



Chairperson's Corner

By Minyu Cao

2020, indeed, presents some extraordinary times. The coronavirus, has pushed us into a completely different life style with new terms such as flattening the curve and social distancing. This year, so far, has been difficult in many aspects. But I kept reminding myself that when I look back in a few decades, this probably is just a tiny piece of my life. If I reflect upon it, the quarantined life has brought some positive aspects to my personal life. Since my husband and I both have been working from home, we learned more about what each other actually does and have more appreciation of each other's work. Being together more with my 2-year-old daughter, not only has brought frustration (as one can imagine), but surprisingly has let us find more activities we enjoy doing together as a family. We are closer to our family now than before with more frequent phone calls to check on each other. I hope you and your family are doing well during this trying time.

During this time, the Actuary of the Future Section has also been working hard to propel several initiatives that we have planned for this year:

- We partnered with the Technology Section, and the Actuarial Innovation & Technology Strategic Research Group to put forth the second annual **Disruptions to the Actuarial Profession Contest**. We look forward to showcasing your ideas about how technology will revolutionize the actuarial profession and how actuaries can contribute to this process. This year, we open the contest up to everyone who is interested in technology and the actuarial profession, especially students in universities who want to engage in this future-shaping discussion. The contest is currently open until Aug. 3. Submit your essays or videos to aof@soa.org.
- We opened intern positions for our section. Our goal is to form bridges between college students and the SOA with

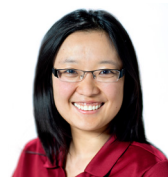


valuable work and networking opportunities. The intern program has been around for more than two years. In the past, interns have made significant contributions to our section podcasts.

- We have established our presence on Reddit. We developed a Reddit Etiquette list and have made posts regarding relevant information on Reddit Actuary group, such as the intern application information. We aim to reach different segments of our membership via this channel.

These are some of the highlights of the section movement this year. I hope you find them valuable to your membership.

As always, please let us know your thoughts and ideas. You can post them on LinkedIn, reach out to any council members or send an **email** to the Actuary of the Future Section. We look forward to hearing from you. ■



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What I Wish I Knew Then

By Tim Rozar

Author’s note: Last year I was asked by professors Guangwei Fan and Abe Gootzeit to speak to a group of aspiring ActSci students at my alma mater, Maryville University, about some things I had learned in my career. I was honored by the invitation, and shortly after my talk, I wrote this article to immortalize the key points.

In reflection, that seems like a lifetime ago. My thoughts go out to everyone who has lost loved ones during this pandemic and to those who are on the front lines fighting to keep the rest of us safe. Many of those students in the audience have since finished up their schooling via remote learning and are now attempting to enter a workforce in a world that is unlike anything we have ever seen. While I am very thankful to have a job that allows me to work remotely, I remain apprehensive about what the future may bring.

To those students and anyone else who happens to read this, I hope that some of the advice below still resonates, and I wish you all the best of luck in your future careers.

When I was in college, my parents lived about five miles from Maryville University, Dr. Fan was teaching me life contingencies, I was an intern for the parent company of RGA, and, right after graduation, I got married. Fast forward more than 20 years, and I am once again at Maryville, my parents still live five miles away, I still have a lot to learn from Dr. Fan, I am still working for RGA, and I am still (very happily) married. In some ways, my life might be viewed as a cautionary tale: if you aren’t careful, you might end up in the same place doing the same thing with the same people for the rest of your lives. It feels completely different, however. I’m not at Maryville as a student but as an alum. Dr. Fan isn’t an intimidating authority figure; he’s a mentor and a friend. My wife and I aren’t naive young newlyweds; we’re grizzled parents. And I’m not an actuarial intern; I’m an executive.

In more than 20 years in the industry, I’ve had some successes, made plenty of mistakes, and learned some things along the way.

So, for whatever it might be worth, here is some advice I wish someone had given me back then.

1A) BEING A GOOD ACTUARY REQUIRES A LOT MORE THAN PASSING ACTUARIAL EXAMS

We have a team that screens entry-level candidates, so by the time I am interviewing people, they all look great on paper: good grades, good internships, good recommendations, and good progress on exams. So, I’m looking for other stuff. Stuff like communication skills—we need people who can speak with confidence in front of a room full of people and can make complicated concepts accessible to non-technical audiences. Stuff like leadership—we need people who can lead themselves and show the potential to lead others. Stuff like diversity of thought—we need a collection of people who think differently and bring unique life experiences, backgrounds, and perspectives. And stuff like sense of urgency—we need people who have an innate drive to get stuff done because that is impossible to teach. Actuarial exams do cover relevant content and serve as a crude but useful screening mechanism, but at the end of the day, all



No matter how daunting and life-changing something seems, just get the best information you can and make the best decision you can. Life will go on.

that passing actuarial exams really proves is your ability to pass actuarial exams.

1B) BEING AN ACTUARY REQUIRES PASSING ACTUARIAL EXAMS

But you have to pass them. You can complain about all the reasons it isn't fair, but it doesn't matter. All actuaries have one thing in common: they passed their actuarial exams. By definition, that is what qualifies them as an actuary. That isn't to say you can't have a great career and a happy and fulfilling life if you don't make it through the exams. You absolutely can—just not as an actuary. So, as counterintuitive as it may sound based on everything I said about wanting holistic candidates with varied interests, skills, and backgrounds, the most important advice I can give an actuarial student is that your number one professional priority should be passing the exams. Put in time away from work, find a study partner, work tons of sample problems, go to exam seminars, lock yourself in a room ... do whatever it takes. If you want to join our club (at least the way the rules are written today), passing exams is the price of admission.

2) FAILURE IS ALWAYS AN OPTION

I don't care if you got straight A's and were the captain of your high school's state champion mathletes team. Everyone taking actuarial exams is really smart, and yet the passing rates are less than 50 percent. Get used to it: you are likely to fail from time to time. When I took my first exam in February of 1995, I failed. When I took it again in May, I failed. And in November? Yep, failed it again. That's right: before I passed any exams, I had already failed three times (with a score of five each time). I went on to fail a total of nine actuarial exams in my illustrious exam-taking career (with eight fives!). Am I embarrassed by this? Not at all. As I said before, being a good actuary takes a lot more than passing exams, and without trying to brag, I am pretty good at some other stuff that isn't tested on the exams. But I was one exam sitting away from giving up on being an actuary—multiple times. Ultimately I persevered, but even if I hadn't, I would have ended up fine. I am still the same person. I have lots of other interests, and I have friends and family that care about me regardless of the letters after my name.

3) THE MORE YOU LEARN, THE MORE YOU REALIZE HOW LITTLE YOU KNOW

I spent a lot of time in my late teens and early 20's trying to get better at chess, because I was exactly that cool. I memorized the openings, I played countless hours on my computer, and I read lots of books. Then one summer while I was in college, the company I was interning at hosted a charity event where one of the other actuaries played about 30 games simultaneously against other employees. After about an hour he had won every game (including annihilating me). It was humbling, but it taught me how big the gap is between good and great (or in my case, between terrible and great). The better I got at chess, the more I realized how bad I actually was. Learning curves are like that. There is initially a steep increase in competence whenever you pick up a new skill. It is invigorating to literally see yourself getting better and better every day. But eventually, that levels off, and it becomes difficult even to maintain your current level of competence, let alone to keep getting better. Don't be discouraged by this. You should absolutely strive to be a lifelong learner, pick up new skills, and continue to try getting better at skills that you already have. Just make sure to carry with you a healthy self-awareness that, regardless of where you are, you still probably have a long way to go.

4) GO FOR THE BRONZE

Imagine the 100-meter dash final at the Olympics: eight of the world's greatest sprinters running 100 meters in less than 10 seconds. The gap between the gold and the bronze could be hundredths of a second—a snap of your fingers. At the finish line, the gold medalist feels relief. He was probably expected to win, and anything short of the gold would have been a great disappointment. The silver medalist feels misery. He worked so hard and was so close to winning. The bronze medalist feels unbridled joy! He probably wasn't expected to win at all and was very close to finishing off the medal stand altogether, but for the rest of his life, he will be known as an Olympic medalist. (There is even academic research¹ that validates these emotions). My advice: work hard and do your absolute best, but realize that there will always be someone better—and that is OK. Don't get so obsessed with being the best that you are unable to celebrate being great.

5) GO DEEP

It is nearly impossible to be the absolute best at anything, but along the path to life-long learning, you might just find a topic where you can become an expert. At some point, I stumbled into being known as an expert in the field of mortality experience analysis. I found it interesting, and it was very useful in my job. I read research reports, I attended conferences, I learned from people around me, and I personally sourced and analyzed a lot of raw data. When my colleagues and I started publicly sharing some of our insights into mortality experience, my name became attached to the topic. Professionally, this can open doors to career-defining opportunities. So, find a topic that is interesting

to you and become an expert—no matter how niche your field of expertise might seem.

6) DANCE WITH THE ONE THAT BROUGHT YOU

Early in my career, my boss's boss's boss summoned me into his palatial office to congratulate me on a good year and to offer me some advice. He said I was at risk of being pigeonholed as the "technical guy." I took his feedback to heart, and within a year, I was enrolled in the Executive MBA program at Washington University in St. Louis, which was an amazing, life-changing experience. I soon had a broader view of business operations, leadership, and the global economy. I started to think more strategically and act with more confidence. This propelled me to new roles throughout the years, leading global teams and travelling all over the world. I was extremely grateful for taking his advice. Then, a little over five years ago, I was going through a 360-review process as part of a leadership program, and the feedback I received was something like "make sure you don't get pigeonholed as the technical guy." I was initially deflated, because I knew I had experienced huge personal growth in my leadership, communication, and interpersonal skills. What I chose to take away from the feedback was strong encouragement to continue with that growth. But at some point, I also had to accept that I kind of am a "technical guy." That reputation and those skills were a primary reason why I had succeeded in the professional opportunities that had been put in front of me. So, at this point in my career, I can confidently share my insights on leadership, business strategy, or innovation—but I'm also still happy to help you write an Excel macro.

7) CAREER PATHS ARE NOT LADDERS; THEY ARE JUNGLE GYMS

I inadvertently borrowed this one from Sheryl Sandberg,² but I find it especially true for actuaries. Our career paths seem to be laid out so nicely for us: actuarial intern, actuarial assistant, senior actuarial assistant, assistant actuary, associate actuary, actuary, senior actuary, and so on (or whatever your company calls these various titles). This is tantalizing, especially for someone who doesn't like to make big life decisions. Just pass exams, put in the time, and don't mess up too much, and you'll keep progressing up the ladder. The problem is that you may not get the well-rounded background that you need or find the role that is the best fit for you. Don't be afraid to try out different opportunities, and never view any steps along the way as a step backward. Just climb around—up, down or sideways—and you can have a lot of fun along the way.

8) MOST DECISIONS DON'T REALLY MATTER

OK, of course decisions matter—but they are rarely as important as you think they are. Actuaries tend to want lots of data and analysis upon which to base their decisions. But at some point, you end up with a "paralysis of analysis," and the only thing worse than making a bad decision is making no decision at all. If it turns out that you absolutely made the wrong choice, it can usually be undone or corrected, and you will learn from the experience.

This is true of even the biggest decisions in life. Your choice of college, career, and spouse are super important, and yet I know plenty of people who are living very happy lives who transferred colleges or changed careers or even got divorced and remarried (sometimes more than once). No matter how daunting and life-changing something seems, just get the best information you can and make the best decision you can. Life will go on.

9) JUST BECAUSE YOU CAN DOESN'T MEAN YOU SHOULD

As Uncle Ben told Peter Parker, "with great power comes great responsibility." The models that actuaries create, the products we develop, and the services we provide influence decisions that affect the lives of real people. For much of my career, I worked with life insurance underwriters to help validate the predictive value of data sources like prescription drug histories, motor vehicle records, and financial credit reports. If used appropriately, models using these pieces of data can lead to a more accurate, fair, and consumer-friendly underwriting process. But I worry about the temptation I see in the industry to keep pushing the envelope. It is important to always be challenging yourself to ask the right questions about data appropriateness, model suitability, privacy rights, and consumer fairness. This applies to things beyond life insurance underwriting, too. Actuaries ought to be developing easy-to-explain products that create real value for consumers rather than unnecessarily complex ones that exist only to exploit holes in reserve regulations. Trust is the cornerstone of a sustainable industry, and actuaries should be guardians of that trust.

10) MANUFACTURE SERENDIPITY

Steve Jobs wandered into a calligraphy class in college in an era where computer scientists didn't think about style, but according to Jobs, "If I had never dropped in on that single course in college, the Mac would have never had multiple typefaces or proportionally spaced fonts." George Harrison was so frustrated by "dopey accountants" (his words, not mine, although it is worth noting he didn't say "dopey actuaries") that he blew off a business meeting to hang out in Eric Clapton's garden on an unseasonably warm and cloudless day. If he hadn't skipped the meeting, he wouldn't have been there to write "Here Comes the Sun." Dr. Alexander Fleming left his lab dirty when he went on holiday break and came back to find the mold that had grown in his petri dishes had prevented the growth of his staphylococci samples. If he hadn't prioritized his holiday over cleaning, he wouldn't have discovered penicillin. Lin-Manuel Miranda picked up a copy of Ron Chernow's 818-page biography of Alexander Hamilton at the airport on the way to his family's vacation and read the entire book on the beach. If he had not been such a voracious and curious reader, he wouldn't have been inspired to create one of the all-time classic Broadway musicals. And, most importantly, in the 1940s, an Italian chef from The Hill neighborhood in St. Louis accidentally dropped an order of ravioli into hot oil instead of hot water. If he hadn't made this mistake, then the culinary deliciousness that is "toasted ravioli"

would be sorely missing from sports bars throughout the Greater St. Louis area. These people all did something unexpected, they opened themselves up to new experiences, they took risks, they put themselves in a position to be in the right place at the right time, they learned from their mistakes, and then they took advantage of it when the time arose. So, learn an unexpected skill, hang out with people who inspire you, take a vacation to recharge, pick up a book you might not otherwise be interested in, and experiment with things that don't seem like they should work together. You never know what happy accidents you might create.

So, there you have it: a couple of decades of life experience distilled down to 10 fortune-cookie-sized memes. You might not agree with all of them, but maybe some of them will resonate.

And hopefully, you will at least be inspired to pass on what you have learned to the next generation. ■



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ENDNOTES

- 1 https://www.researchgate.net/publication/15726123_When_Less_Is_More_Counterfactual_Thinking_and_Satisfaction_Among_Olympic_Medalists
- 2 <https://www.gsb.stanford.edu/insights/sheryl-sandberg-careers-arent-ladders-theyre-jungle-gyms>