

PART 4: TWO REFLECTIVE CASE STUDIES

Provide reflective accounts of two contributions (one per case study) you have made that have had a significant impact in relation to learning and teaching, and demonstrate that you meet the criteria for Senior Fellowship. These case studies allow you to give in-depth reflections on two distinct aspects of your professional practice in teaching and/or supporting learning that demonstrate your successful and sustained contribution to others, specifically through engagement with your peers through mentorship or leadership, and supervision and support of junior staff such as tutors or demonstrators.

Use each case study to address different aspects of Descriptor 3, with a focus on D3.VII: successful co-ordination, support, supervision, management and/or mentoring of others - whether individuals and/or teams - in relation to teaching and learning.

Structure your case study as follows: title, context, the issue(s) involved (including insights from learning and teaching research), the solution, and finally your evaluation and evidence of the impact of your strategy on enhanced student learning.

4.1 CASE STUDY 1: Introducing Health System Online Learning into Population Health Year 1 Curriculum**Integrating Health System Online Learning into Population Health Year 1 Curriculum (A1, A2, A3, A4, A5)****Context:**

Health outcomes are significantly influenced by structural and social determinants of health. It is imperative that future doctors possess a comprehensive understanding of the various determinants contributing to health and wellbeing, with the health system being a crucial factor. Health systems significantly influence people's access to quality healthcare when needed. As future medical professionals, our students will work across diverse healthcare settings. Exposing them to the landscape of Australian health systems and comparing these with those of other countries will prepare our graduates to adapt to various systems. Providing students not only with knowledge of Australian medical systems but also broader insights into health system functions and structures is highly relevant for preparing them to enter the health workforce pipeline both in Australia and internationally (V4)

Issue:

Recognising the importance of health systems in the career as health professional, in 2021, I led a curriculum mapping exercise focusing on Level 3 and Level 4 learning outcomes within the MChD program at ANU SMP across Y1 and Y2. It became evident that health system content was not adequately covered in the Phase 1 MChD curriculum, as evidenced by the Level 3 and 4 learning outcomes (V3, V4). While some health system related objectives were included in the Level 3 learning outcomes, they were not translated into Level 4 learning outcomes. Additionally, these objectives mainly pertained to service delivery and professionalism, overlooking overarching health system topics such as landscape, structure, functions, comparisons with other countries, and key challenges faced by health systems in Australia. This gap is not unique to ANU SMP but is a common issue across medical education systems (V4). There is a growing demand from health practitioners and medical educators to align medical education goals with health system outcomes (O'Brien et al., 2022; Bhatt and Arya, 2017).

Solution:

Following the curriculum mapping, I collaborated closely with the Population Health Theme Chair to address this gap. In 2021, we developed a Teaching and Learning Enhancement Grant Proposal to introduce three online interactive learning modules on RISE-360 for Year 1 medical students (K3, K4). The proposal underwent internal discussion with the entire population health team before being presented to the Phase 1 Education Committee for approval. After securing approval, we submitted the TELT Grant application and were awarded the grant for implementation in 2022 (K6).

We hired a health system specialist to develop the three online modules, incorporating critical inputs from the population health team (K1). Together, we defined the learning objectives for each module and designed the content and flow. The health system specialist initiated the content development in PowerPoint format, iterating with the population health team multiple times. The final content was reviewed by learning technologists (or TELT Team) at ANU SMP to ensure compliance with copyright and intellectual property rights (K6). The modules include learning materials, independent learning activities, embedded readings and video clips, self-reflections, and quizzes to assess student knowledge retention (K2, K3, K4, K5, V1, V2). Throughout the development process, we consulted various theme chairs within ANU SMP to avoid content duplication and ensure curriculum integration (K6). While the content was internally developed by the population health team, the interactive components and technical aspects of the module were designed by TELT Team (K1, K4, K6). These modules were successfully incorporated into the Year 1 teaching curriculum since 2022 (K4).

In 2023, I introduced a micro-teaching or tutorial on the health system topic, linking key concepts in the modules with clinical scenarios to explore complexities of access inequities, levels of care, and preventative measures in primary care settings (K1, K2, K3, V1, V2). This tutorial was developed in consultation with a rural generalist registrar to ensure relevance to clinical practice, especially in primary care settings (K6, V3). The aim was to consolidate student comprehension of the Australian health system landscape and enhance their understanding of their position within the system, emphasising their role in promoting health and wellbeing within the population they will serve in the future. Achieving this objective contributes to bridging medical education goals and health system outcomes by promoting health system-oriented teaching (V4).

Evaluation of Impact on Student Learning:

The online interactive modules have been integrated into Population Health curriculum for Year 1, distributed across three blocks. We maintain vertical and horizontal integration with other themes and frameworks (especially with rural and remote health, primary health care, and social foundation of medicine) in Year 1, as well as linking with health policy modules delivered in Year 2 of population health teaching (K5, K6, V4). Student feedback on Wattle is utilised to improve the quality and delivery of the modules (K4, K5). Overall, the modules have been well received by students, providing them with practical knowledge to navigate the health system landscape in Australia and introducing them to the complexities of health issues, access to care, and health inequities in Australia (V4). In addition, students were exposed with various challenges faced by health systems in Australia – for example rural health workforce retention, ageing and migrant populations, or financing mechanisms.

One constructive type of feedback from students highlighted the necessity of integrating these learning activities with live discussions involving experts from both Australia and international contexts. This approach aims to enrich student learning experiences by providing direct access to diverse perspectives and expertise in the field. Furthermore, it can foster deeper understanding through real-life examples and contextual discussions. As we move forward, our plan is to merge the online modules and tutorials with a public health seminar. This integration will not only enhance student comprehension but also promote stronger students' engagement (K2, K3, V1, V2). By incorporating live interactions with experts, students will have the opportunity to delve deeper into complex topics, exchange ideas, and gain valuable insights from real-world experiences. This holistic approach to learning will better prepare students for their future roles as healthcare professionals.

Word count: 988 words

4.2 CASE STUDY 2: Practicing Population Health for Medical Students

Practicing Population Health for Medical Students – Long-term Phase 2 Population Health Project

Context:

The goal of medical education system is no longer just about graduating competent clinicians, but also about producing healthcare professionals who can actively contribute to improving the health of the entire populations (V4). The journey through medical education is not solely about mastering clinical competencies, it is about embracing a broader vision of healthcare – one that encompasses both individual patient care and the pursuit of public health goals (V4).

Issue:

In Phase 2, students are immersed in clinical rotations, where the demands of patient care leave little room for delving into the realm of population health (V4). During Phase 1 of the program, students were introduced to the foundational principles of population health, equipping students with essential skills and knowledge regarding its scope and tools. However, as students transitioned into Phase 2 and embarked on their clinical rotations, the integration of population health teachings became more challenging (V4). As future healthcare professionals, it is imperative that students not only excel in diagnosing and treating individual patients but also recognise their role in addressing the broader determinants of health that affect entire populations (V4). This reality has underscored the importance of finding creative ways to bridge the gap between clinical practice and population health.

Solution:

The Population Health in Phase 2 initiated a long-term population health project in 2018, providing students with an opportunity to engage in projects addressing health issues directly. These projects include conducting clinical audits, conducting program evaluations and policy analyses, and developing health promotion activities. This typically involves group projects comprising 3-4 students working with designated supervisors (V1, V2, K2, K3). E-learning modules are thoughtfully chosen to ensure that the entire cohort gains a solid understanding of core concepts across all three streams (K3, K4, V1, V2).

In 2022, I joined the program as Co-convenor, collaborating closely with the Chair of Population Health Theme (Program Convenor). I initiated engagement with ACT Health (Mental Health and Suicide Prevention Unit) and proposed aligning our long-term population health program with their priority agenda (V4). In 2022, ACT Health became involved in the program, initiating two projects. The positive experiences between our students and ACT Health have sustained this collaboration, resulting in the completion of two projects, two ongoing projects, and the commencement of two more projects in 2024. Furthermore, the Program Convenor and I engaged with potential supervisors from Indonesia, successfully securing a project with an Indonesian partner focused on anti-vaping policy. These collaborations supplement our existing partnerships with various Peak Bodies, hospitals, and rural-based healthcare organisations (K2, K3, V1, V2, V4).

I soon realised that some field supervisors lacked fully developed supervision skills. I frequently engaged with external supervisors, particularly those from ACT Health and rural areas, providing them with 'informal training' in academic supervision skills, guiding through program expectations, and emphasising that students are also engaged in other clinical activities throughout the project's duration (K6). I facilitated program orientation workshops in collaboration with the Rural Clinical School to familiarise rural clinicians with the program (K6).

In 2022, the Program Convenor and I conducted an evaluation of one of the streams, the Health Promotion, in which students worked independently to produce health education videos. We identified two main issues: (1) an equity issue – while other projects available to students were curated and supervised, this was not the case for the health promotion stream; and (2) the quality of the educational videos produced by students were suboptimal (K5, K6). In 2023, we paused the health promotion stream and overhauled it, providing *new* online learning materials and curating health promotion projects (K1, K2, K3, K4, V1, V2). We also assigned a member of the population health team as a supervisor for students opting for the health promotion stream (K1, K2, K3, V1, V2). In 2024, we relaunched the stream, addressing the issues identified in previous years. Instead of producing educational videos, students in this stream are now tasked with conducting situational and root causes analyses and creating factsheets or posters.

During this redesign process, we received an assistance from a rural generalist registrar who undertook an academic post with us. I collaborated with the registrar to map out health promotion teaching in the ANU SMP curriculum, overseeing the identification of curriculum gaps (K6, V4). Additionally, in collaboration with the Population Health Chair, we developed a TELT Grant Application to create *a new* online interactive health promotion module. This grant was awarded in 2023, and the module was finalised in collaboration with the TELT Team, with implementation taking place in 2024.

Evaluation of Impact on Student Learning:

The skill set acquired by students through the Long-Term Population Health Project at ANU SMP is not only valuable but also unique, tailored specifically for the needs of graduates entering various fields. This skill set enhances their ability to engage effectively with both internal and external stakeholders. The projects they undertake are directly aligned with the needs of the institutions involved, ensuring that students contribute meaningfully to addressing pertinent issues within their respective communities (K2, K3, K5, V2, V4). The impact of these projects extends beyond mere academic exercise, manifesting in tangible benefits such as increased community knowledge and health awareness or improved service quality (K5, V4). Students and their supervisors have garnered recognition through quality publications and awards, affirming the merit and impact of their endeavours (V2, V3, V4, K2, K3, K5).

The positive reception of these projects by both students and external stakeholders underscores their potential for further expansion and collaboration with non-health stakeholders. This expansion not only broadens the scope of the projects but also opens doors for interdisciplinary collaboration and engagement. By providing students with opportunities to work directly with influential organisations and individuals, these projects facilitate early exposure to the intricacies of health policy processes within a supportive and constructive learning environment (K2, K3, K5, V1, V2). Such experiential learning fosters the application of contextualised teaching methods, ensuring that students develop a comprehensive understanding of their field while actively contributing to positive change within their communities (K5, V2).

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