Chapter 2
The State of Program Design and Development

Abstract Why take on a whole-of-university approach to the improvement of learning and teaching? This chapter answers this question by describing the state of current practice followed by a rationale for the self-organizing university model including the need for theory, collaboration, and new institutional practice for governing the learning and teaching process.

Keywords Collaboration · Theory · Research to practice gap · Curriculum change · Climate · Institutional practice · Autonomy · Learning and teaching

The climate of change and uncertainty in universities has heightened the focus on learning and teaching. This includes concern about entry and exit standards, participation (Bradley et al. 2008), issues of equity and inclusion (Devlin et al. 2012), and the impact of accountability (Kimber and Ehrich 2015). The need to address these concerns is reflected in a range of initiatives that include projects to track and predict student performance and success, the innovative use of technology, and external benchmarking (Kemp and Norton 2014), the use of outcomes-based education practices (Barman et al. 2014; Lam and Tsui 2014), program evaluations (Ronsholdt and Brohus 2014), enhanced student perceptions of learning experiences (Kuhn and Rundle-Thiele 2009) and the measurement of student satisfaction and performance.

According to Norton et al. (2013), the need for good teaching in universities has never been greater. Good teaching begins with a strong responsive curriculum. Bradley et al. (2008) challenged universities to view increased participation in higher education as a driver for curriculum reform. With current curriculum reform promoting the importance of catering for the needs of individual students across all disciplines, changes in the design and delivery of programs are also necessary.

What is not evident internationally at this time are coherent and integrated approaches to the broad-based fundamental transformation of universities to address the tensions and challenges associated with becoming better learning organizations. This includes the simultaneous transformation of policy, work practice, organizational design, technology, and support around learning and

teaching that are commensurate with the order of magnitude of the challenges facing universities. How university programs are designed has not been addressed through reform, although traditional design methods have been widely criticised (Florian et al. 2010; Forlin 2010; Song-Turner and Willis 2011).

Four areas of need have been consistently identified in the higher education literature related to program design and development. These are: the need for a theoretical basis for program reform and design (Goldspink 2007; Levin 2010); the need to close the theory-to-practice gap between (a) research in higher education, and (b) what is done in practice (Hora 2012; Norton et al. 2013; Song-Turner and Willis 2011); the need to utilise collaborative practice, including the way groups of people work together to achieve common goals (Burgess 2004; Furlonger et al. 2010; Oliver and Hyun 2011; Winn and Zundans 2004); and the impact of prevailing institutional practice on program reform, design and innovation (Bradley et al. 2008; Levin 2010; Oliver 2013; Sabri 2010).

2.1   Need for Theory

A number of researchers have identified the need for curriculum innovation to be theorised beyond actual curriculum content (Cochran-Smith and Zeichner 2005; Hoban 2004; Kezar and Lester 2009). This refers to the kind of theory that links design process to the full scope of the change required by organizations to engage in substantive and sustainable curriculum reform. Such theory addresses the way the organization is structured for learning and teaching, as well as the content and process specifically related to the design of curricula. It is clear that unifying theory is necessary to bring these interdependent aspects together.

2.2   Research to Practice Gap

There is also a gap between research and practice with the most prevalent explanation suggesting that researchers and practitioners operate within quite different cultures (Kezar 2000; Schalock et al. 2006). Kezar (2000) suggests that the dichotomy between theory and practice is a social construction. Within the institutional context, theory is broadly constructed to mean work that is done in research, principally in university settings, that in turn is expected to impact upon the field. However, this fundamental operating assumption of universities has not been applied to the field of curriculum learning and teaching in higher education where innovations are rarely theorised and only loosely connected to related research.

Multiple factors come into play at the higher education level that continue to separate theory from practice—the culture of the institution, socialisation of the faculty, the discipline foci of the institution, and the continued tension within higher

education itself as a professional identity (Kezar and Lester 2009). This suggests that addressing the theory to practice gap requires high-level and broad-based change capable of engendering new cultures of practice. Those new cultures need to address the separation from practice (Grima-Farrell 2012) and reconcile the acquisition of practical knowledge with traditional theoretical knowledge (Berry 2007). From a SOU perspective, the magnitude of the gap in all sectors of the education field is indicative of a field that is pre-paradigmatic in its development and evolution (Kuhn 1996). The reconciliation of theory and practice is necessary for any theory to be complete and for practice to be informed.

2.3   Collaboration

Successful and long-term change requires collaboration, yet higher education is often a solitary and isolating profession, with university structures separating disciplines and individuals within disciplines. Kezar and Lester (2009) described the conditions required for a higher education institution to support collaboration. They found that teaching, research, governance and management all needed to be altered to support the collaborative process. Collaboration, and the process required for effective collaboration, can be viewed at several levels: collaboration at the institutional level where academics work together; academics in a specialist field working together to create and develop new program content; collaboration in the field; and collaboration between educators in different contexts, such as between academics and teachers (Zundans-Fraser 2014). Researchers indicate that despite recognising the benefits of collaboration, teachers in universities continue to work largely in isolation (Norton et al. 2013; Zundans-Fraser and Bain 2015a).

2.4   Institutional Practice

Knapp and Brandon (1998), suggest that the institutional practice of universities also impedes curricular reform. The authors identify four prominent features of university structure and institutional practice that impede innovation. They are: The knowledge-centric nature of the organization, position hierarchy, promotion systems and departmental autonomy. These factors interact in ways that perpetuate the status quo by making collaboration and organizational coherence difficult. They create insurmountable challenges for academics attempting anything a little different and innovative while perpetuating "private practice" work environments that inhibit collaboration. In their study, Zundans-Fraser and Bain (2015a) found that academics believed working in a collaborative manner led to an open and transparent design process, the valuing of different opinions and expertise, shared knowledge and responsibility, and ultimately the design of a quality program. Most of the challenges identified by the academics had to do with institutional practices

where the investment of time and recognition of the work done were lacking. This meant that although the academics had shared ownership of the program and valued collaborative practice, working in such a manner with existing processes was challenging. An institutional process that embeds collaboration within organizational structures as a standard expectation was suggested as a way to move institutional program design and review processes from a data entry exercise to one focused on quality design.

When a level of flexibility is sought against centralised control within this complex environment (Knight 2001; Macdonald 2003), the enthusiasm for self-organization demonstrated by educators is dampened at administrative levels due to concern about potential risks that may never eventuate (Goldspink 2007); and when the greatest focus is on rationalisation and efficiency (Coate and Tooher 2010). These concerns reflect the tension that exists between the organizational structure and realities of higher education institutions and their daily operations. The everyday restrictions and constraints of higher education practice, such as tight deadlines and expansive documentation requirements, appear to work against curriculum coherence and depth. The institutional practice of many institutions focuses on documentation requirements that are not related to the quality of learning and teaching (Zundans-Fraser 2014) and where ideas of quality are shaped by the extant demands of the organization around the way curriculum is developed and documented (Borko et al. 2006; Tudor 2006). Curriculum reform and design that goes beyond the regular institutional cycles of student evaluation, staff reflection, and the selection and design of new program materials is particularly challenging, as it requires time and dedicated participation that some researchers claim are not a natural part of higher education culture (Burgess 2004; Oliver and Hyun 2011).

2.5 Summary

This overview of key program development issues provides an evidence base for the claims made in the introduction to this brief. Reforming curriculum design and delivery involves transformational change in the way universities are structured and organised. Existing processes are not only frequently incompatible with change and better practice, but can actively undermine such change through diffusion of purpose, poor alignment of goals and process, and contradictory structures for reward and recognition. Even though there has been a dramatic increase in educational reform efforts over the past 25 years, it is having insufficient impact to drive sustainable and scalable change (Hopkins and Levin 2000). Many academics instrumental in curriculum reform are open to innovations, change, and enhancing teaching and learning. However, reform often gets in the way by focusing on operational aspects of the system—governance, finance, workforce and accountability that do not support curricular innovation. A key contention of SOU is that curricular reform needs to drive structural improvement informed by complete theory to practice models of institutional change for better learning and teaching.

Fundamental change in the way university services are funded, designed and delivered, and the needs and characteristics of the students who pay for and receive the service are driving reform and change in universities that frequently lack the theoretical frameworks, institutional process, practice and collaborative cultures required to address the profound changes they face. An integrated program design approach, a more rigorous theoretical base for program reform and tight coherence between course work and practical work are required (Darling-Hammond 2006; Darling-Hammond et al. 2005). The type of reform that is advocated is in its infancy in the higher education sector, with little attention given to the evolution of program content or the way it can transform and renew an institution, although this situation is slowly changing (Oliver and Hyun 2011). Reform that moves beyond the regular institutional cycles of student evaluation, staff reflection, selection and design of new materials at the course level is particularly challenging as it requires time and dedicated participation that some researchers claim are not a natural part of higher education culture (Burgess 2004, Kezar and Lester 2009). An integrated program design approach, a more rigorous theoretical base for program reform and tight coherence between course-work and practice is required (Zundans-Fraser and Bain 2015b). Any change initiatives designed to address the key areas of need identified here need to be grounded in changes in the extant institutional requirements for program design.

References

Barman, L., Bolander-Laksov, K., & Silen, C. (2014). Policy enacted—Teachers' approaches to an outcome-based framework for course design. *Teaching in Higher Education, 19*(7), 735–746. doi:10.1080/13562517.2014.934346

Berry, A. (2007). *Tensions in teaching about teaching: Understanding practice as a teacher educator*. Dordrecht: Springer.

Borko, H., Liston, D., & Whitcomb, J. A. (2006). A conversation of many voices: Critiques and visions of teacher education. *Journal of Teacher Education, 57*(3), 199–204. doi:10.1177/0022487106287978

Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education.* Retrieved from http://www.innovation.gov.au/HigherEducation/Documents/Review/PDF/Higher%20Education%20Review_one%20document_02.pdf

Burgess, H. (2004). Redesigning the curriculum for social work education: Complexity, conformity, chaos, creativity, collaboration? *Social Work Education, 23*(2), 163–183. doi:10.1080/0261547042000209189

Coate, K., & Tooher, M. (2010). The Galway symposium on design for learning: Curriculum and assessment in higher education. *Teaching in Higher Education, 15*(3), 347-354. doi:10.1080/13562511003740924

Cochran-Smith, M., & Zeichner, K. M. (2005). *Studying teacher education: The report of the AERA panel on research and teacher education*. Washington, DC: American Educational Research Association.

Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education, 57*(3), 300–314. doi:10.1177/0022487105285962

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. In L. Darling-Hammond, J. Bransford & National

Academy of Education (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.

Devlin, M., Kift, S., Nelson, K., & Smith, L. (2012). *Effective teaching and support of students from low socio-economic backgrounds: Resources for Australian Higher Education*. Retrieved from http://www.olt.gov.au/project-effective-teaching-and-support-students-low-socioeconomic-backgrounds-resources-australian-h

Florian, L., Young, K., & Rouse, M. (2010). Preparing teachers for inclusive and diverse educational environments: Studying curricular reform in an initial teacher education course. *International Journal of Inclusive Education 14*(7), 709–722. doi:10.1080/13603111003778536

Forlin, C. (2010). Teacher education reform for enhancing teachers' preparedness for inclusion. *International Journal of Inclusive Education, 14*(7), 649–653. doi:10.1080/13603111003778353

Furlonger, B. E., Sharma, U., Moore, D. W., & Smyth-King, B. S. (2010). A new approach to training teachers to meet the diverse learning needs of deaf and hard-of-hearing children within inclusive Australian schools. *International Journal of Inclusive Education, 14*(3), 289–308. doi: 10.1080/13603110802504549

Goldspink, C. (2007). Transforming education: Evidential support for a complex systems approach. *Emergence: Complexity & Organization, 9*(1/2), 77–92.

Grima-Farrell, C. (2012). *Identifying factors that bridge the research-to-practice gap in inclusive education: An analysis of six case studies*. (Unpublished doctoral dissertation). Charles Sturt University, Bathurst.

Hoban, G. F. (2004). Seeking quality in teacher education design: A four-dimensional approach. *Australian Journal of Education, 48*(2), 117–133. doi:10.1177/000494410404800203

Hopkins, D., & Levin, B. (2000). Educational reform and school improvement. *NIRA Review,* 21–26.

Hora, M. T. (2012). Organizational factors and instructional decision-making: A cognitive perspective. *The Review of Higher Education, 35*(2), 207–235. doi:10.1353/rhe.2012.0001

Kemp, D., & Norton, A. (2014). *Review of the demand driven funding system*. Retrieved from https://docs.education.gov.au/system/files/doc/other/review_of_the_demand_driven_funding_system_report_for_the_website.pdf

Kezar, A. (2000). Understanding the research-to-practice gap: A national study of researchers' and practitioners' perspectives. *New Directions for Higher Education, 110*, 9–19. doi:10.1002/he.11001

Kezar, A., & Lester, J. (2009). *Organizing higher education for collaboration: A guide for campus leaders*. San Francisco, CA: Wiley.

Kimber, M., & Ehrich, L. C. (2015). Are Australia's universities in deficit? A tale of generic managers, audit culture and casualisation. *Journal of Higher Education Policy and Management, 37*(1), 83–97. doi:10.1080/1360080X.2014.991535

Knapp, M. S., & Brandon, R. N. (1998). Building collaborative programs in universities. In M. S. Knapp (Ed.), *Paths to partnership: University and community as learners in inter professional education*. Oxford: Rowman & Littlefield Publishers.

Knight, P. T. (2001). Complexity and curriculum: A process approach to curriculum-making. *Teaching in Higher Education, 6*(3), 369–381. doi:10.1080/13562510120061223

Kuhn, T. (1996). *The structure of scientific revolutions* (3rd ed.). Chicago: University of Chicago.

Kuhn, K.-A. L., & Rundle-Thiele, S. R. (2009). Curriculum alignment: Exploring student perception of learning achievement measures. *International Journal of Teaching and Learning in Higher Education, 21*(3), 351–361.

Lam, B. H., & Tsui, K. T. (2014). Curriculum mapping as deliberation—Examining the alignment of subject learning outcomes and course curricula. *Studies in Higher Education*. doi:10.1080/03075079.2014.968539

Levin, B. (2010). Governments and education reform: Some lessons from the last 50 years. *Journal of Education Policy, 25*(6), 739–747. doi:10.1080/02680939.2010.523793

Macdonald, D. (2003). Rich task implementation: Modernism meets postmodernism. *Discourse: Studies in the Cultural Politics of Education, 24*(2), 247–262.

Norton, A., Sonnemann, J., & Cherastidtham, I. (2013). *Taking university teaching seriously*. Grattan Institute.

Oliver, B. (2013). Graduate attributes as a focus for institution-wide curriculum renewal: Innovations and challenges. *Higher Education Research & Development, 32*(3), 450–463.

Oliver, S. L., & Hyun, E. (2011). Comprehensive curriculum reform in higher education: Collaborative engagement of faculty and administrators. *Journal of Case Studies in Education, 2*, 1–20.

Ronsholdt, B., & Brohus, H. (2014). Towards more efficient student course evaluations for use at management level. *Tertiary Education and Management, 20*(1), 72–83. doi:10.1080/13583883.2014.881912

Sabri, D. (2010). Absence of the academic from higher education policy. *Journal of Education Policy, 25*(2), 191–205.

Schalock, H. D., Schalock, M. D., & Ayres, R. (2006). Scaling up research in teacher education: New demands on theory, measurement and design. *Journal of Teacher Education 57*(2), 102–119. doi:10.1177/0022487105285615

Song-Turner, H., & Willis, M. (2011). Re-engineering the course design and delivery of Australian tertiary education programmes: Perspectives from Chinese students. *Journal of Higher Education Policy and Management, 33*(5), 537–552. doi:10.1080/1360080X.2011.605228

Tudor, I. (2006). Teacher training and 'quality' in higher education language teaching: Strategies and options. *European Journal of Teacher Education, 29*(4), 519–532. doi:10.1080/02619760600944811

Winn, S., & Zundans, L. (2004). University and school connections: Enhancing literacy development of primary aged children. *Special Education Perspectives, 13*(1), 49–62.

Zundans-Fraser, L. (2014). *Self-organisation in course design: A collaborative, theory-based approach to course development in inclusive education.* (Unpublished doctoral dissertation). Charles Sturt University, Bathurst.

Zundans-Fraser, L., & Bain, A. (2015a). The role of collaboration in a comprehensive programme design process in inclusive education. *International Journal of Inclusive Education.* Advance online publication. doi:10.1080/13603116.2015.1075610

Zundans-Fraser, L., & Bain, A. (2015b). *How do institutional practices for program design and review address areas of need in higher education.* Manuscript submitted for publication.