THE PROMISE AND THE PRACTICE OF QUALITY IN ASSURING LEARNING IN HIGHER EDUCATION.

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ABSTRACT

There remains a lack of published empirical data on the substantive outcomes of higher learning and the establishment of quality processes for determining them. Studies that do exist are nationally focused with available rankings of institutions reflecting neither the quality of teaching and learning nor the diversity of institutions. This paper describes two studies in which Associate Deans from Australian higher education institutions and focus groups of management and academics identify current issues and practices in the design, development and implementation of processes for assuring the quality of learning and teaching. Results indicate that developing a perspective on graduate attributes and mapping assessments to measure outcomes across an entire program necessitates knowledge creation and new inclusive processes. Common elements supporting consistently superior outcomes included: inclusivity; embedded graduate attributes; consistent and appropriate assessment; digital collection mechanisms; and systematic analysis of outcomes used in program review. Quality measures for assuring learning are proliferating nationally and changing the processes, systems and culture of higher education as a result.

Keywords: quality assurance of learning; graduate attributes; learning and teaching outcomes

BACKGROUND

The quality debate in higher education is vigorous and ongoing. The lack of reliable data on the substantive outcomes of higher learning, coupled with a focus on rankings of institutions that reflect neither the quality of teaching and learning nor the diversity of institutions (OECD, 2011) has prompted scholars increasingly to argue that the internal and external perspectives of quality can and should be better linked (Jordens & Zepke, 2009; Brink, 2010). The external view of quality debates the value of national systems and international and transnational issues in the shift towards qualifications frameworks (Harvey & Williams, 2010(a)). In contrast, the internal view focuses on institutionally sanctioned assurance programs and debates learning and teaching quality, assessment and feedback for continuous program improvement (Harvey & Williams, 2010(b)). In the past twenty years, these two perspectives on quality in higher education have been increasingly documented; however, the external processes for engaging in it are often misaligned to the substantive academic activity, and the internal processes for encouraging it are largely patchy and tenuous (Harvey & Williams, 2010(b)).

Quality in assuring the learning of students in higher education is predicated on the implementation of a process that demonstrates the outcome of learning against a predetermined set of standards (Brink, 2010) which in turn are generally related to the graduate skills required for a particular program of study. In this study of Australian universities, we investigated the processes developed for encouraging and assuring learning outcomes against standards rather than focusing inquiry on the standards themselves. It was our contention that while the processes for assuring learning were likely to be varied across institutions, there would be general consensus on the desire to establish systems and relationships that delivered quality outcomes and consequently consistency across many initiatives. Further, we proposed that while a number of external accrediting bodies may be significant driving forces for an initial engagement with assurance of learning, the aims and purposes would be linked to contextual priorities that were fit for their purpose of measurement of student learning outcomes against predetermined (often externally benchmarked) standards.

Assuring Learning

In any investigation of student outcomes in higher education, the term graduate attributes (or graduate capabilities as they are sometimes known) will feature. Graduate attributes are the transferable, generic or core learning skills which institutions determine should be acquired by graduates regardless of their field of study (Spencer et al., 2011). The increased attention to graduate attributes and assuring their achievement as part of program learning outcomes is a result of the convergence of the demands of business, government, accreditation and education (Barrie et al., 2009; James et al., 2004). Known in the literature as assurance of learning, Zhu and McFarland (2005) suggest two main steps in the process. First, identify what learning needs to be assessed and to what degree and then determine how to measure and demonstrate the achievement of that learning.

The concept of mapping graduate attributes into curricula, whilst common in the secondary sector, is relatively new in the higher education sector (Spencer et al., 2011) and research on 'mapping' graduate attributes throughout the curriculum is scant (Oliver, 2010). Few authors discuss curriculum mapping as a quality management tool to identify program gaps and opportunities for better alignment of graduate attributes, course objectives and assessment (Biggs, 2003; Freeman et al., 2008). In contrast, most research has focused on the technical aspects of assurance of learning and critiques of the tools and systems available to universities.

Integral to mapping student learning outcomes throughout the curriculum is the collection of evidence of student achievement of those outcomes. Increasingly, direct measures of

determining student achievements, including the outcomes from various assessments, are replacing indirect measures such as surveys, exit interviews and industry queries. In spite of this, the systematic direct measurement of value-added graduate attainment in higher education is still relatively immature in Australia (Taylor et al., 2009) and the challenges associated with collecting quality evidence of student achievement are exacerbated by the need for efficiency (Freeman, 2010). To assist with the process, assessment rubrics are commonly used to collect data on students' capability (Yorke, 1998). Rubrics include marking criteria, often in matrix form, that articulate explicit levels of achievement intended to make expectations transparent (Mansilla et al., 2009). Rubrics are not without their critics. There are those who claim that university education cannot be easily reduced to a 'tick list' of skills or competencies, many of which are ill-defined, overlapping, and difficult to measure (Hager, 2006).

An important component of an assurance of learning process is to analyse and use the information gathered for improvement. This application of data is colloquially referred to as 'closing the loop' and 'should be the raison d'etre for assessing student learning' (Martell, 2007, p. 192). Merely collecting data is not enough. An authentic quality assurance process should allow academics time and space to reflect on the data they collect to improve curricula, assessment and program design. Though deceptively simple, many institutions are unsure about how to undertake this type of continuous improvement (Martell, 2007; Taylor et al., 2009).

Developing processes to incorporate the joint mapping of curricula, collection of student achievement data and analysis of the data to implement program based change brings new issues for higher education management. To achieve these outcomes, various changes in systems, structures and/or culture are recommended. Systems change advocates recommend assorted models for processes that meet accrediting bodies' requirements, invariably including the steps referred to earlier (mapping curricula, collecting student data and analysing the data to inform curriculum change) (Martell, 2007; Zhu & McFarland, 2005). Recursive models of curriculum improvement that encourage continuity and efficiency with short and long term benefits of curriculum change are increasingly recommended (Zocco, 2011). However, a one-size-fits-all model of assurance of learning is unlikely to fit the diverse requirements of various disciplines or the different graduate attributes being measured (Marshall, 2007).

Structural change to academic work relationships are also recommended with traditional organisational charts recognised as not conducive to the knowledge management and innovation required for substantive programmatic change. Instead of the traditional disengaged individualism, collegial entrepreneurism is recommended, with equitable central university resource distributions, strong leadership not equated to hierarchical authoritarianism, and new partnerships between academics and administrators (Ryan & Guthrie, 2009).

Academics need to be empowered and encouraged to build teams and collegial experiences through a range of processes such as communities of practice which in turn foster inclusivity and innovation into the decision making of multi-discipline academics and administrators (French, 2011). A network approach involving both key external and internal stakeholders in curriculum quality assessment is recommended for moving the locus of control away from the institution itself to the relevant disciplinary community of practice, resulting in more authentic involvement in the process of planning, design and delivery of curriculum (Jordens & Zepke, 2009). Yet this type change in work structures requires investment of both hard resources and time from academics who are already struggling with increasing teaching and research workloads, often within a culture they feel devalues this aspect of their role (Green & Ruutz, 2008).

Coupled with the need for structural change is the importance of substantive interruption of embedded academic culture to ensure the programmatic view in building the quality of assuring learning. A transformational change in culture is suggested for academic staff to be fully involved in the quality assurance process (Betters-Reed et al., 2008; Horsburgh, 1999). To achieve lasting and sustainable change for academics in their most deeply held discipline-based interests and values, alignment of both leadership with ownership and internal culture with quality culture is critical (Gordon, 2002).

This paper reports on a study that was part of a larger research project investigating assurance of learning processes in Australian universities. The context for this study was Australian Business Schools where there is an increasing focus on assurance of learning driven by external accreditation of specific programs from agencies such as the American-based Association to Advance Collegiate Schools of Business (AACSB) and the European Quality Improvement System (EQUIS). Many Business Schools are implementing new internal processes to assure and report on student learning throughout a program of study against pre-determined graduate capability standards to meet external requirements. The aim of our study was to identify the assurance of learning processes currently being implemented and to investigate the practices sustaining that process. A further goal was to identify emerging issues between management, which often designs or leads the change, and teaching academics, who implement new practices.

METHOD

Due to the limited knowledge of assurance of learning practice in Australian universities, the methodological framework was an exploratory qualitative design using two data collections consisting of interviews and focus groups to explore the phenomenon. An experimental design was neither possible nor desirable, as the variables and relationships between them were as yet unknown (Berg, 1995; Creswell, 1994; Marshall & Rossman, 1989). For data collection one, we interviewed Associate Deans Learning and Teaching (ADLTs) within Australian business schools. Associate Deans Learning and Teaching are generally responsible for the strategic implementation of curriculum and teaching and learning processes hence they are ideally placed to reflect on the strategic development of assurance of learning within disciplines, as well as the implementation practices and challenges. For schools where an ADLT position did not exist, a person with equivalent knowledge of institutional teaching and learning processes was sought (for example, director of studies or director of teaching and learning). Email contact was made with all ADLTs (n = 39) across Australian business schools and 25 indicated agreement to proceed with an interview, resulting in a response rate of 64%.

Participants matched the characteristics of the population in terms of State, external accreditation status, and network affiliation (Group of Eight [established research], Australian Technology Network [technical], Regional Universities Network and Innovative Research Network) (Table 1). Of particular importance in terms of sampling was that externally accredited schools were not over-represented ($z = -0.68$, $p > .05$), and there was adequate representation of the diverse university types as determined through affiliation networks.

Insert Table 1 about here

A semi-structured telephone interview survey was developed from key themes evident in the extant literature, and iteratively adjusted and moderated by advisors to the research project. Central concepts addressed in the interviews included: external accreditation; internal process development; staff involvement; strategic focus; graduate standards; tools; and program development and challenges (see Appendix 1).

For data collection two, we selected four distinctly situated universities from those participating, two with external accreditations for their business programs and two without.

The aim of the second study was to elaborate the data from the first. Whereas the themes emerged through stakeholder initiation in the first study, key concepts were interrogated explicitly in the second, follow-up study. The focus group questions were developed from the results of the first round of interviews and sought to identify the issues of process development from two perspectives, those of management and those of teaching academics (see Appendix 2). Two focus groups (one group of management personnel and one of teaching academics) consisted of volunteers from a relevant population at each institution.

ANALYSIS

The 25 interviews and 8 focus group discussions were taped, transcribed verbatim and analysed using semantic analysis and content analysis conducted in two stages: an initial analysis conducted using semantic analysis software and the second using different content analysis software and alternate researchers. Concept maps for each data collection were developed and examined for overall patterns and proximity followed by a more detailed analysis of concept content via scrutiny of the thesaurus for each concept and co-occurrence. We also looked for the absence of meaningful concepts, going to the list of 'frequent words' found in the concept seed editing stage for the words that may draw out more meaningful information from the text. Once a meaningful and stable map was established, it became the starting point for further interpretation.

Drawing on Hsieh and Shannon's (2005) methods of directed semantic and content analysis, sections of the text were coded into the eight major categories identified, including (in order of importance): assessment; mapping; evidence; involvement; accreditation and AACSB; research; standing out; and stakeholder buy-in. The text within these categories was coded through an inductive process of identifying sub-categories, in recognition of the importance of homogenous and distinct categorisations as suggested by Lincoln and Guba (1985). Over the course of the coding, the labels and definitions of the distinct categories often changed, reflecting the meaning brought by the additional text as recommended by Miles and Huberman (1994).

Complementing the exploration phase of the semantic analysis of the text, an analysis was undertaken using content analysis software to validate the categories. Seven categories similar to those from the semantic analysis were identified. Notably, the categories were similar enough that listing them would not add to the description.

FINDINGS AND DISCUSSION

All the respondents in both studies identified their institutions as supporting an institutionally sanctioned assurance of learning process and discussed the benefits of these processes as basic and foundational to the continuous improvement of programs and the provision of evidence of the development of students' graduate attributes. 'Continuous improvement of curriculum is something that academics are always striving for anyway' (RUN; non-accredited). A basic frequency count indicated external accreditation (both national and international) were the primary drivers for assurance of learning processes for the majority of the respondents (n = 23 [92%]).

The concept maps depicted different issues relating to assurance of learning proposed by the different groups. Three institutional groups were evident following the analysis of the interviews with ADLTs. Group 1, business schools not currently in the process of applying for external accreditation, discussed assessment issues primarily related to mapping of graduate capabilities and accreditation with external bodies. Group 2, business schools in the process of applying for external accreditation, discussed assessment issues concerning the evidence of students' achieving learning outcomes and aligning with an emerging industry culture for accreditation. Group 3, business schools with external accreditation, discussed assessment in relation to the issues of the buy-in and involvement requirement for all staff and

the importance of addressing the sustainability of the process to ensure time is not taken from academics involved in important research requirements.

This would appear to be a natural outcome of the assurance of learning process where the first stage institutions were concerned about what they should do to set standards and map the curriculum, the second stage institutions were concerned about how to collect and measure outcomes, and the third stage institutions were concerned about how to involve the staff to improve and sustain the process (see Figure 1)

<center>Insert Figure 1 about here</center>

From the focus group study, the issues raised by management groups were distinctly separated from those raised by the teaching academic groups. Management groups were concerned with the strategic concepts of 'change' and 'staff engagement' whereas the academics were concerned about the process issues of 'skills development' and 'motivators for the process'.

The importance of a holistic programmatic view for quality and the quality process itself were the most common concepts discussed equally by both groups. The management discussion centred on: the value of the whole of program approach; the benefit to staff of seeing the connections between their teaching units and the whole program; the value of a program approach in facilitating large subject assurance; and the value to students of seeing how their skills are developed over a program. On the other hand, the academic groups were more focused on process issues such as the politics of program management and the challenges of seeing links to program goals where staff see learning objectives as 'retrofitted' into subjects.

Semantic analysis offers an indication of when and how often concepts occur close together within the text. The co-occurrence between concepts in the text is an important measure of the degree of association between them. For each of the groups as differentiated above by point of process in accreditation, we viewed blocks of text coded as groups co-occurring with concepts. In this way, we were able to illustrate the findings that related to our research questions with quoted text. For this study we have focused on concept co-occurrence between the three groups (accredited, non-accredited and seeking accreditation) and the three stages of the assurance of learning process.

Setting the standards and mapping the curriculum

Contrary to the research evidence that mapping of graduate attributes or standards throughout relevant programs is new to higher education (Martell, 2007; Taylor et al., 2009), we found that all schools surveyed were engaged in the process of mapping learning standards in their programs; however, the responsibility for this mapping varied. In the majority of cases, 16 (64%), academic staff were identified as being responsible for selecting the subjects/courses/units of study most suited to the assurance of specific graduate attributes; with faculty administrators responsible for this task in only nine (36%) cases.

The level of mapping varied, with ten (40%) cases mapping learning outcomes only to the subject outcomes or course outcomes level, while the remaining 15 (60%) cases reported mapping learning outcomes to specific assessment tasks within a subject. Those who reported mapping to specific assessments tasks were also currently pursuing, or already in possession of, external international accreditation.

Paramount across all university types and accreditation status was the desirability for the curriculum mapping process to be inclusive of all staff in the program. Betters-Reed et al. (2008) recommend that for an appropriate quality assurance process in higher education, academic staff need to be fully involved in its determination and delivery. Both structural and cultural changes were noted as being critical to ensuring effective assurance of learning practice. The introduction of new structures and processes for academic collaboration resulted in new processes of assuring learning as well as opportunities to share information at a

programmatic level and to encourage inclusive decision making. Examples from a range of institutions follow:

> The emphasis on a participatory process involved sitting down with subject coordinators and having them work through how the graduate attributes and program learning objectives fit into their subject. (ATN; accredited)
> We held a number of workshops off-campus, where staff worked through charting the learning goals over the course of the program on butcher's paper. This included unit and program coordinators, heads of departments and the dean of learning and teaching. (IRU; accredited)
> We engage in participatory mapping by email, sending out a spread-sheet with the attributes, which lecturers fill in for their individual units. (Regional; non-accredited)

An holistic view of the program demonstrating the contribution of each course to the program learning goals and to the development of graduate attributes has been shown to be a critical factor in long term success in assurance of learning (Lynn & Robinson-Backmon, 2005; Marshall, 2007). Removing the focus from a single course or unit of study to viewing the delivery of content, skills development and assessment as a scaffolded continuum is essential for quality assurance of learning processes.

In this research, institutions that had undergone the physical act of mapping the program learning outcomes through the courses or units of study reported that these 'maps' or spread-sheet records were powerful stimulants to understanding and recognising the importance of a holistic approach to the program design and delivery for academic staff. The process of debate, sharing of information and discussion about assessment tasks that would provide evidence of learning outcomes flowed from this process.

In universities with external accreditation, the mapping was generally updated annually, feeding into a five year cycle of program review. In other cases, maps were not as often updated and tended to fall more into University accreditation or professional body accreditation timelines. The following respondents noted:

> Program directors are asked to code all unit objectives against program learning goals and outcomes. A FilemakerPro database is used to present how the program learning goals are distributed over the units. The mapping is updated every year, which feeds into a program review every five years. (Go8; accredited)
> We build levels of attributes into the process, along individual assessment items. Learning outcomes and assessments are rated in terms of the level of the graduate attribute demonstrated: 1) introductory; 2) intermediate; 3) graduate. These levels are used to show that the relevant attribute has been developed over the course of the program. (RUN; non-accredited)

Effective assurance of learning practice suggests facilitating staff and student awareness of program change and assurance of learning processes (French, 2011; Green & Ruutz, 2008; Jordens & Zepke, 2009). This is particularly noted as a useful step in fostering staff engagement and encouraging active student participation in the learning process Comments such as those following provide examples:

> The discussion around staff engagement concerned the institutional orientation of rewarding research, and the challenges of getting academics' time for anything else. There was an emphasis on how easy the process of AoL is; that it saves work and time, particularly through electronic systems for the entry of marks. (Other; non-accredited)
> While attempts were made to make AoL resource and time neutral, there were concerns that this might be indicative of a tolerance for the processes rather than real engagement. (Go8; accredited)

> The e-portfolio in the Bachelor of Business is built around the graduate attributes. Students are prompted to find examples of how they have demonstrated each of the attributes through their course work and extracurricular experiences. (ATN; accredited)
>
> Students are asked to record their extracurricular learning and previous studies, which are then combined with their current studies to produce a Career Point Index in line with the graduate attributes. [They] are encouraged from early in their program to start planning and developing their Career Point Index aligned to their desired career path. (ATN non-accredited)

Capstone subjects, commonly compulsory subjects offered in the final year of a degree program (Van Acker & Bailey, 2011), were increasingly identified as a program initiative used to facilitate the emphasis of the end point in the skills development map for students and as a data collection point for program review:

> Capstone units are mapped as a point of assessment for particular learning objectives that have been developed through tasks earlier in the degree. The results of assessments related to that outcome are of interest if there is a problem with demonstrating the graduate level of the attribute at the capstone. The review process then looks all points where the attribute is developed. (ATN; accredited)
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> Each major has a capstone unit. All goals are introduced in the core units, with the further development of the goals in the major and outcomes are typically measured in a capstone unit. (Other; non-accredited)

Collection and measuring of evidence

The literature denouncing the use of rubrics in assurance of learning due to their potential to reduce the development of skills and competencies to a tick list (Hager, 2006) was not supported in this research. Twenty (80%) of the 25 cases confirmed the use of rubrics to collect evidence of learning outcomes, with the remaining five indicating their intention to develop these tools. Whilst the use of rubrics was unanimous, there was still contention about whether or not to standardise the rubrics, with eleven interviewees using standardised rubrics in the data collection process.

Despite 100% of respondents acknowledging that they used a process for mapping learning outcomes across the program, only ten (40%) confirmed that they were collecting evidence or data to measure student learning outcomes. All but one school utilised an internal embedded approach to collection of learning outcomes versus the use of a standardised testing method where students are required to undertake an examination independent of their individual subjects within the program (G08; accredited). Vital issues identified for effective assurance of learning practice included: the need to reduce academic workload in the data collection processes; ensuring consistency in data collection; and maintaining quality of the analysis of the results. Software solutions were broadly acknowledged as assisting the practice of collecting data and reducing the workload on academics as indicated below:

> We use a program called STUNNER, which breaks assessments into high, medium, low and produces a report for each subject and eventually program whether a learning objective was achieved. (Other; non-accredited)
>
> Specifically for assessing group work, we use SPARK to allow for self and peer evaluation anonymously. (G08; accredited)
>
> ReView was used for online marking, with a set of standards for attributes presented alongside the grade standards for the assignment. All assessment marking is done online, eliminating the need for extra data entry. The system is able to pull out the criteria for a particular attribute across assessments and present a picture of performance on that attribute. (ATN; accredited)

Some respondents identified that assessment pieces were marked by the academics responsible for teaching the subject, while others used independent markers to assess the graduate attribute elements of the assessment task. Primarily this was motivated by not wanting to add to lecturers', course or program coordinators' workloads. For most, 'time burden' was seen as the most significant challenge in the development and embedding of appropriate criteria and collection of evidence of learning outcomes. Using technology to assist in the data collection was seen as the solution to ensure academics were not subject to additional administrative work. Two examples follow:

> We embed assurance of learning criteria into student assessment criteria using rubrics and ReView [software program], with student learning typically assessed in a capstone unit. The overall performance for each learning goal is an aggregate of all of the students' results from that learning goal across all linked assessment criteria. Embedding assurance of learning into routine activity and systems was seen as essential to build assurance of learning into the culture of the university, having all staff engaged in and reflecting on how units and programs develop the learning outcomes. (ATN; accredited)

> We deliberately didn't go down having external people come in and mark ten per cent of the exams and remark them. That to me is not sustainable. (Go8; accredited)

For a limited number of universities, getting staff 'buy-in' to the process was considered the central challenge. External examination was discussed as a possible solution to measure the achievement of graduate attributes without unnecessarily burdening academics engaged in the 'important work of research'. Whereas 'buy-in' was addressed passionately by respondents who raised it, this theme was one of the concepts with lowest valence, or in other words, identified in the mapping process with limited discussion. The solution involved taking assessment items (or a sample) to external examiners, to remark using criteria in line with the attributes:

> The process has mainly been to assess student work for AOL separately from the lecturer's regular assessment grading, using external markers (external to the unit but usually internal to ASB) and a rubric which focuses on one graduate attribute /program learning goal; however, increasingly, the rubrics are being embedded in the regular unit marking guides so that external marking is not necessary, and a random sample of the students' marked work can be used for AOL reporting. (Go8; accredited)

The challenges associated with ensuring consistent measurement criteria in assessing attributes across programs and using clearly articulated and meaningful criteria were also discussed. Embedding criteria into the curriculum to normalise the practice and to encourage both engagement and the value of the practice was identified as an important empowerment opportunity within the process. Consistent criteria for attributes embedded into assessment tasks, breaking objectives into two or three criteria, with markers indicating the student's level of achievement on each of these, and providing opportunities to benchmark across programs provided a basis for high level discussion and feedback on the suitability of the rubrics at the subject and program level:

> We use a rubric developed for each of the learning objectives. The assessment teams take a sample of assessments from the capstone and apply it against a rubric for the learning goal. For each learning goal there is a separate assessment team that mark the sample of assessments against the criteria. (Other; non-accredited)

The use of multiple measures to enrich the discussion and interpretation of the data collected was identified as a necessary component of an effective practice of assuring learning. The following examples identify that while direct data use is the norm in Australian business schools to assure the learning of students against graduate standards; indirect measures are not

without their use or benefits and can offer a broad base for further analysis and program development:

> We use a broad package of data to understand program performance and assurance of learning outcomes, not just the measurement of program learning outcomes, but in addition university level analysis of individual major performance and unit and teaching evaluations. These different sources of information are considered each semester by discipline teams as part of a comprehensive review of program, major, unit and assessment outcomes. (ATN; accredited)

> As well as assurance of learning measures, we use data from government surveys and student completion surveys to help develop the validity of the data. (Other; non-accredited)

Continuous program improvement and process sustainability

It was clear from the respondents that the part of the process often known as 'closing the loop' (Martell, 2007) is possibly the least developed area in Australian business schools. A high proportion of those institutions undertaking continuous improvement at program level were institutions with external accreditations. Important elements of effectiveness in this part of the process included a broad stakeholder engagement and program level thinking.

Those institutions with a formalised reporting process all discussed the need for the encouragement of broad stakeholder engagement with this aspect of the process and acknowledged the need to build an expectation of critical reflection at both unit and program levels with a view to further improvement. However, this emerging stakeholder involvement was clearly focused on internal engagement. Jorden and Zepke (2009) recommended a broader network approach in curriculum quality assessment but as yet the institutions participating in this project did not engage in discussion about substantive external stakeholder involvement. Examples of the rich internal stakeholder involvement are as follows:

> We have quite a de-centralised structure of responsibility for responding to measurement data. The aggregated results get sent back to the unit coordinator and to the discipline representative for assurance of learning. They are asked to comment on the data and make suggestions for changes at the unit level, then at the program level. (Go8; accredited)

> A de-centralised process occurs in our school where the responsibility to develop and act on changes occurs through discipline teams. A team including the Assistant Dean Teaching and Learning, program directors, the teaching and learning team, the discipline coordinators or head of each major, the chair of teaching and learning committee from the discipline school, and some of the unit coordinators are brought together to discuss the findings. These meetings are positioned as an important event with some robust discussion around the interpretation and implications of the data. (ATN; accredited)

In some cases, aggregated results were considered at a discipline level leading to suggestions for appropriate changes:

> Working with a small team including the unit and program coordinators, we placed responsibility on this group to work with the results for the different learning objectives. The use of small groups was a fairly practical measure based on the difficulty of getting senior people together at the same time. (IRU; accredited)

In most cases, after program reports were reviewed by a committee or by teaching and learning teams, discussion of results by others involved in the program delivery was identified as useful in reviewing program learning goals and identifying overlaps:

> Our process works back from where learning is assessed to examine how a particular learning outcome has been introduced and developed over the program. Closing the

loop at the program level means that there is recognition of the places in the program where changes could be made. (Go8; accredited)

The issue of sustainability of the process beyond its initial implementation and reporting stage is also of concern for the management groups in the study. Ensuring that the processes are embedded, relevant and considerate of time burdens on staff are all critical to achieving a cultural shift where assurance of learning is valued and rewarded in the institution.

CONCLUSION

Globalisation, political intervention, privatisation of higher education and the shift to online learning have resulted in an increased concern with the quality of higher education worldwide. Protecting the rights of students, attempting to achieve greater standardisation of qualifications for an increasingly mobile workforce, and attending to public opinion are of concern to governments regardless of their political persuasion. Universities must prove their worth. They are obliged to provide evidence that degree completion is value-adding to students' knowledge and skills, and the demand is high from multiple stakeholders.

The existence of a quality assurance mechanism may not automatically mean that the program is of good quality or that there are any tangible improvements to student learning. Quality assurance should be a support mechanism used to enhance quality in higher education and to improve student learning (Martin & Stella, 2007). While the debate still rages in regard to who sets the standards, how they should be assessed and whether assurance should be externally driven or internally located, Westerheijden et al. (2007) suggested that, to be sustainable and truly embedded, quality assurance of student learning should be a transformative process that sits within academic learning communities who rely on clear research-based evidence.

We found support for our contention that, while a number of external accrediting bodies and government requirements may be significant driving forces for initial engagement with assurance of learning, the processes developed in Australian business schools are often linked internally to meet the broader stakeholder needs ensuring student learning outcomes fit for purpose and measurable against a set of predetermined (usually externally benchmarked) standards.

The strength of support for a quality system was somewhat surprising as was the degree to which business schools had already engaged in the process. There was a divergence of focus between higher education management personnel, who design the assurance of learning processes and systems, and teaching academics, who implement them. This was a reasonable expectation with management concerned about culture change and academics concerned with skills and motivation. A key finding is that the university stakeholders have a deep and rich understanding of the definition, contextualisation and imperative for assurance of learning. The business schools participating in this research are invested in and dedicated to doing the best by their students. They have embraced the necessity of enquiring into collecting evidence and making improvements to enhance the quality of student learning and outcomes. The data provided through this study may be interpreted as affirming for stakeholders, in that the shared mission across institutions is a quality learning outcome.

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Appendix 1

Guiding Questions for interviews

1. Do you have defined graduate outcomes/graduate attributes for each of the degree programs in your school at your university?
2. From where have these defined graduate outcomes originated?
3. How do you assure that students in your programs achieve your defined graduate outcomes?
4. How have you implemented this process with key stakeholders?
5. What challenges have you faced? How did you overcome them/ what are the lessons learnt?
   Have you any current challenges? How do you propose to overcome them? Can you foresee any future challenges? How would you like to further develop your process?
6. Do you have any evidence/examples/tools that you would be happy to share with us?
7. Are there any other comments you would like to make? Is there anyone else that I should talk to in regard to this?

Appendix 2

Focus Group Questions

	Management (HOS, Program Directors, T&L Reps, T&L Support)	Teaching Staff
1.	Do you have defined graduate outcomes/graduate attributes for each of the degree programs in your faculty?	Do you have defined graduate outcomes/graduate attributes for each of the degree programs in your faculty?
2.	What is your institution/faculty philosophy behind assuring these graduate attributes?	What is your institution/faculty philosophy behind assuring these graduate attributes?
3.	What is your understanding of the external motivators behind assuring graduate attributes? (TEQSA, AUQA, AQF, standards agenda)	What is your understanding of the external motivators behind assuring graduate attributes? (TEQSA, AUQA, AQF, standards agenda)
4.	How do these external motivators impact your processes?	How do these external motivators impact your processes?
5.	If you were talking to a new academic, how would you explain your process for assuring graduate attributes? (mapping, data collection - type, when, rubrics, examining data, closing the loop, engaging students)	If you were talking to a new academic, how would you explain your process for assuring graduate attributes? (mapping, data collection - type, when, rubrics, examining data, closing the loop, engaging students)
6.	Do you feel you have got staff buy-in for the process?	Are you engaged with the process?
7.	How did you get staff buy-in for the process?	How have you been involved in the process?
8.	What are the main enablers for the process?	What are the main enablers for the process?
9.	Are you using any 'tools' to support	Are you using any 'tools' to support

	assuring graduate attributes?		assuring graduate attributes?
10	What are the intended outcomes of the process?		What are the intended outcomes of the process?
11	What are the unintended outcomes of the process?		What are the unintended outcomes of the process?
12	What challenges have you/are you facing?		What challenges have you/are you facing?
13	How did/will you overcome them/ what are the lessons learnt?		How did/will you overcome them/ what are the lessons learnt?
14	In an ideal world what innovations would you like to see implemented for the future?		In an ideal world what innovations would you like to see implemented for the future?

Table 1

Characteristics of Sample Compared to All Australian Business Schools

State	NSW n(%)	VIC n(%)	QLD n(%)	WA n(%)	SA n(%)	TAS n(%)	ACT n(%)	Total n(%)
Sample	7(*28*)	6(*24*)	6(*24*	3(*12*)	1(*4*)	1(*4*)	1(*4*)	25(64)
Pop.	10(*26*)	9(*23*)	9(*23*)	4(*10*)	3(8)	1(*5*)	4(5)	39(100)

External Accreditation Status		External Accredited n(%)	No Accreditation n(%)
	Sample	8(*20*)	20(*80*)
	Pop.	9(*23*)	29(77)

Network Affil.	Go8	ATN	RUN	IRU	Other	Total
Sample	*6(24)*	*4(16)*	*4(16)*	*1(2)*	10(*44*)	25(64)
Pop.	*8(20)*	*5(12)*	*6(15)*	*7(17)*	13(*33*)	39(100)

Continuous program
improvement and process
sustainability

Stage 3

Collection and measuring of
evidence
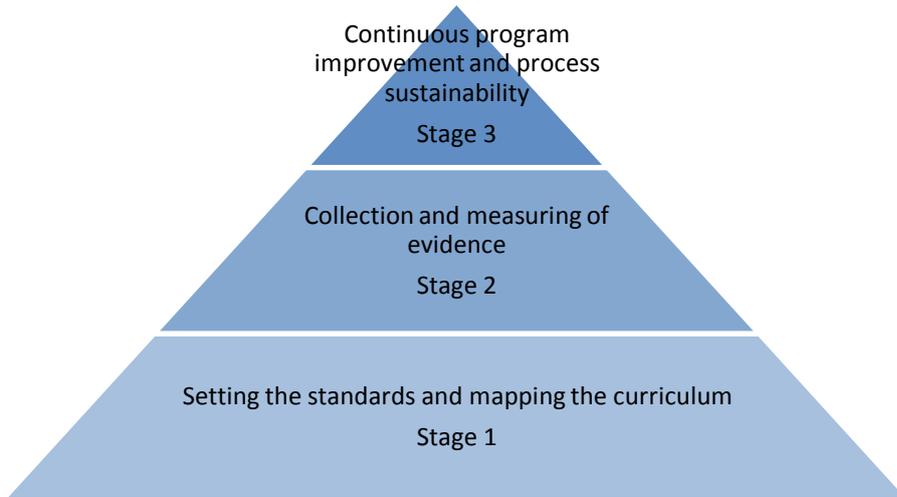
Stage 2

Setting the standards and mapping the curriculum

Stage 1

Figure 1 – Stages of Assurance of Learning Process