Actuaries – A Learning Profession?

Prepared by Professor Clifford Friend

Presented to the
2023 International Congress of Actuaries
28 May – 1 June 2023

Institute of Actuaries of Australia
ABN 69 000 423 656
Level 2, 50 Carrington Street, Sydney NSW Australia 2000
t +61 (0) 2 9239 6100
e actuaries@actuaries.asn.au **w** www.actuaries.asn.au

Actuaries – A Learning Profession?

Clifford Friend

Director of Engagement & Learning

Institute & Faculty of Actuaries, UK

Summary

Actuaries – A Learning Profession? What a question! How could it not be a learning profession, rooted as it is in members drawn from a pool of highly mathematically literate graduates, professionally qualified through what is considered a rigorous and some might say overlong professional study pathway?

However, at the IFoA we have stepped back from such simple assertions to take a more independently informed look at the profession and its future; one that considers the future needs of all professionals, including actuaries, in times of rapid change, and which addresses not only the contemporary 'technical' competencies members will need, but also the personal attributes they will require for sustainable and successful future careers.

We have conducted our own 'Moonshot' project to address the future competencies needed by our members, and in this paper evidence our view that actuaries have not been part of a truly learning profession. We conclude that it needs to now become one to secure our members' future. We outline in the paper the very significant shift we believe is now needed to develop a 'growth mindset' across the profession, which will create the 'learning profession' necessary to secure future employment for our members.

Current Approach to Learning

Our 'Moonshot' project has concluded that the global actuarial profession has been far from a truly learning profession for many reasons. These include:

- It has historically recruited from a pool of 'smart' people who have often exhibited the traits of – in the words of Prof Carol Dweck [1] - a 'fixed' mindset.
- Learning during professional qualification focuses on 'passing the bar' – training to gain the short-term knowledge required to qualify and achieve immediate professional status and financial reward, rather than preparing an individual with the initial competencies and appetite for professional learning required for a long and successful career.
- The long process of qualification results in a learning culture which is often backward-looking – focussing on the challenges of pre-qualification study, rather than forward-looking about the competencies which will be required for the next role or to respond to changes in the profession more widely.
- Where actuarial associations require ongoing Continuing Professional Development (CPD), this is more often based on a formulaic regulatory approach rather than reflection on the development a member needs for their future career.

This has all resulted in a lack of focus by members on the Career-Long Learning they need as part of their career-planning, and a lack of a holistic view from their associations on members' Career-Long Learning requirements; national and international activities also being often narrowly focussed on aspects such as pre-qualification syllabuses, comparative standards of national qualifications, and the use of these measures as proxies for the international standing of global associations.

Our 'Moonshot' project has concluded that a more holistic approach is required to address these issues. It is no longer appropriate to simply make piecemeal adjustments to the profession's established approaches to learning; focussing on developments to pre-qualification learning by changing its technical content and/or adding new study areas such as ‘human-centric’ skills.

Does This Really Matter?

Our survey work and horizon-scanning with both members and employers has shown that a more holistic approach to career planning and Career-Long Learning is certainly currently at the top of their agendas. Both recognise the significant changes happening in the profession and that the speed of this is increasing. Keeping ‘up to date’, ‘career planning’, and ‘keeping up with relevant technologies’ are amongst the ‘Top 10 Work Challenges’ reported by our members, with around 2/3 of the IFoA’s global membership looking to actuarial associations to help them with their future careers; the most valued role of an association being Career-Long Learning to keep pace with changing business needs. Helping develop such professional knowledge and skills is reported by IFoA members as a ‘Top 5’ benefit of their membership, and that they want to engage more in Career-Long Learning.

They have therefore shown a greater than anticipated appetite for development of a more learning profession.

Why is this? We believe the evidence is clear. Many Futurologists, such as father and son Richard and Daniel Susskind [2] have addressed the impact of emerging technologies such as AI on future professional work, and indeed more broadly, the ‘Future of the Professions’ themselves. They talk about “how technology will transform the work of human experts” – such as actuaries. In more colloquial terms ‘will the robots eat members’ lunch’. Based on technological developments, and democratisation of the production and distribution of knowledge, futurologists predict a common pattern across the professions, including the actuarial one. This involves a challenge to the work of professionals as holders, analysers and distributors of professional knowledge, with successful individuals in future being those who instead interpret, communicate, and can ‘lift the lid’ on the ‘black box’ technologies they will increasingly depend on.

This is a profound shift for all professions, including the actuarial one, requiring a move up the professional value chain in response to the increasing risk of automation.

To illustrate this in a slightly ‘fun’ way, go to https://willrobotstakemyjob.com select a profession and it will predict its risk to automation. The futurologists’ view on the need for professionals to move up the value chain is starkly illustrated by such an ‘experiment’. For example:

Paralegals - 89% risk

Lawyers - 22% risk

To avoid having to check, actuaries are at a risk of 52%, lower than accountants (71%) but higher than statisticians (41%). But at significantly greater risk of ‘automation’ than other high knowledge professionals such as lawyers and chartered engineers. One can debate the veracity of the methodology, but there is a serious underlying point here - the continuing need for ‘reskilling the skilled’ – our members - throughout a professional career to move them from producers and distributers of knowledge, to interpreters and communicators, and to do so at a hitherto unseen pace. It also requires a shift from the relatively ‘fixed’ mindset of the past, where members consider themselves as being simply ‘very smart’ people who are resilient and adaptable to any changing future.

As Carol Dweck says “There’s another mindset in which these traits are not simply a hand you’re dealt and have to live with, always trying to convince yourself and others that you have a royal flush when you’re secretly worried it’s a pair of tens. In this mindset, the hand you’re dealt is just the starting point for development. This **growth mindset** is based on the belief that your basic qualities are things you can cultivate through your efforts”.

Our members are just beginning to recognise the true scale and pace of what is required, the need to develop more of a growth mindset, and to engage in career-long reskilling as part of a learning profession.

What are Members Looking For?

Our global membership is seeking more high-quality curated learning opportunities from us than has hitherto been available to them, with materials appropriate to their career-stage and learning style. They tell us that this needs to include bite-sized learning, formal training, and contemporary professional research, and they wish to access this through self-direction, digital delivery, peer-to-peer and formal learning. They do not expect us to be expert in everything, but expect us to lead on actuarial areas, and in other fields to act as 'sign-posters' to trusted expert sources of knowledge and learning.

We have already responded to such feedback by developing learning content through a new strategy of signposting/off-the-shelf first, partnering second, and finally, and only when strictly necessary, develop bespoke materials ourselves. Unlike the 'not-invented-here syndrome' often adopted by associations, this gives our members access to the most contemporary materials developed by true global experts in the relevant subject domain. Two examples of this include our recent introduction of a pre-Fellowship study pathway in Banking, offered in collaboration with the Actuarial Society of South Africa, and our Certificate in Data Science, offered in partnership with the Southampton Data Science Academy – a centre of excellence in data science (co-credentialed by both the IFoA and University of Southampton, UK).

Members and employers have also told us that our Career-Long Learning content, including that associated with our two professional qualifications, needs to be less directly focussed on 'being an actuary'. At first this appears strange, but they mean that it needs to address a wider range of competencies, including technical, business & management, and 'human-centric' competencies. This will develop the skills successful actuaries and employers tell us are the key to a future senior career. This feedback is consistent with a recent report by PWC on the 'Actuary of the Future' [3]. It also reinforces the importance of the competency-based approach we are developing to both qualification and our wider Career-Long Learning, in a similar way to the Society of Actuaries in Ireland and the Actuaries Institute Australia – to name just two sister associations. These frameworks reinforce the growing message that for successful careers, in future actuaries will need to demonstrate a wider range of competencies, the majority of which are beyond pure actuarial technical knowledge. Whilst this news is little revelation to our members approaching or holding C-suite roles, our evidence shows that this is commonly misunderstood by early-career actuaries who focus too much on development of their technical actuarial knowledge.

The learning landscape outlined here is very different from the historic focus of actuarial associations on qualification and audit-based CPD. Members recognise the necessity for a more 'arc of professional learning' from the very initial stages of pre-qualification through to the end of a member's career.

'Flipping' Our Learning

Our 'Moonshot' project has provided us with a strategic 'polestar' for the development of this 'arc of professional learning'. It has shown that we, like many sister associations, and our members themselves, have become overly fixated on the pathway to qualification. We have probably all neglected the scale of post-qualification learning that our members will need for successful future careers, and consequently have inadvertently created a disconnect between the pre- and post-qualification professional learning of our members.

We are now addressing this by 'flipping' our approach and looking more holistically at the needs of members whatever stage they are at in their career journey. And the surprising thing is there is a greater similarity in need across this spectrum than many might expect.

We have chosen to lead development of this 'arc of Career-Long Learning' with a focus on post-qualification offerings. This approach speaks to a large number of members who are probably currently under-supported, and provides the profession with many advantages including:

- It is agile - learning in newly emerging areas identified by horizon-scanning can be developed/signposted at pace and delivered to members ‘just in time’ to meet their immediate professional needs.
- A dynamic learning portfolio can be offered to all members and continually refreshed as new requirements emerge and others reach the end of their natural ‘product life cycle’.
- New offerings can be market-tested without the need for time-consuming formal pre-qualification governance.
- If market testing identifies learning of longer-term significance to the actuarial profession, then it can be introduced into pre-qualification curricula.

All our new content is developed following regular horizon-scanning and delivery is integrated across all our member-facing channels, including formal learning programmes, peer-to-peer through our digital communities, via our acclaimed thought leadership programme, events and conferences, and our member-led webinar programme.

This content is available to all members, pre- and post-qualification, and we intend to share it across this historic divide. To aid this we are introducing greater levels of optionality within our pre-qualification curricula to allow candidates to draw on this wider body of learning material on an individual basis when qualifying, promoting greater ownership over their professional learning, building their longer-term commitment to this, and developing a greater growth mindset.

We have also followed the same path as a small number of other fully-regulated actuarial associations in moving to a reflective practice based CPD scheme, encouraging members to become more engaged in their career planning, identification of their competency-gaps, and the Career-Long Learning necessary to prepare themselves for their professional future.

All is focussed on the development of a stronger learning profession which responds to the future needs of our members, prepares them for the future career challenges they will face, and builds a growth mindset into their key skills.

Building the Growth Mindset

We have, like many professions, identified that a growth mindset is key to our members’ future. It will underpin their desire to engage with the Career-Long Learning that is so essential to their futures. It is no longer sufficient to consider oneself as being simply ‘very smart’ to provide the resilience and adaptability actuaries will need for the future.

The actuarial profession is significantly behind other professions in recognising this, but thankfully can draw on a wealth of experience from these professions, and formal academic research, to accelerate development of this mindset amongst our existing members. We are already doing this through our Thought Leadership Programme which has been well-received by those who have undertaken our Growth Mindset Programme.

We also recognise that as we move forward as a profession, in future many individuals seeking qualification as an actuary – from Generation Z and Generation Alpha – will have been exposed to growth mindset development as part of their formal school education. This too will contribute strongly to our future as a learning profession.

However, perhaps equally as important for this future is the need to improve the ‘diversity of thought’ within the actuarial profession, which forms a key segment of our current Diversity, Equity and Inclusion (DEI) initiatives. A more diverse range of individuals seeking to qualify as an actuary brings with it diversity of thought, lived socioeconomic experience, and mindset. This is sadly still far too narrow amongst our members, who still come predominantly from a narrow pool of mathematics graduates and, as with much of the financial services sector, dominated by higher socioeconomic backgrounds. Improving the breadth of future members will broaden the profession’s diversity of thought, engagement with career-long learning, and help us to create the true learning profession we seek for our members.

Conclusions

Our 'Moonshot' project has shown that globally, actuaries have not been part of a truly learning profession and need to now become so.

To create the 'learning profession' necessary to secure their future employment, members will require a very significant shift to a 'growth mindset'.

It is no longer sufficient for members to consider themselves as being intrinsically 'very smart' to provide the resilience and adaptability they will need.

Members are just beginning to recognise the true scale and pace of what is required, the need to develop such a growth mindset, and to engage in more structured career-long reskilling as part of a learning profession.

A further key element is the recognition that for successful future careers, they will need to demonstrate a wider range of competencies, the majority of which are beyond pure actuarial technical knowledge. This will allow them to become professionals who can interpret, communicate, and 'lift the lid' on 'black box' technologies, skills which will be key if they seek future C-suite roles.

This will require a move away from the global profession's fixation on pathways to qualification, to a more holistic approach which addresses the competencies and learning needs of members whatever stage they are at in their career journey.

Thankfully our members have shown a greater than anticipated appetite for developments of this type.

They are now expecting actuarial associations to respond and support them more strongly to achieve personal success in their future careers.

References

[1] Carol Dweck, Mindset – 'Changing the way you think to fulfil your potential', publ. Robinson (2017)

[2] Richard & Daniel Susskind, The Future of the Professions 'How technology will transform the work of human experts', publ Oxford University Press (2017)

[3] https://www.pwc.lu/en/actuarial-services/docs/global-actuary-future-survey-results.pdf