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The Complex, Multi-layered Business of Developing Quality Professional Education in Universities

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Introduction

University undergraduate and postgraduate, professional programs must be fit for purpose: that is, their design and delivery should result in intended outcomes for students. In the context of professional degrees, their design assures professional standards and professional body expectations (Henard & Leprince-Ringuet, 2008). Quality standards in higher education in Australia and elsewhere emphasise, amongst other things, student participation and attainment, the learning environment, teaching, research and research training, and institutional Quality Assurance processes (Australian Government, 2015; ENQA, 2009). Author accounts in this first of two volumes on quality practice in the professions focus on the following areas: unit design and teaching, learning outcomes and assessment, blended and simulated learning approaches, student

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diversity and equity, and support for and barriers to program quality enhancement.

The work in these case studies highlights the inherent complexity of delivering on expected graduate outcomes for the professions. In this chapter I will argue that this complexity stems from two principal domains: the conceptual, and the contextual. First, developing quality curricula that is fit for purpose requires university teachers to leverage, analyse and synthesise a wide range of learning concepts including those embedded in professional standards and capabilities, employability skills, institutional graduate attributes statements and career development skills inventories. Second, increasing pressure on professional degrees to deliver particular outcomes for their graduates, in the context of stakeholder negotiation, shrinking budgets and increasing calls for the inclusion of diverse groups, places university practitioners at the centre of, sometimes conflicting, societal and economic forces.

Accordingly, each case study examined in this chapter will be organised based on whether they illustrate the successful navigation of the conceptual and pedagogical complexities inherent in assuring quality professional curricula, or where their case highlights more contextual elements that shape curriculum design and implementation processes. This latter theme can be further conceptualised as social, political, economic or cultural in orientation. This chapter concludes that despite the success of initiatives described in case studies examined in this book, achieving educational quality for the professions is a rewarding, yet far from straightforward, enterprise.

Background

There has been an increasing emphasis over time on universities meeting the requirements of employers and professional bodies, and to some extent governments (TEQSA, 2015). Professional, university education must satisfy the desires of many. However, quality professional education is not the simple sum of those desires. According to Holt, Mackay and Smith (2004), quality professional curricula are

...shaped by the interplay of various stakeholder concerns: those of the different academic disciplines and departments contributing to the curriculum; the expectations of industry and professional associations; and the students themselves. (Holt et al., 2004, p. 2)

From the perspective of universities as education providers, quality professional education must deliver more than the technical skills, attributes and work-readiness capabilities graduates require for success in the workplace. The university experience should also capture graduate capabilities and attributes prized by universities themselves: those that reflect what is “higher” in higher education. The American Association of Colleges of Nursing (AACN) refers to such a “value-add” in the following statement: “education has significant impact on the knowledge and competencies of the nurse-clinician...nurses are prized for their skills in critical thinking, leadership, case management, and health promotion...” (AACN, 2017, p. 1). At face value, the value-add of colleges for the nursing profession seems clear, with commonly referenced educational outcomes such as critical thinking, presumably understood and agreed upon by educators and the profession alike.

Yet accounts such as this can mask tensions and disagreements between educators and professional stakeholders about the meaning and intent of particular quality outcomes of the professional curriculum. The requirement of university programs to undergo professional accreditation, positions professional bodies as key custodians of requisite professional practices and standards. In many ways this should come as little surprise. According to the theory of the professions, professions preserve and pass on traditions, which, “engender modes of life, habits of thought, and standards of judgement” (Traulsen & Bissel, 2004). Professional habits of thought and standards of judgement are likely to influence how professions and professional bodies interpret the meaning of particular desirable educational outcomes, as well as how such outcomes ought to be taught and assessed. Meanwhile, academics of professional disciplines are required to navigate the expectations of their original professional community alongside those of their new profession in the academy. For example, Michelsen, Vabø, Kvilhaugsvik, and Kvam (2017) explore the interaction between professional and disciplinary communities in

program outcomes design. They conclude that at its most fraught the involvement of professions in the design of learning outcomes may divert their function from that of describing intended learning towards that of preserving the status quo of particular professions. Hughes and Barrie (2010) examine influences on the assessment of graduate attributes in higher education. They argue that in professional degrees the significant influence wielded by industry stakeholders may result in positive outcomes for assessment practices, such as the use of more authentic, contextualised assessment tasks. However, they (Hughes & Barrie, 2010) claim that this influence “also runs the risk of patchy implementation or of limiting the assessment focus to tangible workplace competencies at the expense of transformational aspirations...of many universities” (p. 328).

The complexity of negotiating differing stakeholder views about the desired outcomes of professional university education is exacerbated by the more fundamental difficulty of interpreting such outcomes. Seminal Australian work by Barrie (2006) underscores the tendency of academics to hold differing perceptions about the nature of graduate attributes, which itself impacts on the way they are taught and assessed. Up until the present, commentators have observed that researchers and program stakeholders tend to conflate various terms used to describe graduate learning outcomes, such as graduate skills or attributes and employability skills or dispositions (Oliver & Jorre de St Jorre, 2018). Studies have also highlighted disagreement between stakeholder groups about which particular graduate attributes or employability skills are seen as important, or to what extent they are a focus of professional programs (Oliver et al., 2010).

In addition to the issue of the conceptual complexity of assuring specific graduate outcomes (Green, Hammer, & Star, 2009), professional education in universities also takes place against a backdrop of evolving and sometimes, dramatic change (Feigenbaum & Iqani, 2015). Contextual factors that influence decisions about professional program design and implementation can be categorised as socio-political (O’Meara & MacDonald, 2004), economic (Feigenbaum & Iqani, 2015) cultural, and even emotional (King, 2006). The chapter will now examine cases from volume one that illustrate successful initiatives in which one or more of these challenges are navigated.

Navigating Conceptual and Pedagogical Complexity

A range of published examples in the secondary literature make clear the conceptual complexity of learning constructs such as graduate attributes, professional competencies and standards (Green et al., 2009; Hammer, Chardon, Collins, & Hart, 2012). For example, in the case of an Australian law school, researchers (Hammer et al., 2012) found that while legal educator participants valued lifelong learning, their responses to questions showed a lack of precision about how particular aspects, such as learner autonomy, could be developed. The consequence of higher education teachers' lack of clarity about how to conceptualise and develop specific attributes is that relevant program curricula fail to address them. A review of Australian accounting degrees in 2004 also highlighted this phenomenon (Mathews, 2004). The aim of the review was to assess the extent to which professional accounting standards were driving consistency across relevant programs. An associated finding was that a lack of guidance about how particular professional standards should be developed meant that some intended professional outcomes were not evidenced (Mathews, 2004).

A number of cases presented in this monograph showcase specific learning and teaching strategies that successfully target the development and assessment of desired professional knowledge, standards, and competencies. Nash, Chalmers, Brown and Stupans' chapter on the pharmacy profession outlines a successful initiative to develop students' lifelong learning skills by requiring them to self-assess against their National Competency Standards at the conclusion of each exam. Similarly, Downer and Slade's chapter on using ePortfolios to prepare undergraduate students for professional practice provides a detailed example about developing students' lifelong learning capacity of professional judgement using Gibbs' (1988) six steps of reflection. Students used the reflection process authors described in this case to connect their learning with relevant professional standards and reflect on their performance as they progressed through the Midwifery program.

Simulations can be an effective learning and teaching strategy in professional disciplines to bridge the gap between university education and professional practice. Haraldseid, Aase and Aase describe a Norwegian university inter-professional training initiative to develop nursing and medical students' non-technical skills: a full-scale simulation that took place in a clinical skill lab, followed by a debriefing activity. Student participation in the form of student feedback and shared decision-making was incorporated into different stages of the session design process. This strategy enabled teachers to deeply understand student learning needs and generate creativity of thinking and student buy-in. Student feedback also enabled teachers to identify traditional patterns of behaviour shaped by professional roles and culture for nursing and medicine, as well as a lack of shared knowledge between the two student groups, which could inform the current and future design.

In their case, Nordkvelle et al. share the approaches and outcomes of three different simulation approaches undertaken in three different disciplines. In Nursing, the simulation took the form of a clinical skill lab, with only a few students playing active roles and the remainder observing and debriefing after the role play. In the legal, simulated 'moot' court session law students either played an active role as part of the course case, or they played members of the audience. In both of these two simulations, teachers play an active role: either as coaches or participants. By contrast, Management students worked on a role-play activity in teams. All students played an active role, but the role of the teacher in preparing the students ended before the role plays began. In all three cases, students perceived simulations as productive, even though they clearly understood that they were participating in a "practical lesson", rather than professional practice per se. Nonetheless, each case presented by the authors of these two chapters highlight the pedagogical complexity required to bridge the gap between education and professional practice.

In addition to applying effective pedagogies, successful professional learning also requires teachers to be knowledgeable about appropriate learning supports or learning "scaffolds" that help students by providing a bridge between their prior learning and what must be learned. Gorse, Cozzens, Scott and discuss mixed modes of delivery for professional education. They agree that digital environments are used increasingly in

professional practice and can provide opportunities for greater connection, and higher order thinking. However, Gorse et al. argue that digital enhancements be implemented incrementally and consultatively, to ensure that resulting learning environments and activities are educationally and professionally fit for purpose. In his chapter, Kinchin argues that concept mapping be used as a scaffold to facilitate professional learning. Concept maps can be used in curriculum design to make explicit for novices the expert knowledge structures, which inform and interact with procedural knowledge in a given professional field.

Other author accounts highlight the use of concepts such as “viability” and “employability”, curriculum lenses such as “competency”, “career development” and “transition”, and tools such as the ePortfolio to assure the professional outcomes in university curricula. In her chapter about nurse education in the UK, Karstadt applies the concept of viability to assess and enhance the quality of curriculum knowledge within nursing education in terms of its applicability and meaningfulness to individual students’ practice in the professional space. However, other concepts, such as employability, are used by authors in a more informal sense, such as a broad desirable outcome for students, which can be used to ensure that a curriculum is fit-for-purpose. In their account of a Work Integrated Learning (WIL) program for Psychology undergraduates, authors Marrington, O’Shea and Burton describe the development of employability skills as a key outcome for graduates. Yet, informality does not equate to simplicity. For example, the outcome statements used by these authors to design and develop the curriculum included both institutional graduate attribute statements and professional competencies. Both are seen as contributing to graduate employability. However, curriculum designers must navigate a range of interpretation, language use and overlap associated with synthesising learning outcome statements from differing sources.

It is clear from these accounts of professional education practice that a high degree of rigour combined with a level of dexterity in teaching conception, design and approach is required to assure desired professional graduate outcomes. However, teachers of the professions must also navigate further layers of complexity associated with the exigencies of context as part of developing quality curricula for professional degrees.

Navigating Context

Social, political, economic and cultural factors form part of the quality assurance context for professional university programs. This definition refutes the idea of curriculum development and change as an idealised, mechanistic incorporation of value-neutral, curricular elements. A more authentic view of curriculum change acknowledges a social dimension that is replete with tensions, power imbalances, the possibility of resistance, and even of conflict. A study of curricular renewal in an Australian Creative Arts School (Hammer, McDonald, & Forbes, 2014) highlights this dimension, as this reflection by an author-participant suggests:

It was challenging to find myself in a leadership role for the discipline (and having to institute change) without any official recognition of that leadership. I needed to learn 'on the fly' how to negotiate from this somewhat nebulous position. At times, this diverted energy away from the task at hand. (Hammer et al., 2014, p. 57)

A study by King highlights some highly social, emotional aspects related to the interpersonal dimension of curriculum change. Academic interviewees expressed frustration and anger as a result of loosely structured, re-iterative curriculum development processes, difficulties with scheduling because of clashing timetables, the negotiation and consensus-building required for collaborative decision-making processes, and issues of increased workload or role definition (King, 2006). With so little research in this space, to date, the emotional, interpersonal labour associated with professional curriculum change is likely to remain unacknowledged by university managers and poorly understood by professional groups in the short to medium-term.

Evolving societal expectation about the cultural inclusiveness of professions may also form part of the wider context of program quality assurance and is exemplified by Goldman and Trimmer's account of culturally inclusive models of nursing care in Australia. They argue that culturally inclusive models of care require transformative practices related to the teaching of nursing students, and to the practice itself. However, where there has been limited behavioural change at the level of the profession,

as in this case, university programs and university graduates themselves become de facto drivers of change. This places greater responsibility on professional educators as designers of professional programs to be “handmaidens” of cultural change within their wider practice group, and to ensure the appropriate preparation of newly graduated, comparatively junior professionals. As Derven (2014) argues, “good practice” in the promotion of inclusion of diverse groups within professions requires the ongoing professional development of all employees. It is not only today’s graduates who should be expected to be able lifelong learners.

Intended curriculum enhancements driven by normative societal shifts and subsequent responses by professional bodies may also meet with short or long-term resistance at the teaching coalface. This mirrors broader patterns of resistance to change in society but presents an additional, contextual challenge to the developers of quality professional curricula. O’Meara and MacDonald reflect on the impact of this coalface resistance for their teaching graduates:

A program that aims to perpetuate a grand past narrative into the future aims to construct a ‘retrospective pedagogic identity’ of the institution or program. Such a program chooses not to respond to present changes, at the expense of their pre-service teachers career needs. (2004, p. 114)

At its most extreme, program quality enhancement that requires the inclusion of diverse groups in the professions may require significant changes in personal and professional epistemologies. The work of Gorman, Padrò and Press in their chapter critically examines the doctoral supervision of Australian Aboriginal and Indigenous students in Health-related fields. Their particular focus is the relationship between the supervisor and the supervisee as a site for reinforcing cultural and epistemological hegemony. They argue that for Aboriginal and Torres Strait Islander doctoral students, the Western research paradigm can be at odds with their cultural values and ways of knowing. They claim that uncritical acceptance of the supremacy of Western ways of knowing combined with the potential power imbalances inherent in the doctoral relationship present a significant barrier to Indigenous student completion of higher degrees. Such cultural considerations form the backdrop to the provision of

quality postgraduate education in the health professions, which require consideration of social justice issues, such as improving the status of Indigenous peoples, not just through the preparation of Indigenous clinicians but also by ensuring that supervisors develop greater knowledge of Indigenous culture and Indigenous epistemologies.

The particular agendas of higher education themselves may also influence the direction of professional education, including the way professional curricula are designed and taught. This can range from the requirement to incorporate a particular strategic focus into the program syllabus, to wider institutional initiatives focused on broad-scale, curriculum renewal, such as the adoption and implementation of a new graduate attributes policy (Hurlimann, March, & Robins, 2013). The latter was the case for two case studies examined here: desired institutional graduate outcomes were used by curriculum teams to drive curricular renewal within professional programs. For the Health promotion program at the University of the Sunshine Coast (USC), the trigger for curriculum renewal was the introduction of a new graduate attributes statement. According to Taylor, Ashford, Readman and Shelley, assuring alignment of the Program with USC graduate attributes was leveraged to simultaneously focus on the development of students' professional competencies. Similarly, Marrington et al.'s chapter and its discussion of the WIL program for Psychology reveals that institutional graduate attributes were used as *de facto* outcomes for the curriculum design process. The work of these authors shows that institutional aims create additional contextual considerations educators must factor in as part of the quality enhancement of professional curricula.

Conclusion

Achieving quality graduate outcomes for university students in general is a far from straightforward process. University educators must navigate a range of complex thinking and practice to develop learning experiences for their students that are fit for purpose. Yet conceptual, social, political economic and cultural complexities inherent in this type of process rarely feature in accounts of curriculum renewal and enhancement within the

professions. Most higher education accounts tell us little about disagreements over the meaning of particular concepts, such as graduate attributes or employability skills, which educators and other stakeholders apply in definitions of key professional learning outcomes. Accounts about achieving quality professional education experiences rarely provide sufficient guidance for teachers tasked with enacting curriculum change to interpret and assure such outcomes. I have argued in this chapter that assuring curriculum quality in the professions is a multi-layered process, which is shaped by a range of contextual factors, including negotiations between stakeholders about the meaning, and purpose of professional education, restricted government and university budgets, and shifting societal and professional expectations related to cultural inclusiveness, amongst other factors. The successful initiatives shared by the authors in this first of two volumes that provide case studies of quality practice in higher education need to be seen in the light of these requirements, and are all the more remarkable for having navigated them.

References

- AACN. (2017). Fact sheet: The impact of education on nursing practice [Press release]. Retrieved from <http://www.aacnursing.org/Portals/42/News/Factsheets/Education-Impact-Fact-Sheet.pdf>
- Australian Government. (2015). Tertiary Education Quality and Standards Agency Act 2011: Higher Education Standards Framework (Threshold Standards) 2015, C.F.R.
- Barrie, S. C. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, 51(2), 215–241. <https://doi.org/10.1007/s10734-004-6384-7>
- Derven, M. (2014). *Leveraging diversity & inclusion for a global economy*. E. Gundling & P. Leri, (Eds.). Washington, DC: Info-line. Retrieved from <http://ezproxy.usq.edu.au/login?url=http://library.books24x7.com/library.asp?^B&bookid=66702>
- ENQA. (2009). *ENQA report on standards and guidelines for quality assurance in the European higher education area*. Helsinki, Finland: European Association for Quality Assurance in Higher Education.

- Feigenbaum, A., & Iqani, M. (2015). Quality after the cuts? Higher education practitioners' accounts of systemic challenges to teaching quality in times of 'austerity'. *Journal of Further and Higher Education*, 39(1), 46–66. <https://doi.org/10.1080/0309877X.2013.778961>
- Gibbs, G. (1988). *Learning by doing, a guide to teaching and learning methods* (p. 134). London: Further Education Unit.
- Green, W., Hammer, S., & Star, C. (2009). Facing up to the challenge: Why is it so hard to develop graduate attributes? *Higher Education Research & Development*, 28(1), 17–29. <https://doi.org/10.1080/07294360802444339>
- Hammer, S., Chardon, T., Collins, P., & Hart, C. (2012). Legal educators' perceptions of lifelong learning: Conceptualisation and practice. *International Journal of Lifelong Education*, 31(2), 187–201. <https://doi.org/10.1080/02601370.2012.663803>
- Hammer, S., McDonald, J., & Forbes, M. (2014). Three perspectives on a collaborative, whole-of-program process of curriculum change. *Journal of Teaching and Learning for Graduate Employability*, 5(1), 47–62.
- Henard, F., & Leprince-Ringuet, S. (2008). *The path to quality teaching in higher education*. Retrieved from Paris, <https://www.oecd.org/education/imhe/44150246.pdf>
- Holt, D., Mackay, D., & Smith, R. (2004). Developing professional expertise in the knowledge economy: Integrating industry-based learning with the academic curriculum in the field of information technology. *Asia-Pacific Journal of Cooperative Education*, 5(2), 1–8. Retrieved from https://www.ijwil.org/files/APJCE_05_2_1_11.pdf
- Hughes, C., & Barrie, S. (2010). Influences on the assessment of graduate attributes in higher education. *Assessment & Evaluation in Higher Education*, 35(3), 325–334. <https://doi.org/10.1080/02602930903221485>
- Hurlimann, A., March, A., & Robins, J. (2013). University curriculum development—Stuck in a process and how to break free. *Journal of Higher Education Policy & Management*, 35(6), 639–651. <https://doi.org/10.1080/1360080X.2013.844665>
- King, S. (2006). *Emotional dimensions of major educational change: A study of higher education PBL curriculum reform*. Paper presented at the Australian Association for Research in Education (AARE) Conference: 'Engaging Pedagogies', Adelaide, South Australia. Retrieved from <http://www.aare.edu.au/data/publications/2006/kin06834.pdf#page=1&zoom=auto,-35,792>
- Mathews, M. R. (2004). Accounting curricula: Does professional accreditation lead to uniformity within Australian bachelor's degree programmes? *Accounting Education*, 13 (Suppl. 1), 71–89. <https://doi.org/10.1080/0963928042000310805>

- Michelsen, S., Vabø, A., Kvilhaugsvik, H., & Kvam, E. (2017). Higher education learning outcomes and their ambiguous relationship to disciplines and professions. *European Journal of Education, 52*(1), 56–67. <https://doi.org/10.1111/ejed.12199>
- O’Meara, J., & MacDonald, D. (2004). Power, prestige and pedagogic identity: A tale of two programs recontextualizing teacher standards. *Asia-Pacific Journal of Teacher Education, 32*(2), 111–127. <https://doi.org/10.1080/1359866042000234214>
- Oliver, B., Hunt, L., Jones, S., Pearce, A., Hammer, S., & Whelan, B. (2010). *The graduate employability indicators: Capturing broader stakeholder perspectives on the achievement and importance of employability attributes*. Paper presented at the Australian Quality Forum 2010—Higher Education in Uncertain Times, Gold Coast. Retrieved from http://www.auqa.edu.au/files/publications/auqf_proceedings_2010.pdf
- Oliver, B., & Jorre de St Jorre, T. (2018). Graduate attributes for 2020 and beyond: Recommendations for Australian higher education providers. *Higher Education Research & Development, 37*(4), 821–836. <https://doi.org/10.1080/07294360.2018.1446415>
- TEQSA. (2015). TEQSA and quality-assurance. Retrieved from <http://www.teqsa.gov.au/regulatory-approach/teqsa-and-quality-assurance>
- Traulsen, J. M., & Bissel, P. (2004). (9) Theories of professions and the pharmacist. *International Journal of Pharmacy Practice, 12*(2), 107–114. <https://doi.org/10.1211/0022357023727>