognition Agreements
- Examination results
- Projects
Education projects

Course material
• Develop Banking subject specialist level
• Review and update Pensions & Employee benefits
• Update Life: Industry changes

Tuition
• Online platform tuition
• Online platform learning support

Local education system
• Normative skills
• Work Based Skills

Education Service
• Efficient administration process
• Efficient examination process
• Volunteer programme
Normative Skills

Normative skills and capabilities include:

a) interpersonal skills and effective communication;

b) business management and the regulatory environment;

c) professional and ethical practice and

d) life skills, including planning, research, time management.
Normative Skills programme
Work Based Learning

Approach:

- Learning at work complemented by APP courses.
- Encourage more pro-active planning by students with necessary input from supervisors.
- Supervisor responsible for appraisal at work to sign off on WBL.
- Encourage reflection, planning and action to foster lifelong learning.

Evaluation form:

- Evaluation form is an additional layer to support the existing performance appraisal processes.
- Replaces learning logs and annual review and sign off forms.
- Reduced Review Questions and certain competencies.
- Bi-annual submissions are a pre-requisite for workshops.
## Objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>WS 1</th>
<th>WS 2</th>
<th>WS 3</th>
<th>WS 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication: Written, oral, technical and non-technical</td>
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<tr>
<td>Business environment and financial industry</td>
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<tr>
<td>Legal principles and actuarial guidance</td>
<td></td>
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<tr>
<td>Strategic thinking and business decision making</td>
<td></td>
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<tr>
<td>Professionalism: Responsibilities, ethics, legal, conduct standards</td>
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<tr>
<td>Leadership and interpersonal skills</td>
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</table>
Core APP credits

1. Actively participate in workshops:
   - Pre-reading: 1 month prior to WS ✓
   - Assignment: 2 weeks prior to WS ✓
   - Pre-workshop assessment: 1 week prior to WS ✓

2. Submission of WBL evaluation forms at registration and bi-annually thereafter.

3. Formal assessments of the following:
   - Business awareness ✓
   - Model documentation, analysis and reporting ✓
   - Generic Practise Module ✓
### Transitional Arrangements

<table>
<thead>
<tr>
<th>Subject</th>
<th>Final offering of current exam</th>
<th>Credit will be granted for</th>
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</thead>
<tbody>
<tr>
<td>A401</td>
<td>2nd Semester 2014</td>
<td><em>Core APP Workshop 1 preparation and attendance: Day 1 Online assessment</em></td>
</tr>
<tr>
<td>A402</td>
<td>Early in the year 2015</td>
<td><em>Core APP Workshop 1 preparation and attendance: Day 2 Modelling Exam</em></td>
</tr>
<tr>
<td>A403/F303</td>
<td></td>
<td><em>New Work-based Learning requirements will be introduced from 2015.</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Students that have already registered for Work-based Skills by the end of 2014 can continue with the current requirements.</em></td>
</tr>
<tr>
<td>A404</td>
<td>2nd Semester 2015 for students who meet the academic requirements</td>
<td><em>Core APP Workshop 3 preparation and attendance: Day 2</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Core APP Workshop 4 attendance</em></td>
</tr>
<tr>
<td>F210</td>
<td>2nd Semester 2015</td>
<td>Online Generic Practice Module Examination</td>
</tr>
<tr>
<td>F304</td>
<td>2nd Semester 2016</td>
<td><em>Fellowship APP from 2017</em></td>
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*2014 Convention knowing more 22-23 October, Cape Town*
APP Workshops

<table>
<thead>
<tr>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>1st Semester</td>
<td>1st Semester</td>
<td>1st Semester</td>
</tr>
<tr>
<td>Workshop 1</td>
<td>Workshop 1</td>
<td>Workshop 1</td>
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<tr>
<td>Workshop 2</td>
<td>Workshop 2</td>
<td>Workshop 2</td>
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<tr>
<td>Workshop 3</td>
<td>Workshop 3</td>
<td>Workshop 3</td>
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<tr>
<td></td>
<td>Workshop 4</td>
<td>Workshop 4</td>
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<tr>
<td>2nd Semester</td>
<td>2nd Semester</td>
<td>2nd Semester</td>
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<tr>
<td>Workshop 1</td>
<td>Workshop 1</td>
<td>Workshop 1</td>
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<tr>
<td>Workshop 2</td>
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<tr>
<td></td>
<td>APP Fellowship</td>
<td>APP Fellowship</td>
</tr>
<tr>
<td>Core APP</td>
<td>Fellowship Workshop</td>
<td>Fellowship Workshop</td>
</tr>
<tr>
<td>Fellowship APP</td>
<td></td>
<td></td>
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## Deliverables

### Action

<table>
<thead>
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<th>#</th>
<th>Delivering on the Strategic Initiatives</th>
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<tbody>
<tr>
<td>1</td>
<td>Normative Skills: Core APP, Workshop 1</td>
</tr>
<tr>
<td>2</td>
<td>Normative Skills: Core APP, Workshop 2</td>
</tr>
<tr>
<td>3</td>
<td>Normative Skills: Core APP, Workshop 3</td>
</tr>
<tr>
<td>4</td>
<td>Normative Skills: Core APP, Workshop 4</td>
</tr>
<tr>
<td>5</td>
<td>Normative Skills: Fellowship APP</td>
</tr>
<tr>
<td>6</td>
<td>Normative Skills: WBL</td>
</tr>
<tr>
<td>7</td>
<td>Develop course material: Banking</td>
</tr>
<tr>
<td>8</td>
<td>Enhance course material: Pensions and EB (F104 and F204)</td>
</tr>
<tr>
<td>9</td>
<td>Enhance course material: Life Insurance (F102 and F202)</td>
</tr>
<tr>
<td>10</td>
<td>Tuition: Use online platform for F200 tuition</td>
</tr>
<tr>
<td>11</td>
<td>Tuition: Provide online learning support for F100 (pilot)</td>
</tr>
</tbody>
</table>

### Estimated Timelines:

- **Development**
- **Implementation**

The timeline for each action is color-coded to indicate the quarter in which the activity is scheduled to occur. The chart uses a color gradient to differentiate between ongoing development and completed implementation phases.
International actuarial education developments

IAA Syllabus Review: Preparing Actuaries For The Future

Andrew Gladwin
“future education should foster the creativity that humans will need to set them apart from computers. There should be less rote-learning and more critical thinking.”
Why Focus On Educating The Actuary Of The Future?
(And Change Something That Works Today)

- Changing world, changing workplace
- Skills that actuaries had which were successful in the past not necessarily future fit
- Many actuarial societies experiencing change in the demand for actuaries (decline in traditional areas, opportunities in new areas)
- Consequently many actuarial societies relooking at structure and delivery of actuarial education
- These factors drove the formation of the Educating Future Actuaries Task Force in October 2013. The Task Force reported to the IAA Education Committee
Recommendations Of The Educating Future Actuaries Task Force

• Unique value of the actuary seen as being a professional risk manager (i.e. understanding, being able to model risk, but essentially also having a professional underpin)

• Generic toolkit of an actuary should be able to be applied in a number of current and new fields of practice

• Could be combined with specialist learning to enable actuary to play important roles in specialist area –but the core generic competencies will define an actuary

• IAA should undertake syllabus review taking into account these recommendations and ensuring actuaries are future-fit
The Recommended Framework For Setting Out The New Syllabus

Revised Bloom’s Taxonomy (RBT)
Cognitive Process Dimension

<table>
<thead>
<tr>
<th>Verbs</th>
<th>1. REMEMBER</th>
<th>2. UNDERSTAND</th>
<th>3. APPLY</th>
<th>4. ANALYZE</th>
<th>5. EVALUATE</th>
<th>6. CREATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recognize, Recall</td>
<td>Interpret, Exemplify, Classify, Summarize, Infer, Compare, Explain</td>
<td>Execute, Implement</td>
<td>Differentiate, Organize, Attribute</td>
<td>Check, Critique</td>
<td>Generate, Plan, Produce</td>
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<tr>
<td>A. Factual Knowledge</td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>A4</td>
<td>A5</td>
<td>A6</td>
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<tr>
<td>B. Conceptual Knowledge</td>
<td>B1</td>
<td>B2</td>
<td>B3</td>
<td>B4</td>
<td>B5</td>
<td>B6</td>
</tr>
<tr>
<td>C. Procedural Knowledge</td>
<td>C1</td>
<td>C2</td>
<td>C3</td>
<td>C4</td>
<td>C5</td>
<td>C6</td>
</tr>
<tr>
<td>D. Metacognitive Knowledge</td>
<td>D1</td>
<td>D2</td>
<td>D3</td>
<td>D4</td>
<td>D5</td>
<td>D6</td>
</tr>
</tbody>
</table>
What Will Be Different In The New Syllabus?

• Strong technical underpin important – need to ensure this can be applied in a wide range of areas
• Ensuring an understanding and application of all types of risk
• Ensuring actuaries can work with and understanding the implications of big data
• Delivery/professional skills critical– including communication, business awareness, teamwork, project management
• Strengthening the professional/ethical underpin as this is critical to the brand of actuary
• Critical thinking/higher order skills increasingly important (e.g. not just understanding a model, but communicating the limitations of a model)
• Explicitly setting out the level and depth of coverage of syllabus objectives
Will The New Syllabus Be Longer?

• Intention is that it should be the same length

• New syllabus should be more detailed as it will set out depth and level of coverage

• Therefore some background areas should be covered in less depth, and some topics which may be seen as specialist knowledge would be outside core syllabus

• Impact may vary between IAA members, depending on current depth and coverage
Next Steps

• Draft new syllabus will be available in time for IAA meetings in Zurich April 2015
• Extended education meetings in Zurich to allow a wide variety of education stakeholders to discuss draft
• Further refining of syllabus and ongoing consultation with key stakeholders with expectation that IAA Council will approve new syllabus in the first half of 2016
• Appropriate time will be given for IAA members to adapt to new syllabus
In Summary

• Current actuarial education has served the profession well, but change is needed to equip actuaries for the future and allow the profession to adapt and grow
• New syllabus is critical in framing the competencies required of the future actuary
• Will be opportunities for consultation – please provide your views as this is a critical strategic issue for the IAA and all member associations
Questions?
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<tr>
<th>Name</th>
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<th>Email</th>
</tr>
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<tbody>
<tr>
<td>Mike McDougall</td>
<td>+27 (0) 21 504 4651</td>
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<td>Andrew Gladwin</td>
<td>+27 (0) 21 509 5182</td>
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