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 Recognize, Recall</th>
<th>2. UNDERSTAND Interpret, Exemplify, Classify, Summarize, Infer, Compare, Explain</th>
<th>3. APPLY Execute, Implement</th>
<th>4. ANALYZE Differentiate, Organize, Attribute</th>
<th>5. EVALUATE Check, Critique</th>
<th>6. CREATE Generate, Plan, Produce</th>
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<tbody>
<tr>
<td>Objects</td>
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<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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<td>B. Conceptual Knowledge</td>
<td>B1</td>
<td>B2</td>
<td>B3</td>
<td>B4</td>
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<td>C. Procedural Knowledge</td>
<td>C1</td>
<td>C2</td>
<td>C3</td>
<td>C4</td>
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<td>C6</td>
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<td>D. Metacognitive Knowledge</td>
<td>D1</td>
<td>D2</td>
<td>D3</td>
<td>D4</td>
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<td>D6</td>
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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