

Chapter 17

SoTL as a Bridge to Enhance Actuarial Education Across Asia

Xiao Xu

 <https://orcid.org/0000-0002-6430-5810>

University of New South Wales, Australia

ABSTRACT

This chapter reflects on a practitioner's journey in the Scholarship of Teaching and Learning (SoTL) and explores the transformative role of the SoTL in advancing actuarial education across Asia. Drawing on over years of teaching experience, I share insights into how I have integrated technology and global perspectives into the curriculum. The narrative highlights my strategic use of GitHub Classroom to foster international collaboration and enhance student engagement through practical, real-world applications. By illustrating specific SoTL projects and their impacts on both my professional growth and student success, this chapter underscores the potential of SoTL not only to adapt actuarial education to meet regional demands but also to elevate it into a practice that is globally competent and culturally responsive. The insights presented aim to contribute to the ongoing dialogue on the importance of SoTL in navigating the complexities of higher education in Asia.

SECTION 1: INTRODUCTION

In the ever evolving landscape of higher education, the Scholarship of Teaching and Learning (SoTL) has emerged as a transformative force, bridging the gap between traditional academic disciplines and innovative educational practices. My engagement in SoTL is deeply rooted in actuarial science, a highly technical field that demands a teaching philosophy informed by academic rigor and enriched by diverse experiences across various disciplines and global contexts. My early years in China ignited a deep-seated passion for mathematically applied problems. This curiosity guided my academic pursuits in the United States and Australia, culminating in my current roles as a senior lecturer at the University of New South Wales (UNSW) in Australia and as the international research manager for the Society of Actuaries (SOA) in Asia. My professional journey has been significantly shaped by participating in various teaching conferences and exchanges, where sharing innovative educational ideas is paramount. These experiences have been crucial in comprehending the practical needs of local Asian actuaries, particularly in continuing education and the management of impactful research projects for the actuarial

DOI: 10.4018/979-8-3693-3727-1.ch017

community across Asia. Such engagements have demonstrated the vital role of SoTL in enhancing actuarial education programs throughout the region. Through SoTL, we leverage international experiences and insights to devise educational strategies tailored to meet the specific needs of Asian markets. This approach ensures a dynamic and responsive actuarial education landscape, preparing practitioners who are well-equipped to navigate the complexities of the financial world.

The following sections provide a detailed exploration of my SoTL journey. Section 2 examines the current actuarial education landscape, discussing the interdisciplinary nature of the field and highlighting disparities in educational resources across Asia. In Section 3, I reflect on my transition from an actuarial practitioner to an educator, and how this shift has shaped my teaching philosophy, with influences from Asian educational principles and global theories. Section 4 highlights my key SoTL projects, such as the integration of GitHub Classroom and the SOA Research Challenge, which have significantly improved student engagement and learning outcomes. Additionally, Section 5 explores my contributions to advancing global actuarial education through collaborations with international organizations like the United Nations Development Programme (UNDP), focusing on promoting sustainable education goals and developing faculty capacity in emerging markets. Finally, Section 6 emphasizes the importance of lifelong learning and continuing education for actuarial practitioners and reflect on how these initiatives have informed my teaching practices and supported the professional development of actuaries across Asia. Section 7 discusses the critical role of reflection in my SoTL practice, outlining how continuous feedback and adaptation have shaped my pedagogical strategies. Finally, the conclusion synthesizes the insights from my SoTL journey, emphasizing the transformative impact of innovative teaching methods and global collaboration in advancing actuarial education. It also highlights the ongoing pursuit of educational excellence through the integration of technologies, continuous reflection, and the promotion of sustainable actuarial education practices across Asia and beyond.

SECTION 2: ASIAN ACTUARIAL EDUCATION LANDSCAPE

Actuarial science is an interdisciplinary discipline that blends concepts from mathematics, statistics, data analytics, accounting, economics, and finance to address long-term financial management challenges in sectors such as insurance, banking, and pensions. This highly technical subject is also distinguished from other subjects by its close connection with professional organizations that serve as accreditation bodies, making the actuarial curriculum uniquely practical and closely connected to real-world actuarial practices. Students pursuing actuarial degrees typically begin with foundational courses in mathematics, statistics, economics, and accounting. Early in their academic studies, they aim to pass the first few preliminary actuarial professional exams, which are part of the accreditation process for becoming a qualified actuary by the relevant accreditation body. These exams cover essential knowledge and skills needed in the field and are critical for advancing in the profession.

Globally, there are many established actuarial accreditation bodies that play pivotal roles in shaping the career paths of actuaries. Notable among these are the SOA and the Casualty Actuarial Society (CAS) in the United States and Canada, which specialize in life and health, as well as property and casualty insurance. Additionally, national and local organizations such as the Institute and Faculty of Actuaries in the UK, and the Actuaries Institute in Australia, are examples of the prominent members of the International Actuarial Association (IAA). This global body unifies the professional practices and ethical standards of actuaries across various countries. These organizations typically offer two main levels of

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