

Effective University Teaching and Learning

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The Tensions of Teaching and Research in Higher Education

University teaching and learning has been a contentious issue for many decades. This was largely due to the tension between the predominant functions of universities, namely, research, teaching, and service or leadership (Dewar, 2002). Traditionally, research has been perceived by academics as the more prestigious activity due to its potential to contribute to the knowledge base, build scholarly reputations, and to acquire research funding. An additional factor in lowering the priority of teaching was that many universities maintained promotion criteria which privileged research output over that of teaching. These factors highlight the realities with which university administrators and faculty within academic development centres have been contending.

University administrators are now faced with a changing context. There are more students and more diverse students accessing higher education due to the increasing expectation of employers for skilled and qualified staff. With the reduction of funding to universities students have been expected to pay higher fees. This has produced a consumer or client orientation whereby entering university studies has been perceived to be a transactional (user pays) rather than an educationally transformational relationship (Scott & Dixon, 2008; Dixon & Scott, 2008). Many universities have encountered the phenomena that students perceived payment of fees as a guarantee of academic success within their courses, rather than viewing it as an access to educational opportunities (Scott & Dixon, 2008; Dixon & Scott, 2008). This has placed academics in an invidious position whereby they feel pressured to pass students even in cases of poor performance. There are also other pressures on faculty.

Scholars' Preparation to Teach

Universities prepare scholars for their research pursuits through higher degree programs, but preparation for teaching is limited. Therefore, university teachers are at a distinct disadvantage in preparedness to perform their teaching role. They are largely ignorant of the knowledge base in teaching and learning (Knapper, 2010). Their conceptualisation of what is good teaching is frequently reliant on their own experiences as a learner, and in the form of mentor's modelling rather than drawing upon evidence-based practice (Knapper, 2010). Depending on the quality of their own learning experiences and their professors' teaching practices, academics' conceptualisation of what constitutes good teaching may be highly variable and frequently associated with the discipline. Rowland (1996) indicated many faculty members felt "their department was a special case in some way or other" but he reported that even with this perception of uniqueness of teaching within specific disciplines, "all [should be] held to account, in the university setting, in terms of their teaching and their research" (p. 12).

Enshrined in university culture is the prevalent perception that being a competent researcher automatically translates into being an effective teacher because ...

"it casts the academic in the role of learner and therefore helps them understand the learning experience; it promotes a critical engagement with the subject matter; it keeps the academic up to date with the frontiers of knowledge within the discipline. Such linkages are to be expected." (Rowland, 1996, p. 13)

Research into this assertion "concluded that there is no evidence ... to indicate the existence of a simple functional association between high research output and the effectiveness of undergraduate teaching", with the exception, not surprisingly, of colleges of education (Ramsden & Moses, 1992, p. 273). Even

though some may claim that there is a distinct linkage between research and teaching, Ramsden and Moses indicated that “a high level of research activity may actually divert an academic’s attention from his or her students” however, this was highly variable (p. 274). Brew and Boyd (1995) stated that the act of teaching was more complex than simply having the discipline knowledge. They found that conducting research in a specific domain was highly unlikely to endow the researcher with pedagogical expertise. Drawing upon Ramsden and Moses’s study, Brew and Boyd stated that students should be wary of assuming that high quality research departments correlated with high quality educational experiences. Prosser (2010) found, however, there was a relationship between the type of research and consequent “forms of teaching” that were adopted (p. 132). Drawing upon his work with Trigwell, Prosser (2010) found a correlation between researchers whose research foci tended towards “wholes ... the relationship between the subject matter and the field of study including underpinning theories and conceptions” with “student focused conceptual change and development forms of teaching” (p. 132). Contrastingly, if the scholar’s research focused on “parts”, namely, “the internal structure of the subject matter with a focus on facts and techniques or concepts, issues and procedures” their teaching tended to be more teacher-centred and information transmissive. He also endorsed Ramsden and Moses’s, and Brew and Boyd’s findings that the quantity of research output had no correlation with quality teaching. Rowland, Ramsden and Moses, and Brew and Boyd all advocated for clearer definitions of high quality teaching and learning and for support structures, such as academic professional development to be made available to promote better teaching practices.

Good Teaching in Higher Education: Foundational Theory

Indicators of Good Teaching

Unlike educational research in the school context, research about teaching and learning in higher education has had a relatively recent history. Even so, considerable research now informs practice about optimal strategies in teaching and assessment in universities and colleges. The research of Chickering and Gamson (1987; 1991; Chickering, Gamson, & Barsi, 1989) provided foundational understandings about effective undergraduate teaching. They posited seven principles of effective teaching specifically targeting undergraduate levels, while later, they explored the influence of technology within their ‘seven principles’ framework:

1. *Encourage contact between students and faculty* – Chickering and Gamson indicated that an important factor in keeping students motivated and involved was frequent academic-student contact. These interactions enabled students to manage problems, “enhance[d] students’ intellectual commitment and encourage[d] them to think about their own values and future plans” (Chickering & Gamson, 1987, n.p.). Information and communication technologies (ICTs) have enhanced communication with the advent of email and other asynchronous communication technologies (Chickering & Ehrmann, 1996). Voice-over-Internet-Protocol has added a further dimension in the form of synchronous communication.
2. *Develop reciprocity and cooperation among students* – Encouraging students to develop cooperative skills sharpened their cognitive processes and promoted deeper learning. Johnson and Johnson and their associates’ (1998, 2007) research in cooperative learning within the college context also reinforced the importance of this principle.
3. *Encourage active learning* – Passive students generally do not learn as effectively as active ones. Student activities are most effective if they include writing, discussing, and applying the new learning to past experience (Chickering & Ehrmann, 1996). Chickering and Ehrmann highlighted three groupings of ICTs that related to active learning behaviours: resources and tools for learning-by-doing (e.g., simulations), time-delayed exchange of written materials (e.g., forums and bulletin boards), and more recently, real-time VoIP conversation.

4. *Provide prompt feedback* – Formative and summative feedback is essential to support the ongoing learning of students. Instructor feedback needs to be timely to ensure students ongoing development of understanding and to correct misconceptions. Metacognition, or awareness of the process of learning and ways of thinking, is also a critical ingredient to successful learning (Marzano, 2000).
5. *Emphasise time on-task* – Organisational skills are essential for student success. Students need assistance to develop appropriate time-management skills. Hence, instructors careful structuring of learning experiences and assessment tasks scaffold the development of these essential skills.
6. *Communicate high expectations* – “Expect more and you will get more” (Chickering & Ehrmann, 1996, p. 4). Academics who have high expectations for students will frequently find students expend extra effort to meet these. The other important aspect of this principle is that there must be explicit communication to students of academics’ expectations.
7. *Respect diverse talents and ways of learning* – Chickering and Gamson acknowledged that all students were unique and therefore required a variety of learning experiences to facilitate their learning. This essentially meant that instructors must adopt a range of teaching strategies to ensure the successful learning of all students.

Following from Chickering, Gamson, Erhmann, and Barsi’s principles, more recent research on teaching and learning within universities was conducted by Ramsden (2003). Even though Ramsden identified that there was no “best way” to teach he formulated thirteen “important properties of good teaching” as:

1. A desire to share your love of the subject with students;
2. An ability to make the material being taught stimulating and interesting;
3. Facility for engaging with students at their level of understanding;
4. A capacity to explain the material plainly;
5. Commitment to make it absolutely clear what has to be understood, at what level, and why;
6. Showing concern and respect for students;
7. Commitment to encouraging student independence;
8. An ability to improvise and adapt to new demands;
9. Using teaching methods and academic tasks that require students to learn thoughtfully, responsibly, and cooperatively;
10. Using valid assessment methods;
11. A focus on key concepts, and students’ misunderstandings of them, rather than on covering the ground;
12. Giving the highest-quality feedback on student work; and
13. A desire to learn from students about the effects of teaching and how it can be improved.

(Ramsden, 2003, pp. 86-7)

When comparing Ramsden’s “important properties of good teaching” there was significant alignment between his thirteen points and those of Chickering and Gamson “seven principles” of good teaching. This alignment was evident in Ramsden’s “showing concern and respect for students” and Chickering and Gamson’s “respects diverse talents and ways of learning” although Chickering and Gamson’s point was broader taking account of diverse learning styles and talents. Similarly, Ramsden’s “using teaching methods and academic tasks that require students to learn thoughtfully, responsibly, and cooperatively” linked with Chickering and Gamson’s “develops reciprocity and cooperation among students”. Both Ramsden and Chickering and Gamson identified expectations as an element. However, there were slight variations in intent wherein Ramsden highlighted the importance of clear expectations, the level of the content and rationale for including it into the course, whereas Chickering and Gamson’s principle focused on simply communicating high expectations for students. Finally, further alignment was evident in the importance of providing effective and timely feedback. Ramsden’s final property of good teaching drew upon his research about student evaluation of teaching and its value in improving teaching.

Using Student Evaluations to Improve Teaching

Ramsden's (1991; 1998) research in the area of student evaluations of teaching identified that their feedback was valid and useful for informing teaching. He found students were able to provide balanced insights about what assisted them to learn and what hindered them. He recommended that student feedback from a validated questionnaire was an important source of data academics could employ in course reviews and to facilitate reflection of the effectiveness of their teaching. Ramsden and his associates' (1991; 1998b; Ramsden, Margetson, Martin, & Clarke, 1995; Ramsden & Martin, 1996) research in this area endorsed the earlier work of Marsh and his associates (Marsh, 1980; 1987; Marsh & Roche, 1994; Marsh & Dunkin, 1992) who confirmed the validity and reliability of using student evaluations of teaching in the pursuit of improving courses, resources and materials, teaching strategies, and assessment tasks and processes.

Teaching Beliefs Influence Students' Learning Approaches

Prosser, Trigwell, Martin and Ramsden (Prosser, Ramsden, Trigwell, & Martin, 2003; Prosser & Trigwell, 1999a; 1999b; Trigwell & Prosser, 2003) explored how students learn and also the relationship between teaching and learning within the university context. They found that there were two predominant modes of learning, namely, surface or deep. Surface learning approaches involved learning considerable amounts of material but only to a limited understanding or depth. Whereas, deep learning was linked to students delving into more complex concepts, principles, and relationships within the topic(s) and exploring their understandings in more intricate and multifaceted manners. They found students who adopted deep rather than surface approaches to learning attained higher quality and more comprehensive learning outcomes. Adopting deep approaches were also associated with perceptions of good teaching, and clear goals and standards. Surface approaches were typically associated with workloads being too high so that students were unable to spend time to deeply understand all the content, and assessments that tended towards "measuring reproduction rather than understanding" (Prosser, et al., 2003, p. 37).

These findings may have led to the view that it was the students' prerogative as to whether or not they learned more deeply. However, Prosser and his associates found students' approaches to learning were not necessarily fixed and were potentially different across units. In their study some students adopted deep approaches for one unit and surface for a different course ... "the same student might focus on merely reproducing facts in one context (surface approach), but on thoroughly comprehending the material in another (deep approach)" (Ramsden, Prosser, Trigwell, & Martin, 2007, pp. 140-1; Trigwell, 2010). Curiously, they found that students' responses to units were linked to that of the professor's beliefs about, and approaches to, teaching. In fact, instructors were crucial in the learning process as they structured the context and strategies of learning and assessment, and thereby influenced students' approaches to learning. In his description of the linkage between student learning and good teaching, Ramsden (2003) stated effective teaching was focused on high quality student learning outcomes which "does not allow students to evade understanding, but neither does it bludgeon them into memorising; it helps them respectfully toward seeing the world in a different way" (p. 84).

In investigating academics' underpinning pedagogical paradigms Prosser and his associates found instructors who believed their role as a teacher was to pass on information to students tended to adopt more transmissive approaches to teaching. Transmissive modes of teaching revolve around presenting information in lecture formats, reading of material, and/or didactic approaches which have been established to be largely ineffective (Bligh, 1998). Contrastingly, academics who had a more constructivist belief system tended to structure more active, interactive and reflective learning experiences, whereby students were encouraged to "build their own knowledge; [and] the lecturer's task [was] to challenge students' existing ideas through questions, problems, discussion[s]" (Trigwell & Prosser, 2003, p. 233). These more constructivist instructors "perceive[d] that they have more

control over their teaching, that their class sizes [were] not too large, that their workloads [were] not too high and that their department value[d] teaching” (Prosser et al., 2003, p. 38).

Active Learning

The key goal of an instructor is to facilitate and support the learning of his/her students. Understanding how learning occurs, what conditions support learning, and how to maximise students’ learning potential are key elements of being an effective university teacher (Krause, 2005). Chickering, Ramsden and their associates advocated for active learning, reciprocity and cooperation, and using teaching methods and academic tasks that scaffold these activities. In fact there has been considerable research that indicates clear alignment between student engagement and instructors design of learning experiences, instructional repertoire, the level of technologies that have been integrated into coursework, as well as, the quality and frequency of feedback to guide learning (Kuh, 2001, 2003; Kuh et al. 2007; Nelson Laird & Kuh, 2005; Pascarella & Terenzini, 2005).

Structuring cooperative learning activities has been investigated within the higher education context by Johnson, Johnson, and Smith (1992; 2007) since the early 1990s. Their research into the impact of cooperative learning strategies revealed that “that students learn[ed] more by cooperating than they [did] by competing or working individually” (Johnson, et al., 1998, p. 28). Even though it must be acknowledged that individualistic forms of learning and teaching, such as, mastery learning, direct instruction, and presentations do have academic outcomes, these tend to be most effective in the elementary school context and when procedural and declarative knowledge and skills were the key outcomes (Arends, 2010; Bligh, 1998). These individualistic strategies have their place in certain knowledge acquisition; however, if higher order cognitive processing and team-based learning were desired then cooperative learning strategies were optimal. Research in cooperative learning identified that certain conditions must be established for students to avail themselves of the educational advantages that were embedded within this teaching strategy. These include careful structuring of the learning activities to ensure individual accountability, equal participation, team-based orientations and loyalties (positive interdependence), and simultaneous interactions (Kagan, 1994). In order for learning to be maximised the students must also be encouraged to process (reflect on) or debrief their cooperative behaviours with the view to “continuous improvement of these processes” (Johnson et al., 1998a, p. 30).

Even though there is considerable evidence to indicate that cooperative learning is a positive learning experience which can yield both social and academic gains, many university students dislike cooperative activities, particularly if it incorporates an assessment component (Caspersz, Skene, & Wu, 2002). Generally university students’ priorities are individually-oriented; especially, in relation to the attainment of good grades, therefore these students may not be naturally prepared to engage in cooperative and team-based activities (Scott & Issa, 2006). Concerns raised by students frequently include “free-riding” and “social loafing” behaviours of group members, whereby, these students did less than their fair share of the workload, and yet were content to receive their share of the assigned grades (Caspersz, et al., 2002, n.p.). Longitudinal research within the university classroom though, indicates that if the academic structures the learning experiences and incorporates strategies designed to increase individual accountability and equal participation many of these student concerns are alleviated (Scott & Issa, 2006).

Sound Assessment Practices

Assessment has been and remains a contentious and a frequently trivialised aspect of teaching and learning within higher education (Knapper, 2010). As Yorke (2003) stated there were significant pressures on universities which negatively impacted on the potential for integrating sound practices of assessment such as formative feedback. He identified four points: 1) the concerns with ensuring standards which reinforced summative forms of assessment; 2) increasingly larger classes with less

time being available for individual attention; 3) more modularised units which reinforced summative assessment due to the press of time; and 4) “the demands placed on academic staff in addition to teaching, which include[d] the need to be seen as ‘research active’, the generation of funding, public service, and intra-institutional administration” (p. 483). Along a similar argument, Knight (2002) identified that summative assessment frequently lacked validity and reliability. He indicated summative assessment practices could be improved through rigorous pursuit of plagiarism and malpractice; double-marking; “providing training for academic staff in assessment and its development”; adhering to “a code of practice” (pp. 282-3); maintaining a reflective approach to improving assessment tasks and practices; and exploring “assessment as a complex system of communication” between academic and student designed for “sense-making and claim-making” (p. 285). Unfortunately, rather than viewing assessment as another avenue to cultivate further learning experiences it has been perceived as ... merely ... the endpoint of the teaching and learning process ... [with a] strong culture of ‘testing’ and an enduring emphasis on the final examination, leaving the focus predominantly on the judgmental role of assessment rather than its potential to shape student development ... assessment can be more fully and firmly integrated with teaching and learning processes. Assessment should not only measure student learning but also make a contribution to it. (James, McNinnis, & Devlin, 2002, p. 1)

Indicators of Effective Assessment

In their report James et al., (2002) described some of the changes to assessment in universities outlining these as the move to criterion referenced assessment, provision of clearer statements of criteria that aligned with learning outcomes, and more strategic assessment that integrated the knowledge and provided more timely formative and summative feedback within the undergraduate years. Assessment needed to encompass principles of fair assessment similar to those adopted within the school system (The Joint Advisory Committee, 1993). In fact, James and his associates outlined sixteen indicators of effective assessment in higher education as:

1. Assessment is treated by staff and students as an integral component of the entire teaching and learning process;
2. The multiple roles of assessment are recognised. The powerful motivating effect of assessment requirements on students is understood and assessment tasks are designed to foster valued study habits;
3. There is a faculty/departmental policy that guides assessment practices. Subject assessment is integrated into an overall plan for course assessment;
4. There is a clear alignment between expected learning outcomes, what is taught and learnt, and the knowledge and skills assessed;
5. Assessment tasks assess the capacity to analyse and synthesis new information and concepts rather than simply recall information which has been presented;
6. A variety of assessment methods is employed so that the limitations of particular methods are minimised;
7. Assessment tasks are designed to assess relevant generic skills as well as subject-specific knowledge and skills;
8. There is a steady progression in the complexity and demands of assessment requirements in the later years of courses;
9. There is provision for student choice in assessment tasks and weighting at certain times;
10. Student and staff workloads are considered in the scheduling and design of assessment tasks;
11. Excessive assessment is avoided. Assessment tasks are designed to sample student learning;
12. Assessment tasks are weighted to balance the developmental (‘formative’) and judgemental (‘summative’) roles of assessment. Early low-stakes, low-weight assessment is used to provide students with feedback;

13. Grades are calculated and reported on the basis of clearly articulated learning outcomes and criteria for levels of achievement;
14. Students receive explanatory and diagnostic feedback as well as grades;
15. Assessment tasks are checked to ensure there are no inherent biases that may disadvantage particular student groups; and
16. Plagiarism is minimised through careful task design, explicit education and appropriate monitoring of academic honesty.

(James, et al., 2002, p. 9)

Aspects that were specifically identified as areas for further development within universities were minimising plagiarism, online assessment, group-based projects, and assessing large classes with the view to ensuring fairness, equity, consistency, and parity (James, et al., 2002; Knight, 2002). Another aspect which was increasingly important was the need to embed both the teaching and assessing of generic or professional skills, such as, communication – written, verbal and interpersonal, critical and creative thinking – problem solving, decision making, and analysis, team-work, information literacy – research and use of varied data sources, and information communication technology skills (James, et al., 2002; Knight, 2002; Summerlee & Christensen Hughes, 2010).

Good Supervision of ‘Higher-Degree-by-Research’ Students

Sinclair (2004) made the case that supervision could be considered a form of teaching except the teaching was that of graduate students for the purposes of preparing them to undertake research. He described supervision as a polarised “intervention continuum” with good supervision being a “hands on” approach at one end as opposed to poor or “hands off” supervision at the other (p. 26). Hands on supervision was correlated with regular intervention in the candidature process and more successful and faster completion rates. Cullen, Pearson, Saha, and Spear (n.d.) indicated that good supervision was characterised by considerable time, effort, and intervention in the early stages of the candidature with more independence and less control as the doctoral student developed competency, self-reliance, and confidence. Sinclair highlighted the importance of “rapid turnaround” of feedback on thesis drafts, and the development of trusting and non-parasitic relationships (p. 35). Mainhard, van der Rijst, van Tartwijk, and Wubbels (2009) emphasised the importance of sound interpersonal interactions in the supervisory relationship. In Sinclair’s and Mainhard et al., reports they advocated for agreements to be contracted between student and supervisor to ensure clarity of expectations and to facilitate the opening of difficult conversations about authorship and power relationships. In terms of the induction into scholarly pursuits, Sinclair (2004) and Cullen et al., (n.d.) indicated there was a strong place for teamwork approaches to supervision whereby: collaboration between candidates was promoted, both face-to-face and in online modes; researchers and other experts acted as advisors and additional mentors; students were introduced to networks of other research associations; and supervisors and students undertook joint authorship and presentation of research.

Cullen and his associates drawing upon the work of Brown and Atkins (1989, in Cullen et al., n.d, p. 101) compared and contrasted the characteristics of good lecturers or instructors with good supervisors and found considerable similarity, although the list of roles of supervisors was more extensive. On occasion supervisors acted as a:

- Director (determining topic and method, providing ideas);
- Facilitator (providing access to resources or expertise, arranging field-work);
- Adviser (helping to resolve technical problems, suggesting alternatives);
- Teacher (of research techniques);
- Guide (suggesting timetable for writing up, giving feedback on progress, identifying critical path for data collection);
- Critic (of design of enquiry, of draft chapters, of interpretations or data);

- Freedom giver (authorises student to make decisions, supports student's decisions);
- Supporter (gives encouragement, shows interest, discusses student's ideas);
- Friend (extends interest and concern to non-academic aspects of student's life); and
- Manager (checks progress regularly, monitors study, gives systematic feedback, plans work).

Similar to research in undergraduate university teaching, supervisor development or professional development for scholars has come under scrutiny. There has been an "increased emphasis on efficiency and quality" of supervision (Pearson & Brew, 2002, p. 135), on the complexity entailed, and "priorities and time" pressures on academics (p. 148). Pearson and Brew identified that supervisors were like managers and leaders who were simultaneously "educating, motivating and leading others", hence, they recommended leadership development programs enabling supervisors to "deal with variations in these learning and career goals of different students, and in differing institutional, disciplinary and professional contexts" (p. 143). Pearson and Brew indicated supervisor development programs were more likely to nurture adaptability, flexibility and awareness of the broader issues in inducting graduate students into a research culture which is not only local, but now, global.

The Impact of Technology on Higher Education

Educational technology had, and continues to have, an influence on the range of services within universities as well as on conceptualisations of teaching, learning, and assessment. Walker's (1999) comment "information technology will influence society and education as much as print technology has" illustrated the significance of technology's impact (p. 18). Using technology for learning and teaching radically altered with the advent in 1990 of the World Wide Web. For example, search engines and scholarly databases enabled students and academics to easily access information from much wider sources than previously available. Hence, students have and continue to demand more sophisticated information communication technology (ICT) be made available to support their learning at university (de la Harpe & Radloff, 2008). This has increased the pressures on academics to incorporate ICT into their learning activities and redevelop resource materials (Levine & Sun, 2002). Early researchers asserted that media was not an influence on learning but was merely a form of delivery (Clark, 1983) and others indicated technologies were means of introducing efficiencies, rather than a phenomenon that had the potential to change content and reform curriculum (Carter, 1996). More recently, researchers perceived the immense potential in transforming educational experiences, and also in supporting academics' pedagogical development and interrogation of beliefs about teaching through their exploration of technology implementation in the classroom (Price & Kirkwood, 2008). Information communication technologies are influencing all manner of educational processes and practices, for example, ICT is now used as: tools and equipment for research, analysis, and learning; mechanisms for communication and collaboration between educational stakeholders; resource sources; modes of delivery; learning experiences (simulations); and more recently for social learning and networking.

With ICT now being utilised for all or large components of the learning experience, the social aspects of an educational environment may have been reduced or lost altogether if the academic did not plan for these approaches to be overtly incorporated into the teaching strategies (Davies & Graff, 2005; Palloff & Pratt, 2005). Educational psychologists have long identified the academic and social advantages of collaboration and communication between students - peers, and their teacher (Vygotsky, 1978, 1986, in Bandura, 1986; Woolfolk, 2004). As ICTs have evolved, asynchronous tools such as bulletin boards, forums and emails were used to facilitate greater flexibility in the communication modes. More recently social networking technologies, such as, Facebook™ and Twitter™, have become a phenomenon harnessed for educational purposes. As bandwidth increased and the cost of transmission decreased, Voice-over-Internet-Protocol (VoIP) emerged as a synchronous communication tool. With the development of advanced ICTs, teaching and learning has been reconceptualised to take advantage of these technological tools with the view to enhancing learning. Such

technologies were, however, only tools enabling academics to better meet the needs demanded by their more technologically-aware students.

Leadership that Promotes Quality Teaching

Universities worldwide have encountered many pressures for change over time, but in particular in the last ten years. What is now needed is a period of reflection, reformation and renaissance.... At the same time, we need to regenerate our understanding of, and approach to teaching and learning. It is these goals that which will drive pressing need to reform the undergraduate experience in universities worldwide ... they should concentrate on innovation, relevance, and applicability, and should develop skills related to employability and an ability to function within global policies, economies, and cultures. This is a call to action, a plea to think seriously about what we are doing, to value pedagogical research, and to ensure our institutional policies and practices are well aligned with the very important work that needs to be done. Our future depends on it. (Summerlee & Christensen Hughes, 2010, pp. 257-8)

Universities must engage with reviewing pedagogies employed, the content of programs, and professional skills and ignoring these imperatives places these institutions at risk, whereby, “society will likely find different ways to deliver on the promise of higher education and we may become obsolete” (p. 243). Summerlee and Christensen Hughes highlighted the need to ensure alignment with institutional policies and practices to facilitate this vision of higher quality teaching and learning. Hence, leadership is a key factor in this reform of higher education. Even though their plea was voiced most recently this call to action has resonated throughout higher education literature for decades (Côté & Allahar, 2007; DETYA, 2000; Dewar, 2002; Knight, 2002; Ramsden, et al., 1995; Scott & Dixon, 2008). Ramsden’s (1998a, 2003; Ramsden, et al., 1995) writing throughout the 1990s advocated for strong leadership within universities to promote the vision and structure for engagement with teaching and learning and academic development.

Drawing upon Senge’s (2006; Senge, Otto Scharmer, Jaworski, & Flowers, 2005) and Kouzes and Posner’s (2002, 2003) writing about ‘learning organisations’, Ramsden identified the need to explore the lessons learned from business in terms of transforming universities into learning organisations. Senge noted a power inherent in humans as being the ability to continue their learning throughout their lives. Harnessing the collective’s capacity to learn was a crucial strategy for institutional innovation, creativity, success, and sustainability in diverse contexts such as business, industry and educational organisations. Similarly, Kouzes and Posner reported on the synergies and transformational change possibilities when leaders supported their people and in turn the people created the change and innovations within the organisation. Ramsden encompassed Senge’s ideas and described the implications for leaders in universities. He noted that higher education administrators and leaders needed to address:

- Visionary leadership which translates into explicit and cohesive policies and implementation plans for promoting and guiding quality teaching and learning initiatives;
- Reward and recognition structures including promotion and tenure criteria to encompass and value teaching and learning;
- Creating collaborative cultures focused on quality teaching and learning within faculties and removing the barriers and constraints so that academics can purposefully engage with all their academic roles – teaching, research, and service/leadership;
- Resource teaching activities, ensuring quality infrastructure, resources, and technology;
- Integrate teaching performance into accountability performance review processes for academics and include appropriate student feedback indicators into institutional reviews;

- Use data from student and academic feedback, and external stakeholders in establishing institutional teaching plans, reviews of programs, and individual course (re)development; and
- Resource academic development, for example, the overt acknowledgement and recognition of research (scholarship) on teaching and learning, and formal and informal professional development.

Many researchers within the field of university teaching and learning have identified the imperative in investing time, funding, and expertise into promoting enhanced learning for both students and their faculty. As Senge pointed out transformational change was necessary in many organisations in order to ensure ongoing sustainability within dynamic and competitive contexts and universities must “tap people’s commitment and capacity to learn at all levels” of the institution, and leadership at all levels of the organisation is the key.

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