

Surveys unite to provide current status of Assurance of Learning in Higher Education

Rosie Nash

University of Tasmania, Hobart, Tasmania
rmcshane@utas.edu.au

Romy Lawson

University of Wollongong, Wollongong, New South Wales
romy@uow.edu.au

Anne-Marie Williams

University of Tasmania, Hobart, Tasmania
AnneMarie.Williams@utas.edu.au

Jo-Anne Kelder

University of Tasmania, Hobart, Tasmania
Jo.Kelder@utas.edu.au

Margarietha Scheepers

University of Sunshine Coast, Sippy Downs , Queensland
MScheepe@usc.edu.au

Tracy Taylor

University of Technology Sydney, Sydney, New South Wales
Tracy.Taylor@uts.edu.au

This paper provides an overview of assurance of learning (AoL) practices across Australia in the context of a comparison of two national surveys. AoL is a quality enhancement process used in Higher Education (Lawson et al., 2014), defined as the process by which learning outcomes are measured against specific course goals (Hall & Kro, 2006). Progress has been demonstrated over 5 years through increased awareness of AoL through legislation (Australian Government, 2014) and improved practice supported by national projects (Lawson, Scheepers & Taylor, 2015) but further work is still required. The question of how to support AoL implementation through cultural change to increase staff engagement and resources such as professional development is important. The authors compared data from two national surveys administered to the higher education sector in 2014-15, supporting the quantitative survey findings with qualitative participant statements. Lawson *et al.*'s (2015) Quality Enhancement project (QE) has found significant positive changes in AoL practice since 2010 in Business Education but, despite this, there are still areas for development including collaborative curriculum design. The 2014-2015 Quality Pursuit (QP) survey verified these results, looking more broadly to the sector, their data showed only 54.6% of respondents are engaged in AoL for quality enhancement. This paper will explore both the survey data and discuss mechanisms to support practice through change management and professional development.

Keywords: Assurance of Learning, Higher Education, Cultural Change

Background

Assurance of Learning (AoL) is a quality enhancement process used in Higher Education. In its minimal form AoL is the process by which learning outcomes are measured against specific course goals (Hall & Kro 2006) but, when considered holistically, extends to providing a scaffolded learning experience to develop learners throughout their course or program. That is, not merely assurance at an exit point, but a continual process to support students to achieve the expectations of a course (Lawson, 2015). Awareness of AoL has been developed through legislation (Australian Government, 2014) and national projects such as the Hunters and Gatherers (Lawson et al., 2013, French et al, 2014), funded by the Office for Learning and Teaching (OLT) (www.assuringlearning.com), which collated and curated examples of good practice. Although progress has been made disseminating information and engaging academics working in the sector over the last five years further work is still required to achieve broad, systemic adoption nationally (Lawson, Scheepers & Taylor, 2015).

Key to AoL is that it is a ‘systematic’ approach, based on evidence and directed towards continuous enhancement of the quality of curricula and teaching. The relationship between AoL and ‘Quality Enhancement’ is expressed in the definition embedded in Macquarie University’s Quality Enhancement Framework Policy, which defines Quality Enhancement as ‘a systematic, future directed, continuous cycle of goal setting, planning, managing and reviewing, within an appropriate governance framework and aimed at transformation and reaching the goals of [the institution]’ (Macquarie University, 2012). Two recent OLT quality projects, Lawson et al. (2013) and Krause et al. (2014), provide evidence of successful systematic implementation models: each co-ordinate a number of activities, the sum of which are far greater than their parts.

Benefits of AoL

Under the Tertiary Education Quality and Standards Agency Act 2011, universities and other higher education providers are responsible for self-regulation of their courses. The importance of AoL processes are reinforced in the renewed Higher Education Standards Framework (Australian Government, 2014). In addition to being a legislative requirement there are multiple benefits of AoL to higher education stakeholders. These include (1) Assurance of learning standards for evaluation; (2) Measures of learning for continual improvement; (3) Evidenced student progression; (4) Stakeholder clarity of learning expectation; and (5) Student control for self-directed learning (Australian Government 2014, AACSB 2013). Central to this approach is the transparency AoL provides for stakeholders where, for example, students better understand the goals of their study and that they have mastered the necessary competencies, academics can demonstrate academically rigorous teaching, and employers have confidence in the standard of graduates (Sadler, 2012).

Challenges and Solutions

Challenges to embedding quality enhancement processes include that quality enhancement and AoL are not well understood and individuals perceive it as labour-intensive and threatening (Oliver, 2010). Fullan and Scott (2009) have written extensively of the institutional cultural change issues involved, while Krause et al., (2014) identify reluctance to “re-think, redesign, and restructure curricula” (p.20) as it is viewed as a costly exercise. Challenges to using a shared repository of resources, for example course level rubrics, include lack of confidence around the value of the material and concern regarding an apparent one-sided implication of ‘sharing’ (McGill, Currier, Duncan and Douglas, 2008). In

a competitive and regulatory driven environment teaching staff are extremely protective of their material and feel vulnerable about sharing (Scott, Coates and Anderson, 2008).

The literature also articulates solutions for developing and embedding AoL practice. Both Krause, et al., (2014) and Lawson, et al., (2013) advocate a collegial approach, with academic teaching staff as the principal change-agents; they also note the pivotal role of program leaders. Fullan and Scott’s *Turnaround Leadership* (2009) speaks to the power of a co-ordinated “Top Down Bottom Up” approach that is systematic, empowering and recognises the value of learning and teaching. Fullan and Scott (2009) recommend normalising quality practices in course design and review. Academic respondents report that a collegial approach provides the opportunity to highlight challenges, share strategies and exemplars, and develop resources to support the AoL process (Lawson, 2012; 2015). The importance of supporting academics through professional development, resources, streamlined technology and coaching was emphasised. Scott challenges Higher Education to be change capable and build leadership capacity. Lawson (2013) recommends working actively with discipline scholars, and that it is essential to include a “top-down” approach to ensure executive buy-in, and a “bottom-up” approach to ensure grass-roots support (Kotter & Cohen, 2002). Central to Lawson’s approach is Kotter’s 8 step change model (Table 1).

Table 1: Kotter’s model contextualised for AoL in Higher Education

Kotter’s 8 step change model (Kotter & Cohen, 2002)	Lawson’s adaptation for AoL (Lawson, 2012; 2015)
Increase Urgency	Executive Support
Don’t let up	
Get the Vision Right	Vision
Communicate for Buy In	Communicate for Buy In
Make changes stick	
Empower Action	Empowerment
Create short term wins	Reward and Recognition
Build the Guiding Team	Building a Guiding Team
	Training (Professional Development)

Lawson contextualised Kotter’s model to support AoL in everyday academic practice. This approach is reinforced by insights from ‘change management’ and ‘professional development’ in the literature.

Method

This paper explores the data from two recent surveys administered to the higher education sector between 2014-15: the QE survey and the QP survey, to describe the current status of AoL in Higher Education and discuss mechanisms to support practice through cultural change management and professional development.

Quality Enhancement Survey

An online survey was developed in Qualtrics based on analysis of data collected through semi-structured interviews conducted with Associate Deans Teaching and Learning (ADTL) or their equivalent in the Hunters & Gatherers Project (Lawson et al, 2014). The key guiding questions for the survey were

- What is the current practice of curriculum mapping within business schools?
- What is the current practice of collecting AoL data in business schools?
- What are the main challenges faced by business schools in mapping and collecting AoL data?
- Is there a set of identifiable good practice principles that could inform the sector of mapping and data collection mechanisms?

The format of the 2015 survey was both qualitative (open text responses; additional responses to multiple choice) and quantitative (ranking questions; multiple answer multiple choice). The QE survey was administered through direct requests to Associate Deans T&L in Australian Business Higher Education Schools; network communications and content on the assuring learning website (www.assuringlearning.com).

Quality Pursuit (QP) Survey

The QP survey was informed by a literature review conducted in two phases alongside active discussion with QP community of practice members and recognised AoL experts. Phase one: identification of five relevant themes for influencing AoL activities. Phase two: members reviewed 52 papers and websites using a template (google form available at <http://tinyurl.com/ovw2w18>) to assess identified resources and existing AoL projects for sustainability, portability and useful lessons, mapped against the five themes identified in Phase one. Reviewers rated ten of those resources “all QP members must read” each are asterixed (*) in the references.

The 2014-2015 QP survey included seven quantitative (closed questions, multiple answer multiple choice, fixed choice) and eleven qualitative (open text responses). The QP survey was administered using the online Survey Monkey tool and disseminated, through the authors’ networks, social media, the www.assuringlearning.com.au website and at the HERDSA 2015 conference. The dissemination strategy was designed to achieve a national sample of respondents.

Results

Quantative Findings

Demographics

Twenty seven Associate Deans Teaching and Learning (ADTL) or equivalent from university business schools responded to the QE survey. This included representation from six states and one international respondent. Individual responses were collected for the QP survey. 104 people from a range of disciplines completed the survey from across seven states, with Tasmania representing over half of the respondents (Table 2).

Table 2: Survey respondent Demographics

Demographic	QE Business School	QP Individuals
<i>State/Region</i>		
TAS	1 (3.7%)	54 (51.4%)
NSW	7 (25.9%)	10 (10.5%)
VIC	5 (18.5%)	10 (9.5%)
QLD	6 (22.2%)	7 (6.7%)
WA	3 (11.1%)	4 (3.8%)
SA	1 (3.7%)	5 (4.8%)
ACT	0	1 (1%)
International	1 (3.7%)	11 (10.5%)
Unknown	3 (11.1%)	2 (1.9%)
<i>Discipline</i>		
Health		26 (24.8%)
Science, Engineering & Technology		25 (23.8%)
Student support		16 (15.2%)
Arts & Humanities		13 (12.4%)
Education		11 (10.5%)
Law, Accounting & Business	27 (100%)	7 (6.7%)
Unknown		7 (6.7%)

AoL Engagement

The level of engagement in the different aspects of AoL is reported in Table 3. The data from the QE survey represents engagement in activities at a school level whereas the QP data shows individual engagement in activities. This data indicates that the business sector have engaged strongly with AOL processes with high percentages in the majority of activities for whole schools.. In contrast the engagement is lower across the range of activities when individuals from multiple disciplines respond. The lower percentages in the benchmarking section from both surveys suggest that this is an area of activity that has not been fully engaged in across the sector.

Table 3: Current Engagement in AoL activities

Categories	QE Business School	QP Individuals
Course Learning Outcomes	27 (100%)	33 (62.3%)
Curriculum Mapping	26 (96.3%)	37 (69.8%)
Collecting Data/Evidence	26 (96.3%)	33 (62.3%)
Benchmarking/Review Internally	15 (55.6%)	22 (41.5%)
Benchmarking/Review Externally	12 (44.4%)	

Purpose (AQF, Professional Accreditation)	26 (96.3%)	32 (41.5%)
Closing the Loop	24 (88.9%)	30 (56.6%)

*NB: participants could select multiple categories.

The QP survey responses to engagement with AoL are recorded in Table 4. The survey showed only 54.6% of respondents admit to being engaged in AoL for quality enhancement. Most educators report they have been met with quality issues in their own teaching in the past (83.7%), currently (70.4%), and expect to incur more in the future (74.5%). An overwhelming 82.5% of respondents feel there are specific issues currently at play that are not being met by the HE sector.

Table 4: QP survey participants engagement with AoL

Question	Yes (%)	No (%)
Currently engaged with AoL (n=97)	53 (54.6%)	44 (45.4%)
Level of engagement (n=53)		
Individual	42 (79.2%)	11 (20.8%)
Course	41 (77.4%)	12 (22.6%)
School	19 (35.9%)	34 (64.1%)
Faculty	17 (32.1%)	36 (67.9%)
Institution	22 (41.5%)	31 (58.5%)
How often involved in AoL (n=50)		
Daily	14 (28%)	
Weekly	17 (34%)	
Fortnightly	8 (16%)	
Monthly	8 (16%)	
1-2 times/year	3 (6%)	
No response	55	
Are there any specific AoL needs that are not met by the HE sector currently?	33 (82.5%)	7 (17.5%)

*NB N/A answers were removed from the data,

^No response not included in percentage but shown to highlight respondents who did not respond to certain questions.

The QE survey asked business schools to identify which roles were engaged in AoL processes with results presented in Table 5. Results showed that for most business schools academics at all levels were engaged in curriculum mapping but the higher level engagement reduced for rubric development and assessment design.

Table 5: QE Survey engagement with AoL by role in business school

	Individual Unit Coordinators	Course Level Coordinators	Associate Deans	Educational Expert
Curriculum Mapping	73%	77%	77%	-
Rubric Development	67%	63%	42%	55%
Assessment Design	92%	50%	38%	46%

*NB: participants could select multiple categories. Only % provided as small number of Business Deans (n=27).

Qualitative Findings

The survey participant responses from both surveys were thematically analysed (Braun & Clarke, 2006) in response to the top challenges faced in implementing AoL and the solutions that have been found to be effective to combat these challenges with results presented in Tables 6 and 7.

Quantitative findings were then analysed in conjunction with findings from the thematic analysis to confirm the reliability of the findings and provide richer insight of the challenges and solutions to AoL reported by the sector.

Challenges to AoL

Analysis of responses to questions related to perceived challenges to implementing AoL in a higher education context: staff engagement in the process; workload challenges connected with AoL; lack of resources in the form of professional development and technology to streamline practice; scalability of practice with large cohorts (predominantly identified by business schools in the QE survey); and valuing the process by seeing the educational experience enhancement.

Table 6: Top challenges faced by educators in pursuit of AoL

QE	QP
<i>Engagement</i>	
Gaining buy-in from staff, culture change Buy-in from unit/subject convenors/ course convenors	University promotions based on research output and not necessarily QE. So difficult to get staff buy in
Engaging academics to take the process seriously and not as an act of compliance (especially when research has a much higher payoff for invested time).	A totally inadequate Grad Cert process that models the worst teaching practices as it attempts to induct new staff
Ensuring new staff are on board	QE should be integral to teaching and routine, not an 'added extra Quality L&T associated with being in the 'B' team in academia(in comparison to the research 'A' team). Academic staff not seeing the relevance; not enough support from the School/Faculty Balancing the tensions between high quality teaching, high research output and administration/service
Faculty awareness or resistance	
Getting people to take this seriously	
<i>Time/Workload</i>	
It is a complex and workload intensive activity and setting up systems to help support the activity is fraught.	We feel we don't have time to follow through on teaching innovations and checks we see as important and great ideas'
Add on, resource hungry exercise - that makes staff grumpy	If we're overworked and overly casualised as 'staff', it can't happen time required to make changes was not sufficiently accounted for in my workload
<i>Resourcing/ Technology</i>	
I have spent three years trying to get the new ReView software installed - and it's only just now got to 'testing' stage - the central University approach to system integration is slow risk management excessive.	This opportunity for mentorship on quality teaching practice seems a bit 'hit and miss' and dependent on academic interest, rather than as a part of an incentivised organisational system
Too little support or expertise situated in the school or in the university centre	Lack of agile institutional response to providing software and hardware to take advantage of new technologies teaching spaces amenable to better teaching practices - not lecture theatres
Lack of data collection tools and software	Lack of technologies or broken technologies Data is hard to obtain from central sources

<i>Student Cohorts</i>	
Sheer size of the task given our large student body and number of degrees	increased number of students with poor reading skills, writing skills, listening skills
Effective and efficient implementation for large cohorts and collection, analysis of data	Post traditional courses Load targets impact on the quality of the student and large numbers impact on the quality of teaching Large teacher-student ratio, and diversity of student cohorts
<i>Enhancing the Educational Experience</i>	
HE market needs have to move quickly on curriculum development while having clear vision of mission	Quality is important but it seems to be too difficult to monitor or assess
The course embedded approach is superior from an individual teaching and learning perspective	A critically flawed evaluation/review system that is focused on student satisfaction only
It is seen as an admin process with no payoff	Lack of consistency in carrying out of policies and procedures
Compliance culture kicks blame down to unit coordinators, many of whom are casuals	competing institutional priorities e.g. efficiency v quality
Need to be establishing a holistic process	Absence of accountability.
Designing authentic assessment practices is required	Checkbox mentality when it comes to monitoring quality

Solutions to Implementing AoL

Both the QE and QP survey responses in relation to identifying effective solutions for implementing AoL processes agreed on the need for professional development and recognition of this type of work. Recognition of the necessity for a structured approach was also evidenced with comments on the need for support from senior leadership and committees to help lead and review processes. The need to stage implementation was also discussed emphasising that readiness and capacity for change needs to be considered. The other area that received comment was changing the culture in regard to AoL, promoting a collaborative approach to working across degree programs/courses (Table 7). The themes in Table 7 are arranged into the Lawson's adapted Kotter model contextualised for AoL (Table 1).

Table 7: Top solutions for implementing AoL

QE	QP
<i>Executive Support & Governance</i>	
Assurance of Learning Committee	If it's not a priority at higher levels, it won't happen
Having a clear responsibility process (eg. approval and reporting process that tracks recommended and actual actions around data).	Having the course coordinator require us to attend quality assurance and alignment sessions
5 yr plan	Genuine support from senior management levels, evidenced in project support and funding approvals
Committee oversight of AoL; Overarching leadership by both the Deputy Dean, External and International and Deputy Dean, Education	An institute within the university focused on teaching and learning scholarship to advise on issues
Giving discipline groups responsibility for assurance of learning	Initiative of Quality Group within the School
<i>Training & Professional Development</i>	
Increased support for academics in designing courses and programs has led to greater program level rather than course level focus.	Central university institute for learning & teaching (L&T) runs workshops, a graduate certificate in L&T which incorporates learning and assessment tasks in this space
Support of Teaching and Learning Consultants and Designers	Internal events such as school T&L retreats, and university-wide T&L forums

Workshops where staff develop TLO/assessment task as an outcome	Workshops to share views on what seems to work (and what doesn't)
Having discipline group meetings with curriculum designers in the room	Teaching grants, both internal and external
<i>Empowerment/ Building a Guiding Team/ Collaborative Culture</i>	
Ensuring that this is a collaborative process involving Unit Co-ordinators, Study Area Co-ordinators, Directors	Among the frontline teaching staff in my department, we're desperate to do more assurance and improvement work and highly motivated to make sure we're providing the best for our students at all times.
Small group T&L groups	Grass roots activity around developing course identity seems to be working
Collegial approach	University (e.g. Teaching Matters) and national conferences that facilitate networking, discussion of these issues and development of collaborative links
Brought everyone together	peer teaching and review
Getting it down to school discipline level / grass roots lecture feel part of it. Embedded	Work alongside situated academic teams to help them create "quality" in a way that makes sense to them
Collaborative design	Mentor support from colleagues
Getting evidence to drive changes.	acknowledge the need for systematic and systemic quality processes
An administrative person to feedback the results.	Evidence, evidence, evidence - both for the need and impact!
<i>Reward & Recognition</i>	
Appointing program directors with appropriate rewards and support to enable leaders to be developed as well as ensure appropriate accountability	Lack of recognition for the amount of time and effort required to develop and deliver quality learning and teaching
Integrating indiv performance evaluation - teaching and unit feedback	Engaging with awards programs that focus on excellence in teaching Recognition of great practice - Institution and national awards
AOL Champions	
<i>Create Short Term wins</i>	
Starting simple (eg. all data collected in a single capstone) enables traction and minimises potential error (eg. unit coordinators making random changes).	Processes for identifying innovative practice or even good existing practice and evaluating the potential for rolling it to the wider School/Faculty;
Measured and planned Pilot then refine	closing of the loop on feedback and improvements
Simplified AoL process to get it into normal academic practice. Starting where people are at and maybe introducing small tweaks rather than trying to change everything. Once it is in place only then begin to make it more widely disseminated and more sophisticated.	Activities that have realistic time frames - at least five years

Discussion

The two surveys analysed in this paper provide insights that can inform the design of professional development for AoL activities. Change management must be intrinsic in the roll out of any AoL associated professional development. It is clear from the responses that although AoL awareness is increasing there is much room for improvement across the sector and the systemic nature of problems facing academics means there is no simplistic approach that will 'solve' the problem of how to embed AoL into routine institutional practice.

Analysis of the two surveys highlighted four discussion topics profitable for institutions: 1) Engagement (Business schools in contrast to other disciplines); 2) Influencing factors for involvement in AoL; 3) Challenges and 4) Solutions to implementing AoL.

Engagement: (Business schools and other disciplines)

Business schools report higher engagement with AoL. The quantitative difference in the reported AoL activity for Business courses (reported by ADTLs) compared with other disciplines (reported by individual casual lecturers through to PVC), could be interpreted three ways.

- ADTLs may be more aware of AoL activities in their schools compared with individual academics on the ground.
- Business schools may have more external pressure to provide evidence of AoL activities (AACSB, Lawson, et al. 2012a).
- ADTLs may be less aware of pressures on the ground and have inflated views of AoL activities taking place in their schools.

This finding is consistent with the discovery by Lawson et al. (2012a) that business academics and their senior leaders lacked a shared understanding of AoL. Whilst leaders interpreted cultural change as strategic issues their academics were more concerned with the practicalities of delivering on AoL to their students. Importantly, as Lawson highlights, this disconnect is detrimental to effectively implementing AoL institutionally.

Thus, on face value, pressure from key stakeholders to produce quality graduates (Lawson, et al. 2012a), external accreditation requirements (AACSB, 2013) and perhaps the last five years increased focus on AoL strategies, supported by OLT Discipline Scholar Lawson, explain the Business schools' reported confidence.

Influencing factors for involvement in AoL

Academic position appears to influence the type of AoL activities undertaken and how regularly they are practiced. Although ADTLs (QE survey) reported nearly 100% involvement by their schools in most AoL activities; individuals from the QP survey reported involvement with AoL in only 50% of cases. As described above this could be a consequence of over estimation on the part of the ADTLs, sample differences or may reflect a true discrepancy in Australian Business schools' current AoL compared with all other disciplines. Although the quantitative findings for the two surveys differ, Table 7 shows clearly ADTLs and individual academics have shared understanding of solutions for implementing AoL. Shared understanding is essential to the success of implementing AoL. With higher level academic position, participants described less involvement in rubric development and assessment design. It is possible that increased leadership involvement in AoL may steer engagement (Fullan & Scott, 2009) and effect change. Benchmarking and review was an AoL activity that both surveys highlight requires increased focus and attention in the future. This could provide 'low hanging fruit' (Kotter & Cohen, 2002) for both leaders and academics wishing to commence AoL. Evidence based resources for national and international benchmarking and review already exist (Booth 2013).

Challenges

The accounts of the challenges to AoL captured in QE survey (high level academics, ADTLs) and the QP survey (individual academics) concur and are consistent with the literature. Both respondent groups described inadequate recognition and professional development support in the area of AoL coupled with increased casualisation, time poor staff, broken systems (administration, technology, mentoring), increased student numbers (with diverse student capability) as a consequence of institutional pressure to increase revenue. They report that the discussion around the value of research versus teaching continues to favour research, which

reduces capacity to address quality of teaching. Most QP survey respondents report specific AoL needs are not being met by the sector. However, a great starting point is that academic leaders and academic teachers have a shared understanding of the challenges and solutions to implementing AoL.

Solutions

Despite the many challenges, the respondents were able to articulate realistic solutions that aligned with Lawson's adapted Kotter model, contextualised for AoL. Thus, we recommend an AoL implementation strategy and professional development designed with this model, threaded with philosophies of change management, and an inclusive collegial approach. Change management and professional development are inextricably linked and were two key solutions highlighted by the QP literature review and the participant comments from both surveys. Leaders and academics could avoid duplication of effort in designing an AoL process for their institution and access existing resources including powerful assessment strategies (Scott, 2016) and AoL rich websites; <http://www.assuringgraduatecapabilities.com/> (Oliver, 2010), www.assuringlearning.com (Lawson, 2015).

Limitations

The results outlined in this paper are susceptible to recall bias. The respondents may represent more highly motivated individuals with a personal interest in AoL rather than the general academic population. This may have the effect of inflating the positive nature of the results. The small number and Australian respondents may make it difficult to transfer the results to an international population.

Conclusions

This paper explored data from two national surveys of the higher education sector, analysed to identify institutional mechanisms to support AoL practice through change management and professional development. Nationally, AoL awareness and activity is increasing, however, there is still much room for improvement. Given the strong engagement with AoL activities reported by Australian higher education Business schools, other disciplines may benefit from exploring the lessons learnt around change management and applying similar approaches utilised by the Business discipline for developing professional development resources. Lawson's adaptation of Kotter's 8 stage model (Kotter & Cohen, 2002) is a useful model to support designing and implementing AoL and build an AoL culture.

References

- AACSB International. (2013). *White paper 3: AACSB assurance of learning standards: an interpretation*. AACSB International Accreditation Committees, 2nd ed. Retrieved <http://tinyurl.com/qyazrua>
- Australian Government. (2014). *Higher education standards framework, (Final proposed December 2014)*. Australian Government. Retrieved <http://tinyurl.com/qf449ry>.
- *Booth, S. (2013). Utilising benchmarking to inform decision-making at the institutional level: a research-informed process. *Journal of Institutional Research*, 18(1), 1-12. ISSN 1443-2110.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi: 10.1191/1478088706qp063oa
- *Deakin University. (2013). *Deakin learning futures agenda 2020: course enhancement*. Deakin University. Retrieved <http://tinyurl.com/kytogq6>.
- *Holt, D. Palmer S., Munro, J. et al. (2014) An evidence-based approach to implementing the 6EOLE Quality Management Framework Retrieved <http://tinyurl.com/n68xaqd>
- French, E., Summers, J., Kinash, S., Lawson, R., Taylor, T., Herbert, J., Fallshaw, E., Hall, & C. (2014). The practice of quality in assuring learning in higher education, *Quality in Higher Education*, 20 (1), 24-43.

- *Fullan, M., & Scott, G. (2009). *Turnaround leadership for higher education*. San Francisco: Jossey-Bass.
- Kotter, J. & Cohen, D. (2002). *The Heart of Change: Real life stories of how people change their organizations*. Boston, MA: Harvard Business School Press.
- *Krause, K., Scott, G., Aubin, K., Alexander, H., Angelo, T., Campbell, S., Carroll, M., Deane E., Nulty, D., Pattison, P., Probert, B., Sachs, J., Solomonides, I. & Vaughan, S. (2014). *Assuring final year subject and program achievement standards through inter-university peer review and moderation*. Canberra: Australian Government Office of Learning and Teaching. Retrieved: <http://tinyurl.com/p9r2f84>.
- Lawson (2015) *Assuring Learning; Leadership*. Retrieved: <http://www.assuringlearning.com/leadership>
- Lawson, R., Taylor, T., Herbert, J., Fallshaw, E., French, E., Hall, C., Summers, J. (2012a). Assurance of learning-Are academics and senior leaders singing from the same hymn sheet? EDULEARN12 Proceedings, 4584-4594
- Lawson, R., Taylor, T., Herbert, J., Fallshaw, E., French, E., Hall, C., Kinash, S., Summers, J. (2012b). Strategies to Engage Academics in Assuring Graduate Attributes. Paper presented at the 8th International Conference on Education, Samos, Greece.
- *Lawson, R., Taylor, T., Herbert, J., Fallshaw, E., French, E., Hall, C., Kinash, S., & Summers, J. (2013). *Hunters and gatherers: strategies for curriculum mapping and data collection for assuring learning*. Sydney: Office for Learning and Teaching, 2013. Retrieved: http://www.olt.gov.au/system/files/resources/SP10-1862_Lawson_Report%202013.pdf
- Macquarie University (2012). *Macquarie University's Quality Enhancement Framework*. Sydney: Macquarie University. Retrieved: <http://tinyurl.com/kcfpsly>.
- *McGill, L., Currier, S., Duncan, C., & Douglas, P. (2008). Good intentions: Improving the evidence base in terms of sharing learning materials. Retrieved: <http://repository.jisc.ac.uk/265/1/goodintentionspublic.pdf>.
- *Oliver, B. (2010). Teaching fellowship: Benchmarking partnerships for graduate employability. Sydney: Australian Learning and Teaching Council. Retrieved: <http://tinyurl.com/lspmaby>.
- Sadler, D. R. (2012). Assuring academic achievement standards: From moderation to calibration. *Assessment in Education: Principles, Policy & Practice*, 20(1), 5-19. Retrieved: <http://www.tandfonline.com.ezproxy.utas.edu.au/doi/pdf/10.1080/0969594X.2012.714742>
- *Scott, G., Coates, H., & Anderson, M. (2008), Learning leaders in times of change: Academic Leadership Capabilities for Australian Higher Education. Retrieved: http://research.acer.edu.au/higher_education/3
- *Scott, G. Tilbury D. Sharp, L. Dean, E. (2012) *Turnaround Leadership for Sustainability in Higher Education*. Office for Learning & Teaching Project Report. Retrieved: <http://www.olt.gov.au/project-turnaround-leadership-sustainability-higher-education-2011>
- Scott, G. (2016) OLT Senior teaching fellowship: Powerful assessment in higher education. Retrieved: <http://olt.gov.au/olt-national-senior-teaching-fellow-geoff-scott>
- TEQSA. (2011). *Developing a framework for teaching and learning standards in Australian higher education and the role of TEQSA*. Canberra: Tertiary Education Quality and Standards Assurance.
- TEQSA. (n.d.). *TEQSA's reform agenda –sector update*. Canberra: Tertiary Education Quality and Standards Assurance. Retrieved: <http://tinyurl.com/ljbbjkh>.

Copyright © 2016 Rosie Nash, Romy Lawson, Anne-Marie Williams, Jo-Anne Kelder, Margarietha Scheepers and Tracy Taylor. The authors assign to HERDSA and educational non-profit institutions a non-exclusive license to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive license to HERDSA to publish this document in full on the World Wide Web (prime site and mirrors) and within the portable electronic format HERDSA 2016 conference proceedings. Any other usage is prohibited without the express permission of the authors.