Curriculum design for assuring learning – leading the way

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assuringlearning.com
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## List of acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOL</td>
<td>Assurance of learning</td>
</tr>
<tr>
<td>AQF</td>
<td>Australian Qualifications Framework</td>
</tr>
<tr>
<td>CLO</td>
<td>Course learning outcomes</td>
</tr>
<tr>
<td>HESF</td>
<td>Higher Education Standards Framework</td>
</tr>
<tr>
<td>HESP</td>
<td>Higher Education Standards Panel</td>
</tr>
<tr>
<td>SLO</td>
<td>Subject learning outcomes</td>
</tr>
<tr>
<td>TEQSA</td>
<td>Tertiary Education Quality Standards Agency</td>
</tr>
</tbody>
</table>
Executive summary

Assuring learning is a vital element in educational practice. It is a feedback mechanism for learning and teaching practice, allowing educators to review students’ achievements in relation to the expectations set for the learning experience, and to use this data to continually inform practice. All those involved in education should be engaged with assuring learning, but in the current standards-driven climate, it is regularly viewed as a compliance activity and a burden that encroaches on teaching and research time. This view needs to be dismissed: a cultural change is required to encourage mindsets that recognise that assurance of learning is beneficial to students, academics and institutions in improving learning and teaching experiences. This fellowship takes a step towards re-engaging academics with assurance of learning by examining curriculum design in a holistic manner, fostering a collaborative approach to design.

This ‘whole-of-course’ curriculum-design approach for assuring learning focuses around course (degree) learning outcomes. It works with course teams to develop appropriate outcomes that meet all the internal and external body requirements, and to use these outcomes to drive design. It encourages course teams to embed course learning outcomes directly into subjects1 (units of study) to introduce, develop and then assure, a technique that results in assessments aligning directly to course learning outcomes (as required by legislation – see Higher Education Standards Framework: 5.1 (2011)), and to provide consistency to students and academics in relation to the overall aims of the degree. The differing expectations and contexts for students at various stages of the degree are then mediated by the assessment tasks used in subjects to monitor progress.

The next element of the approach is agreed criteria and levels of achievement for the different stages of the degree, by the course team collaboratively developing whole-of-course rubrics for each course learning outcome. This, again, provides a consistent message to students about the expectations that have been set depending on where they are in their degree. It also, if developed in a social constructivist way, ensures that academics teaching on a course have a shared understanding of each course learning outcome and the standard required from students. If this calibration is done well, the instructor’s judgements on students’ performance for a course learning outcome are comparable to others’ judgements on the same outcome.

To embed this into the curriculum, the course team must design authentic assessment and learning activities that provide a valid and progressive way to both develop and assess each course learning outcome. This whole-of-course approach to designing key learning activities

1 ‘Subjects’ is used to describe individual units of study.
and assessment tasks means that the course is designed in a scaffolded way, where both students and staff can see progression. These assessment points can then be used to collate evidence to demonstrate achievement with summative assessments focussing on these key tasks. This also provides an opportunity for students to take ownership of demonstrating their learning by collating portfolios.

Only after these whole-of-course design activities are in place can curriculum mapping take place to find the best subjects within which to embed the learning activities and assessments. This holistic design is not a common approach in higher education, with many degrees mapping course learning outcomes at the beginning, and subject coordinators then developing their subjects in isolation.

This fellowship consisted of three parts:

• Coaching – working with institutions who were going through curriculum review to collaboratively revise their course using this whole-of-course approach;
• Dissemination – conducting workshops and presenting at conferences to share the thinking behind whole-of-course design as well as examples of good practice to a wider audience. This also facilitated engaging participants in conversation to further develop the approach; and
• Resource development – expanding the assuringlearning.com website to incorporate materials to support course teams in adopting a whole-of-course approach. These resources included animations to explain concepts at each stage; ‘talking head’ videos from course directors who had experience in the whole-of-course design approach; coached workshop materials and templates; examples of good practice; conference abstracts and presentations; and workshop materials. In addition to these resources, the fellowship allowed for an open-source online tool to be developed (the Curriculum Design Workbench) to step course teams through the whole-of-course design approach, collating, mapping and summarising data on course learning outcomes, rubrics, assessment tasks and learning activities, as teams progress through the stages.

The fellowship has been able to engage with over 1,200 participants from 62 universities and nine other higher-education-related organisations over six countries, in a total of 46 dissemination events. The feedback has been very positive, but, more importantly, the conversations have been rich for all involved, especially the fellow. The evaluations suggest that the fellowship is going to have significant impact on the sector in beginning the move to a mindset that sees assurance of course learning outcomes as a basic educational principle that can be achieved through a collaborative whole-of-course design approach. This has been a heartening experience, for which I thank the Office for Learning and Teaching for their faith in me and their support to undertake my campaign to change the way we think about curriculum design.
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Chapter 1: Fellowship Rationale

Background
Assurance of learning\(^2\) is a basic educational principle: when we set a learning outcome that a student should be able to achieve by the end of their learning experience, we should have a mechanism to see if they have achieved it, and then use this performance information to improve our practice as educators in the future. Internationally there is pressure for significant change in measuring quality in teaching and learning (Krause, Barrie & Scott, 2012), which includes assuring outcome-based learning. The quality of education standards in higher education has been a matter of much recent discontent and debate. Martell and Calderon (2009) cite growing public dissatisfaction with the quality of higher education in the US, and the UK Government White Paper ‘Students at the Heart of the System’ (2011) set out the quality challenges of a changing higher-education environment, recognising the need to strengthen quality-assurance processes and adapt and reinforce systems to improve practice. In Australia, responding to the Bradley Review (2009), the government announced a landmark reform package for higher education that made a commitment to ensuring that growth in the higher-education system would be underpinned by a robust quality-assurance and regulatory framework. This places a renewed emphasis on student outcomes and the quality of the student experience. The assurance of learning process is therefore crucial in educational settings to provide valid evidence to external constituents such as potential students, public officials and accreditors to demonstrate that the organisation is meeting its goals, and that individual academics have a built-in strategy for improvement in learning and teaching.

Under the Tertiary Education Quality and Standards Agency Act 2011, universities and other higher-education providers are responsible for ensuring that their self-accredited courses of study comply with the Provider Course Accreditation Standards. Section Five of the framework sets the standards for assessment, with the expectation that it is designed so that it “is effective and expected student learning outcomes are achieved”. This is reinforced in Standard 5.1:

\[
\text{Assessment tasks for the course of study and its units provide opportunities for students to demonstrate achievement of the expected student learning outcomes for the course of study.}
\]

This legislation drives curriculum design to focus on assuring learning outcomes in a whole-of-course\(^3\) approach. This message is repeated throughout the revised Higher Education Standards Framework, aligning with the model of assurance of learning first proposed in the OLT Strategic Priority Project ‘Hunters and Gatherers: Strategies for Curriculum Mapping

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\(^2\) ‘Assurance of learning’ is a phrase used by the Association to Advance Collegiate Schools of Business to refer to the assessment and documentation of program-level learning outcomes and graduate attributes.

\(^3\) ‘Course’ is used to describe a degree program.
Curriculum design for assuring learning’ (Lawson et al., 2013) (see Figure 1: Assurance of learning cycle in relation to the Higher Education Standards Framework):

Although quality assurance has been recognised as a critical component of educational-enhancement principles, there is little consistency as to how to achieve it. Assuring learning against standards is a complex task for academics and program administrators. Indeed, Coates (2010) not only acknowledges the complexity of assessing, monitoring and enhancing academic standards, but also stresses the need for cultural change to better facilitate the process. Taylor et al. (2009) note that while all Australian universities make claims in policy and curriculum documentation about developing graduate attributes, the effective integration of this development process into programs has been somewhat intangible, resulting in students not fully engaging with degree programs’ stated expectations. In addition, the B Factor Project (De la Harpe et al., 2009) found that academic staff members’ beliefs about graduate attributes and their low levels of confidence and willingness to teach and assess these attributes must be acknowledged if universities are to progress in ensuring that graduates are equipped for the world of work. In light of this, Oliver (2010) concludes that there is an urgent need for “new, efficient and effective ways of judging and warranting” graduate attributes (p.3). Sadler (2011) claims that the validity of the data being used to assure quality is of even greater concern. It is within the context of all these underpinning demands and concerns that this fellowship was undertaken. The fellowship builds on the work of a previous OLT Strategic Project, ‘Hunters & Gatherers’
(Lawson et al., 2013). The project concentrated on two elements of the assurance of learning process: mapping learning objectives that relate to graduate attributes and collecting data on student performance in relation to each learning objective. The emphasis was on informing strategy in a way that would support efficient and manageable assurance mechanisms for academic staff. Based upon the project findings, a range of good-practice strategies were developed for curriculum mapping and data collection in assuring graduate attributes; these strategies included:

- Holistic – a whole-of-program approach;
- Integrated – assurance embedded into the curriculum and linked to assessment;
- Collaborative – developed in conjunction with the academic teaching staff; and
- Maintainable – sustainable and not reliant on individuals or resources.

Progressing from this project, this fellowship concentrates on supporting two areas of education: developing a curriculum and assessments that are conducive to developing course learning outcomes and assuring learning; and working with academics to foster cultural change in adopting assurance of learning curriculum.

**Aim**

The aim of the fellowship was to address the need to design and deliver curriculum to develop and assure graduate attributes needed in today’s society. It achieved this by:

i. Working with course-development teams to use a whole-of-course approach to design their curriculum through coached workshops;

ii. Conducting dissemination events to raise awareness of this whole-of-course approach and to provide forums for conversation about curriculum design for assurance of learning; and

iii. Developing resources to support course teams undertaking course development or reviews (see assuringlearning.com).
Chapter 2: Whole-of-Course Approach

Conceptual Progress
This fellowship builds on the work of a previous OLT funded Strategic Project, ‘Hunters & Gatherers’ (Lawson et al., 2013). The emphasis of that project was on informing strategy to support efficient and manageable assurance mechanisms, predominantly from a management perspective, as shown in Figure 2 (blue circles). In contrast, this fellowship focuses on developing a curriculum and assessments that are conducive to developing and assuring course learning outcomes from academics’ perspective (lilac circles).

Figure 2: Assurance of learning process

The main aim for this fellowship has been to explore mechanisms to support a whole-of-course (degree) approach to curriculum design that fosters assurance of learning. To achieve this, three key elements of curriculum design (learning outcomes, learning activities and assessment tasks) have been constructively aligned, with the overarching goal of evaluating the effect of each element in assuring learning (Figure 3). The most important element of the approach, however, is that of adopting a COLLABORATIVE approach to course design, focusing on course learning outcomes to drive design.
This is a change of mindset for many academics who have engaged in curriculum design in the past. The common practice has been to develop a set of subjects that cover all the necessary areas; students are then awarded a degree once they pass sufficient subjects (Figure 4).

Whole-of-course design removes the silo effect of developing subjects in isolation to work with course teams to develop an integrated and scaffolded approach to the curriculum. When subjects relate and build on each other in a progressive way, students can see how each element of the course relates to the overall course learning outcomes (Figure 5).

To achieve a whole-of-course design the fellowship developed a staged approach, beginning with establishing appropriate course learning outcomes.

**Course Learning Outcomes (CLOs)**
Course learning outcomes are the driver of curriculum design, and it is therefore vital that time is spent on constructing appropriate CLOs that meet internal and external requirements.
Writing CLOs is supported by the Curriculum Design Workbench (CDW). After inputting basic information about the structure of the course, the team is given a page to write their course learning outcomes. This is accompanied by a simple checklist process.

Screenshot 1: Curriculum Design Workbench Tool – Course Learning Outcomes

If they are constructed well the CLOs will encompass external requirements (for example, AQF Levels; Discipline Thresholds; Professional Body Requirements), university themes and the course context and standard (Figure 6). In this way curriculum mapping need only occur once – to the course learning outcomes (CLO) – allowing the assurance of learning (AOL) process to be streamlined to just assuring the CLOs.

Figure 6: Streamlining AOL process through CLOs
The CDW provides a mechanism to ensure that CLOs meet all internal and external requirements:

1. In the initial course overview page, the course team is prompted to select which compliance requirements they must meet; the more common ones (AQF, Graduate Attributes, Threshold Learning Outcomes) and their levels are pre-set as options for selection.

2. Additional external requirements can also be added though through the Compliance Settings tab in the main menu.

3. Each CLO can then be considered against each compliance requirement to ensure that the CLO meets all the requirements; it can then be used as a proxy throughout the course-design process.
A summary of this mapping can then be found in the Course Summary feature:

```
3. Compliance Mapping

<table>
<thead>
<tr>
<th>AQF (AQF Level 8 - Graduate Certificate)</th>
<th>Knowledge</th>
<th>Skills</th>
<th>Application of knowledge and skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>K1</td>
<td>S1</td>
<td>S2</td>
</tr>
<tr>
<td>CLO 1</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CLO 2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CLO 3</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CLO 4</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
```

Course teams can easily see if their CLOs cover all the required compliance requirements using this summary.
The next step in maintaining a streamlined whole-of-course approach is to review how CLOs are embedded into subjects. CLOs are generally kept at a top level, and subject-level learning outcomes (SLOs) are written to reflect the relevant CLOs. This re-writing of CLOs to the SLO level often results in changes in meaning and level, as well as causing additional work for subject coordinators. Assessment tasks are then written to meet the SLOs; thus the direct evidence and data available to assure learning do not genuinely reflect the CLO, but rather the re-worked SLO (Figure 7).

Figure 7: Staggered learning outcomes

To ensure that assessments foster development of CLOs and provides valid evidence of student achievement, it is more effective to import CLOs directly into subjects (this also reduces workload for academics). These are then augmented by additional SLOs that relate to the subject context. The context and level for the CLO of the individual subjects can then be expressed through the design of assessment tasks, using subject-specific knowledge and skills and setting the task at an appropriate level of complexity for the stage of the degree (Figure 8).

Figure 8: Embedded CLOs

The consistent use of the same CLO throughout the course helps students understand what the aims of the degree are, and this helps them make connections throughout their learning, and see how previous learning and feedback can be used for development as they progress through their degree.

NB: This is a change of mindset for some academics. Thus, even though using consistent CLOs embedded into subjects is the recommended methodology for whole-of-course design, to support those who are not prepared for this step or are not yet comfortable rewriting subject learning outcomes, alternatively SLOs could be mapped thoroughly to CLOs. This ensures that the verbs represent the level expected of the CLO and that all aspects of the CLO are covered within the curriculum.
Understanding Course Learning Outcomes (Using Whole-of-Course Rubrics)

To complement whole-of-course design, guidance can be provided for both academics and students in the form of rubrics. These rubrics, which are developed by the course team, who identify criteria for each CLO along with expected standards for different stages of the degree (Figure 9). These criteria and standards are used to calibrate what is expected of students in a social constructivist manner, augmented by exemplars. The rubric is then used as the foundation for developing individual task rubrics incorporating CLO criteria as well as the task-specific criteria.

Once again, this consistent approach to judging the CLO applied throughout the whole course helps the students appreciate what they are trying to achieve and understand the expected standards to perform well for each CLO. This gives them more awareness and control of their learning experience.

<table>
<thead>
<tr>
<th>CLO1 Demonstrate essential knowledge necessary for a career in business related professions</th>
<th>Year 1: Foundation</th>
<th>Year 2: Intermediate</th>
<th>Year 3: Competent</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Critical analysis and evaluation of essential concepts.</td>
<td>Demonstrates some critical analysis/evaluation of essential concepts. e.g. reference to concepts through definition or description only.</td>
<td>Demonstrates sound critical analysis / evaluation of essential concepts. e.g. analysis demonstrated through explanation, discussion, investigation, application, interpretation of concepts.</td>
<td>Demonstrates thoughtful critical analysis and evaluation of essential concepts. e.g. involvement of reflection, judgment, problem-solving, synthesis, assessment, prediction.</td>
</tr>
</tbody>
</table>

Figure 9: Whole-of-course rubric

The example in Figure 10 shows a whole-of-course rubric used for a nested course that includes both a graduate certificate and a master’s degree. Levels were developed for both degree types, and then layered over each other so the same rubric could be used for academics as well as students in the course to judge their progression in relation to the different qualifications:
The use of rubrics always implies that without shared understanding they cannot be effective. It is therefore essential that all those involved in teaching a CLO have a clear appreciation of the criteria and standards in each rubric, and that this shared understanding is relayed to the students. It is also important when writing the rubrics that they focus on descriptions of expected actions rather than statements of excellence (avoiding words like poor, good or excellent, which are difficult to quantify).
The CDW next move in curriculum design is rubric development: course teams are asked to collaborate to develop agreed criteria and standards for each stage of the qualification. This data is collated so it can be easily used in the future.

Assessment Tasks

The main recommendations around whole-of-course curriculum design for AOL are authentic assessment tasks designed in a scaffolded manner. This is not a new idea in assessment design, with multiple sets of good practice guides referring to whole-of-course principles; for example:

*Nine Principles of Good Practice for Assessing Student Learning (Banta et al, 1996)*
- Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.
- Assessment works best when it is ongoing, not episodic.

*Assessment for learning: 6 principles or conditions (McDowell, 2006)*
- Offers students extensive opportunities to engage in the kind of assessment tasks that develop and demonstrate their learning, thus building their confidence and capabilities before they are summatively assessed.
16 indicators of effective assessment in Higher Education (Centre for the Study of Higher Education, Australia, 2002)

- Subject assessment is integrated into an overall plan for course assessment.
- Excessive assessment is avoided. Assessment tasks are designed to sample student learning.
- 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.

A Marked Improvement – six essential elements (Rust, 2012)

- A move beyond systems focused on marks and grades towards the valid assessment of the achievement of intended programme outcomes.

Assessment Standards: A Manifesto for Change (Price et al., 2008)

- When it comes to the assessment of learning, we need to move beyond systems focused on marks and grades towards the valid assessment of the achievement of intended programme outcomes.

Assessments are often designed within individual subjects, rather than developed collectively across whole degrees. They are thus often retrofitted to meet CLOs rather than being designed specifically. This whole-of-course approach prompts the course team to work together to identify suitable tasks for CLOs (considering the criteria identified in the rubric-development phase). Teams are asked to identify where and how the CLOs would be demonstrated in the real world; they then use these authentic tasks as the basis for designing assessments that can be administered under the university system (considering workload, assessment policies, moderation, academic integrity and so on). Once a set of assessment tasks is developed for each CLO, the tasks are examined to see how they can be scaffolded so students have opportunities to develop skills and knowledge as they progress through their degree, making sure the tasks increase in complexity over time (Figure 11).

<table>
<thead>
<tr>
<th>CLO</th>
<th>Assessment 1</th>
<th>Assessment 2</th>
<th>Assessment 3</th>
<th>Assessment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Written</td>
<td>Memo to manager</td>
<td>Letter to client</td>
<td>Executive summary</td>
<td>Full report</td>
</tr>
<tr>
<td>2 Ethics</td>
<td>Case study (one issue)</td>
<td>Case study (multiple issues)</td>
<td>Current news analysis</td>
<td>Real wicked problem</td>
</tr>
</tbody>
</table>

Figure 11: Example of whole-of-course scaffolded assessment

This scaffolded approach provides a focus for students in achieving their course learning outcomes throughout the degree. It allows feedback on assignments to be used in a feed-forward manner by applying it to future assessment tasks that relate to the CLO (Figure 12).
Once again the CDW steps the course team through brainstorming authentic assessment tasks that relate to the CLOs and considering how these could be ordered to present a progressive set of tasks scaffolded throughout the degree. The team is led to consider whether the task is introducing, further developing or assuring the CLO).

This approach also starts to address the problem of awarding marks to individual pieces of work, which then are summed to provide an overall final grade. Yorke (2008), amongst others, has raised concerns about adopting overall percentages as an indicator of quality, as there is no agreement on how student performance should be graded, and no
understanding of how grades are combined into an overall index of achievement (in 2002 the Australian Vice-Chancellors Committee found 13 different scales for reporting overall student achievement). This gives rise to questions about what a percentage, grade-point average or degree classification actually says; which capabilities were actually assessed and at what level; and how grading was decided. With a scaffolded approach that is based around each CLO using a standard whole-of-course rubric, consistent judgements can be made about achievement in relation to the CLO, rather than to individual tasks. This approach can present students with ongoing information about their performance in relation to their end point for each CLO (Figure 13).

![Figure 13: CLO grading](image)

Within this whole-of-course understanding, students can be marked not only on their progress for an individual piece of work but in relation to the degree standards as a whole (Figure 14).

![Figure 14: Whole-of-course marking (Lawson, Freeman & Thompson, 2012)](image)
In reality, this whole-of-course approach to assessment means that summative assessment can be used to assure progress at key points in the course, or for warranting or confirming that learning outcomes have been met (for example, corner or capstone assessments), and therefore can be kept to the minimum necessary for that purpose. Formative tasks at frequent and regular intervals can engage students in productive opportunities to apply knowledge and skills and gain feedback to support their continuous development.

Whole-of-course thinking also lends itself to a portfolio approach to showing achievement in each of the CLOs. Yorke (2008) has proposed that evidence of achieving standards can (some might say should) be created by students to widen the assessment frame so that valued achievements can be recognised, and meaningful information conveyed to interested parties such as employers or external agencies. However, with the emphasis on final percentage marks, students tend to gather evidence of achievement in a 'bottom-up' way, collecting marks and grades during a course until they have sufficient to graduate. This focus on marks, grades and summative assessment is problematic because the conciseness of an overall grade inevitably results in a loss of detail, which prompts the need for supplementary material. Yorke proposes doing assessment differently through a ‘top-down’ method, asking students, ‘How have you satisfied the learning outcomes for your program of study through your work?’ This opens up the possibility of the student making a case that they merit the award in question by stressing their individual profile of achievement. It allows for a mixture of evidence including qualitative assessments of performance in naturalistic settings (such as work placements), as well as claims of achievements that are not formally assessable by the higher-education institution but can nevertheless be supported by evidence. The making of claims of this sort implies that the student has the relevant information to hand, which would require the collation of a portfolio of achievements.

ePortfolios allow students to demonstrate competencies and reflect upon experiences, documenting academic preparation and career readiness. Creating ePortfolios is said to enable students to enhance their learning by giving them a better understanding of their skills and attributes, as well as where and how they need to improve to meet academic and career goals (Yancey, 1999). The introduction of ePortfolios to higher-education programs is not novel; however, limited examples show ePortfolios being used in a whole-of-program approach (where students take ownership of developing their course learning outcomes through collecting, collating, evaluating and selecting evidence from day one of the degree till graduation, and, in some cases, beyond). This engages students with the learning outcomes and the expected standards at different stages, allowing both them and their instructors to monitor progress throughout the degree, as well as providing an evidence repository for internal and external quality assurance.
**Learning Activities**

For students to progress in their learning, a scaffolded approach must be applied to learning activities throughout the degree. Again, the emphasis is on designing activities throughout the whole of the course; thus, it is essential that the course team work together to develop progressive activities that build on each other throughout the course and that align to the CLO assessment tasks.

The CDW again takes the course team to this next step to collaboratively decide on appropriate learning activities that align with the CLOs and the scaffolded assessment tasks; in this way constructive alignment is achieved between learning outcomes, assessment and learning activities.

This assessment and learning activity is collated in the Course Summary section, allowing the course team to see the course as a whole.

*Screenshot 8: Curriculum Design Workbench Tool – Learning Activity Development*
Mapping

Once this collaborative course team process has been completed, curriculum mapping can take place. The key features of the curriculum are designed in collaboration with the whole team, rather than through academics working in isolation once the CLOs are distributed at the start of the design process.
This last stage of the CDW prompts teams to consider where the assessment tasks and learning activities for each CLO best fit within the curriculum, using a drop-down menu of subjects identified in the first stage of outlining the course structure.

Screenshot 10: Curriculum Design Workbench Tool – Curriculum Mapping

The result is a curriculum map for the course showing all the key points throughout the degree that can be used to help both academics and students understand how the whole of course fits together.

Screenshot 11: Curriculum Design Workbench Tool – Course Summary (CLO Mapping)

NB: This ideal course-design process is not possible for all courses; for example, courses that do not have a common core, or in which subjects can be completed in any order (that is,
there are no obvious second- and third-year subjects). In these cases it is still important to identify assessment tasks that align to CLOs, but the scaffolded approach is more problematic. However, CDW output allows students to see what is covered in each subject, letting them see which assessments and activities relate to each other.

In the case of brownfield courses (that is a course revision, in contrast to a greenfield which is a new course) it is also often found that CLOs have already been mapped to subjects; in these circumstances it is recommended that the “Alverno” approach is adopted, in which coordinators who have a common CLO meet to discuss the CLO and how they can manage the students’ development and assessment as they progress throughout the degree.

The other major variation to the approach is that of cascading, which stresses collaboration. In large courses with multiple streams/majors or large teaching teams (which often include sessional staff), it is productive to apply this method to smaller sections of the curriculum; for example each major, or a common first-year core. A high-level group oversees how all these pieces fit together. It must be stressed, though, that as collaboration is at the heart of the approach, to gain a socially constructed process, the more teaching staff and students (both in design and during facilitation) are involved, the more effective it will be.

Calibration
This model compliments the need to moderate higher-education courses. This approach introduces calibration at the design stage, which should then follow into the delivery and assessment phases. Involving external partners in the process and sharing in discussions with national networks that are considering standards for different discipline areas, courses using this whole-of-course collaborative approach will be designed in line with the peer expectations of the degree. In this way, with a strong calibration focus, the moderation process can be achieved with a lighter touch.

Leadership
The last area to emphasise is that of leadership. This approach must be explicitly and clearly led, and so it is important that the leaders target key stakeholders in curriculum development to gain support for a collaborative whole-of-course approach. The approach at first may seem to impose a higher workload. However, although it is indisputably front-loaded in designing the assessment rubrics, assessment tasks and learning activities, once these elements are in place the remainder of the process becomes more streamlined. Common CLOs are used throughout subjects, with agreed rubrics, assessment tasks and activities that only need adapting to individual subject contexts. This streamlining of practice, along with the fact that the approach meets the legislation requirements of the HESP, is a persuasive argument for senior academic leaders.
Chapter 3: Fellowship Activities

Objectives
The objectives and deliverables for the fellowship were:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1: Practical support for a minimum of three business-related curriculum program developments</td>
<td>Deliverable 1: Revised curriculum design (outline with CLOs; assessment tasks and learning activities) for a minimum of three business-related curriculum programs</td>
</tr>
<tr>
<td>Objective 2: Recommendations on curriculum design for assuring learning and managing cultural change</td>
<td>Deliverable 2: Good-practice principles for curriculum design for assuring learning and managing cultural change</td>
</tr>
<tr>
<td>Objective 3: Development of resources and materials to support these recommendations</td>
<td></td>
</tr>
<tr>
<td>Objective 4: Expansion of the existing assuringlearning.com website</td>
<td></td>
</tr>
<tr>
<td>Objective 5: Dissemination of good practice through dissemination events, academic papers and work with the ABDC Teaching and Learning Network.</td>
<td>Deliverable 4: Fellowship reports, dissemination workshops and conference presentations</td>
</tr>
</tbody>
</table>

Table 1: Fellowship objectives and deliverables

Implementation Progress
There were three main elements to implementing the fellowship:

i. Coaching workshops – working directly with three course teams who were renewing/designing courses to adopt a whole-of-course approach. These workshops were run over a period of months for each course, and consisted of five coached sessions for each course team. During these sessions curriculum-design principles were introduced, and the team worked through examples from the course. The team then continued this work between workshops. The participating courses were:
   - Master of Conflict Management & Resolution (JCU)
   - Master of Business (UOW)
   - Bachelor of Commerce (UOW)

Three other courses also requested coaching sessions; these sessions were less frequent (depending on the availability of the course teams) and focused on elements of the approach rather than the complete cycle. These courses were:
   - MBA (JCU)
   - MBA/EMBA (RMIT)

Reflection after each coaching session was undertaken to continually improve both the approach and the coaching session.

ii. Ongoing dissemination events – facilitated conversation and feedback about the whole-of-course approach. These dissemination events were pivotal in the
development of the process based on the discussions that emerged.

<table>
<thead>
<tr>
<th>Event</th>
<th>Locations</th>
<th>Timing</th>
<th>No. of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissemination workshops</td>
<td>Australia (11) New Zealand (4) Hong Kong (4) UK (4)</td>
<td>October 2013 – September 2014</td>
<td>516+</td>
</tr>
<tr>
<td>Consultations</td>
<td>Australia (6) New Zealand (3) Hong Kong (1) UK (1)</td>
<td>October 2013 – August 2014</td>
<td>67</td>
</tr>
<tr>
<td>Conferences</td>
<td>Australia (4) Hong Kong (1) Philippines (1) UK (3) USA (3)</td>
<td>December 2013 – September 2014</td>
<td>640+</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46 events</strong></td>
<td><strong>1,267+ participants</strong></td>
<td></td>
</tr>
</tbody>
</table>

All materials available at: [http://www.assuringlearning.com/conference-abstracts-presentations](http://www.assuringlearning.com/conference-abstracts-presentations)

Table 2: Summary of dissemination events

iii. Resource development – a series of resources have been developed to support the whole-of-course of course approach. These are available on the expanded assuringlearning.com website (originally developed for the OLT Strategic Priority Project ‘Hunters and Gatherers’):

- Fellowship overview ([assuringlearning.com/curriculum-design-fellowship-overview](http://www.assuringlearning.com/curriculum-design-fellowship-overview))
- Coaching workshops ([assuringlearning.com/conference-abstracts-presentations](http://www.assuringlearning.com/conference-abstracts-presentations) – Workshops tab)
- Examples of good practice ([assuringlearning.com/conference-abstracts-presentations](http://www.assuringlearning.com/conference-abstracts-presentations) – Examples tab)
- Media presentations ([assuringlearning.com/conference-abstracts-presentations](http://www.assuringlearning.com/conference-abstracts-presentations) – Media and Resources tab)
- Dissemination workshop materials ([assuringlearning.com/conference-abstracts-presentations](http://www.assuringlearning.com/conference-abstracts-presentations) – Workshops tab)
- Conference abstracts and presentations ([assuringlearning.com/conference-abstracts-presentations](http://www.assuringlearning.com/conference-abstracts-presentations) – Conferences tab)
- Animation series explaining whole of course design ([assuringlearning.com/curriculum-design-what-is-it](http://www.assuringlearning.com/curriculum-design-what-is-it) – all tabs)
- Talking heads commenting on the whole-of-curriculum approach ([assuringlearning.com/curriculum-design-what-is-it](http://www.assuringlearning.com/curriculum-design-what-is-it) – all tabs)
- Curriculum design workbench – online tool to support course teams in whole-of-course design ([assuringlearning.com/curriculum-design-workbench-tool](http://www.assuringlearning.com/curriculum-design-workbench-tool))
- Three journal papers are also in draft and will be submitted for publication in 2015, as well as made available on the website also.
Chapter 4: Evaluation

Evaluation has been sought throughout the fellowship from a wide range of stakeholders. These include course-team members involved in the coaching sessions, through an online questionnaire; participants feedback in the dissemination events, through a survey handout; the fellowship reference group, through conversation; and the external evaluator, mentor and leading experts in the field. The following provides highlights of the key evaluation questions and the actual and envisaged impact.

<table>
<thead>
<tr>
<th>High Level</th>
<th>Evidence</th>
</tr>
</thead>
</table>
| To what extent did the fellowship achieve its objectives? | Approach, Chapter 2  
Activities, Chapter 3  
Evaluation, Chapter 4  
External evaluation report |
| What other valuable outcomes (beyond its objectives) has the fellowship achieved? | Conclusion, Chapter 4  
Curriculum design workbench  
[assuringlearning.com/curriculum-design-workbench-tool] |
| What were the fellowship’s overall strengths and how could it have been improved? | Conclusions, Chapter 4 |
| What significant learning has the fellowship generated concerning strategies for curriculum design for assuring learning? | Conclusions, Chapter 4 |
| Has the fellowship resulted in significant dissemination (e.g. sharing of good practice, resources and strategies to overcome challenges)? | Table 2: Summary of dissemination events, Chapter 3  
Resource development, Part iii. Chapter 3 |
| What is the perceived significance/value of the fellowship in the overall scheme of curriculum design and leadership in Australian universities? | Evaluation, Chapter 4  
Talking heads  
[assuringlearning.com/curriculum-design-what-is-it] |

<table>
<thead>
<tr>
<th>Second Level</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>What valuable learning has the fellowship enabled about curriculum design for assuring learning and leadership strategies?</td>
<td>Approach, Chapter 2</td>
</tr>
</tbody>
</table>
| How have these been valued by the stakeholders? | Evaluation, Chapter 4  
Talking heads  
[assuringlearning.com/curriculum-design-what-is-it] |
| Has the fellowship initiated processes to sustain or expand activities (beyond the fellowship timeline) to enhance curriculum design and leadership strategies? | Website and resources  
Ongoing invitations  
UOW curriculum transformation |
| Has the fellowship provided resources for guiding curriculum design and leadership? | Website and resources  
Curriculum design workbench  
[assuringlearning.com] |
| How have these resources been received? | Part iv. Chapter 4 |
| Has the fellowship produced any significant reports or papers? | Table 2: Summary of dissemination events, Chapter 3 |

Table 3: Key evaluation questions and evidence
Whole of course approach
The following is a selection of feedback that was given in response to questions related to the coaching and dissemination workshop participants’ views on the effectiveness of the whole-of-course approach:

<table>
<thead>
<tr>
<th>Coaching Approach</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• It helped giving an overall understanding of the objectives behind every step of the course design.</td>
<td></td>
</tr>
<tr>
<td>• I had the impression that everything ‘came together’ when using this approach. I feel we are now very clear around the degrees we are offering, the learning outcomes students would need to demonstrate to obtain the degrees, as well as how students can best be supported in terms of teaching and learning across the subjects. The approach really assisted in getting a clear understanding of the ‘bigger picture’, which was particularly helpful for those who had mainly been teaching single subjects within the degree.</td>
<td></td>
</tr>
<tr>
<td>• It was great to review our course from a big-picture perspective, and certainly showed up some overlap and gaps across our various subjects. It also gave the course more coherency than it had before (for both staff and students).</td>
<td></td>
</tr>
<tr>
<td>• Good concept. Useful to have assistance from a Fellow to explain and assist with developing new understanding towards changes to degree structures.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I believe that our curriculum design is much more robust now than it was before. We have developed a ‘logical’ flow assisting students to progress through the degree from the very beginning to their graduation. We used the approach to assess each of our subjects in terms of assessment tasks and we also ended up introducing some additional subjects to ensure that each student would meet all required learning outcomes. This shows that the approach had quite a specific and practical impact on our curriculum design.</td>
</tr>
<tr>
<td>• Made me much more collaborative and willing to take into account how together subjects/academics contribute to the students’ learning.</td>
</tr>
<tr>
<td>• It has made our team more collaborative in developing and designing curriculum and has ensured we think beyond the individual subject silos to keep an eye on the big picture.</td>
</tr>
<tr>
<td>• Changed approach to assessment tasks. New understanding of authentic assessment tasks and mapping of course learning outcomes across subjects for the whole degree.</td>
</tr>
</tbody>
</table>

*Additional feedback from the course coordinators can be heard from the talking heads* (assuringlearning.com/curriculum-design-what-is-it).

Table 4: Coaching workshop participants’ feedback on whole-of-course approach
Dissemination

Approach

- The application to authentic examples was valuable.
- Great philosophy for course design.
- Major reconceptualising and very timely. Will definitely begin ‘program’ level planning and think with ‘new’ mindset.
- Mine has been a ‘lone voice in the wilderness’ type of journey, as I’m operating within a non-traditional space. This workshop has been an affirmative experience, and new ideas [give] direction to help me progress forward on my journey – that’s so exciting.
- Discussions/reassurance on cultural change. Insight into what mapping should be for and the way should be done.
- This resonates with me, Romy’s statement, ‘[It’s] not about the tool, about the conversations it generates!’
- Very thought-provoking.
- Genuinely applicable to real-world setting.
- The idea of gathering together to discuss overall programme assessment – as a group! Eek! – and think about how we all contribute to this.
- Summary of systematic approach to design – external experience which challenges current practice.
- Setting the PLO-based assessments as an idea. Light-bulb moment!
- Challenging ideas that were presented, inviting rubrics for whole-of-course assessment rather than individual subjects.
- The simplicity of the new approach and its practicality.
- Thinking almost ‘backwards’ about the LOs and assessments – start at degree level, and [consider] modules later!
- Being shown an effective way/system to track LO across a degree scheme (planning, strategic) which easily identifies gaps [and] therefore swiftly [enables embarking on] designing a comprehensive and coherent programme. Have absorbed plenty of ideas to enhance student engagement on module and degree level. Wonderful.
- The very practical points of application of Romy’s ideas, yet thoroughly theoretically driven.
- Discussion and rationale. Changed my thinking!!
- On behalf of us all, many thanks for being so generous with your time to fit us into your fellowship tour schedule. Speaking to staff afterwards, [name, name] and I all feel an enthusiasm to embrace your big ideas to improve practice going forward. Staff attending your session also commented to me how useful and free-thinking your session felt, so you really delivered an impact.
- I was at your fabulous presentation at the OLT conference last week. Your recommendations made an enormous amount of good sense. As a career practitioner in a university, I spend my professional life sitting with students towards the end of their degrees helping them to discover what they learned during their degree [and] how it is relevant and valued by employers, and uncovering the evidence of their learning. It can be an onerous task for many students. What you propose would make students’ and grads’ (and career practitioners’ and employers’) lives so much better!
- It does my heart good to hear these sorts of conversations occurring ever more frequently in my institution and within the sector overall, and does my heart better when I see so many of our QUT academic staff make the time to engage and lead positive change.
Impact

- I hope to raise awareness in our program through a report on this workshop as part of a PD on syllabus-mapping to course teaching practice and assessment.
- I will align my assessments and course outcomes with program-level CLOs and emphasise collaboration with my program team in creating a common set of CLOs/assessments.
- Improve course coherence and student engagement.
- I wish more coordinators had attended, as potential for important [change] alters dramatically if more stakeholders are thinking about it.
- It will influence mapping work in two colleges (at least) over the next few months.
- Feedback to course directors in my department and hopefully [there will be a] review like this each year.
- I have seen the need to revise current UG and PG schemes and their concomitant modules for the benefit of staff and students.
- Going back to scheme principles and reviewing the design and implementation of assessment and LOs as a team exercise.
- A new way of thinking when structuring degree schemes from review.
- Big impact moving to a consistent approach.
- It will have an impact [on the] degree. Learning outcomes will feature more heavily across my courses from now on.
- I plan to review our curriculum over the summer and will use the tools and approaches discussed to address this.
- Definitely a holistic view to my degrees and hopefully a way to start important conversations within the school.
- Overhauling marking criteria/module LOs.
- Will be developing a SIG for HERDSA around curriculum alignment. Hopefully [this will] help me in my day job as well.... [T]his is critical for our business degree!
- Direct impact – daily!!
- Will be transformative – thank you! We will definitely be using the materials arising.
- Inspiring, thought-provoking, enthusiasm to attempt/make change.
- Theme is immediate applicability and more confidence in ‘I can do’, and hopefully motivate colleagues to collaborate and do as well! Thank you!!
- I am already planning my work for tomorrow to incorporate my learning from today. Thank you, Romy, for inspiring me!
- Encourage more regular dialogue between unit coordinators and course coordinator, and director too.
- Discussion with the school to try to reduce silo effects. Changes to my learning outcomes. Review assessments in my units.
- Huge impact and I just wish more of my colleagues [had] attended this workshop, as it would have been easier to get them on board.
- Helps me to understand that what I thought was bleedin’ obvious actually needs to be championed, pushed and supported.
- A large number of seeds sown – jungle growth possible. Strategies for managing the jungle – streamlining approach to course quality assurance.

Table 5: Dissemination workshop participants’ feedback on whole-of-course approach
Coaching

An online questionnaire (through the website Survey Monkey) was distributed to all the course teams who participated in the coaching workshops. The following feedback summarises the responses in relation to views on the value of these workshops.

**Distribution of responses:**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Cook University</td>
<td>42.86%</td>
</tr>
<tr>
<td>UOW - BCom</td>
<td>28.57%</td>
</tr>
<tr>
<td>UOW - MCom</td>
<td>28.57%</td>
</tr>
</tbody>
</table>

Table 6: Coaching workshop survey responses

**What elements did you value most?**

<table>
<thead>
<tr>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>I very much valued the alignment of assessment tasks to meet the subject learning outcomes as well as ensuring the authenticity of assignments. I feel like I am much more competent and confident now to explain why we have chosen to use certain assessment tasks. Developing marking rubrics and criteria was also extremely valuable since I am now able to explain them to both other lecturers as well as our students. Everything seems to be much clearer when you are actually involved in the developing process.</td>
</tr>
<tr>
<td>Developing a shared understanding of what we want our graduates to know and to do.</td>
</tr>
<tr>
<td>Working with the CLOs and mapping them across our subjects, and then connecting them explicitly with our assessment (and assessment rubrics).</td>
</tr>
<tr>
<td>Capacity building and face-to-face meetings. New concepts were explained well. Changed to online marking with rubrics, which has been very effective.</td>
</tr>
<tr>
<td>The chance to explore the course learning outcomes and really think about their importance (not just words).</td>
</tr>
</tbody>
</table>

Additional feedback from the course coordinators can be heard from the talking heads (assuringlearning.com/curriculum-design-what-is-it).

Table 7: Coaching workshop survey – most valued elements

**What elements did you find least useful?**

<table>
<thead>
<tr>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some of the discussion around specific words seemed to be unnecessary.</td>
</tr>
<tr>
<td>Since most of the discussion points were new to me, I found them all to be useful.</td>
</tr>
<tr>
<td>We probably didn’t spend enough time between workshops and following the final workshops to really tie things down.</td>
</tr>
</tbody>
</table>

Table 8: Coaching workshop survey – least useful elements

**What was the impact of being able to work collaboratively to the quality of your curriculum?**

<table>
<thead>
<tr>
<th>Impact Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Effective</td>
<td>66.67%</td>
</tr>
<tr>
<td>Effective</td>
<td>33.33%</td>
</tr>
<tr>
<td>Somewhat Effective</td>
<td>0.00%</td>
</tr>
<tr>
<td>Not Effective</td>
<td>0.00%</td>
</tr>
<tr>
<td>N/A</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Average Rating: 3.67

Additional feedback from the course coordinators can be heard from the talking heads (assuringlearning.com/curriculum-design-what-is-it).

Table 9: Coaching survey – impact rating
How do you rate the effectiveness of whole-of-course design for each of the different stages?

<table>
<thead>
<tr>
<th>Stage Description</th>
<th>Very Effective</th>
<th>Effective</th>
<th>Somewhat Effective</th>
<th>Not Effective</th>
<th>N/A</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aligning degree LOs to external/internal requirements</td>
<td>42.86%</td>
<td>57.14%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>3.43 / 4</td>
</tr>
<tr>
<td>Developing whole-of-degree LO rubrics</td>
<td>42.86%</td>
<td>42.86%</td>
<td>14.29%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>3.29 / 4</td>
</tr>
<tr>
<td>Designing assessments to align to degree LOs</td>
<td>42.86%</td>
<td>57.14%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>3.43 / 4</td>
</tr>
<tr>
<td>Scaffolding aligned assessment throughout the degree</td>
<td>57.14%</td>
<td>42.86%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>3.57 / 4</td>
</tr>
<tr>
<td>Designing degree LOs learning activities</td>
<td>42.86%</td>
<td>57.14%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>3.43 / 4</td>
</tr>
<tr>
<td>Mapping degree LOs into the curriculum</td>
<td>42.86%</td>
<td>57.14%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>3.43 / 4</td>
</tr>
<tr>
<td>Evidencing degree LOs</td>
<td>42.86%</td>
<td>28.57%</td>
<td>14.29%</td>
<td>0.00%</td>
<td>14.29%</td>
<td>3.33 / 4</td>
</tr>
</tbody>
</table>

Table 10: Coaching survey – effectiveness of approach

Would you use this whole-of-degree approach again in the future?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>71.43%</td>
</tr>
<tr>
<td>Maybe</td>
<td>28.57%</td>
</tr>
<tr>
<td>No</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Table 11: Coaching survey – future use

Dissemination

In addition to the coached workshop evaluation, feedback was also sought at all the dissemination events. The qualitative responses are recorded in Tables 5 and 13, and the quantitative ratings are in Table 12. Table 12 also includes ratings from the two conferences that collected evaluations from the participants.

<table>
<thead>
<tr>
<th>Dissemination Workshops</th>
<th>Rating (out of 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2014 HERDSA Roadshow, Cairns</td>
<td>4.67</td>
</tr>
<tr>
<td>May 2014 HERDSA Roadshow, Townsville</td>
<td>4.63</td>
</tr>
<tr>
<td>May 2014 HERDSA Roadshow, Sunshine Coast</td>
<td>4.71</td>
</tr>
<tr>
<td>May 2014 HERDSA Roadshow, Brisbane</td>
<td>4.68</td>
</tr>
<tr>
<td>June 2014 HERDSA Roadshow, Launceston</td>
<td>4.69</td>
</tr>
<tr>
<td>June 2014 AUT Workshop, Auckland</td>
<td>4.71</td>
</tr>
<tr>
<td>June 2014 Otago Workshop, Dunedin</td>
<td>4.69</td>
</tr>
<tr>
<td>June 2014 Massey Workshop, Palmerston North</td>
<td>4.64</td>
</tr>
<tr>
<td>June 2014 Victoria Workshop, Wellington</td>
<td>4.69</td>
</tr>
<tr>
<td>June 2014 HERDSA Roadshow, Sydney</td>
<td>4.59</td>
</tr>
<tr>
<td>June 2014 HERDSA Roadshow, Perth</td>
<td>4.38</td>
</tr>
<tr>
<td>June 2014 HERDSA Roadshow, Adelaide</td>
<td>4.59</td>
</tr>
</tbody>
</table>
### Table 12: Workshop and conference ratings

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Details</th>
<th>Rating (out of 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2014</td>
<td>HERDSA Roadshow, Melbourne</td>
<td>4.57</td>
</tr>
<tr>
<td>July 2014</td>
<td>Bangor University Workshop, Bangor</td>
<td>4.59</td>
</tr>
<tr>
<td>July 2014</td>
<td>MMU Workshop, Manchester</td>
<td>4.59</td>
</tr>
<tr>
<td>July 2014</td>
<td>Aberystwyth University Workshop, Aberystwyth</td>
<td>4.59</td>
</tr>
<tr>
<td>July 2014</td>
<td>Swansea University Workshop, Bangor</td>
<td>4.58</td>
</tr>
<tr>
<td>Sept 2014</td>
<td>University of Southern Queensland</td>
<td>4.57</td>
</tr>
</tbody>
</table>

#### Resources

As resources were developed they were showcased at workshops and conferences. Table 13 provides feedback on the website and the newly developed curriculum development workbench tool.

<table>
<thead>
<tr>
<th>Web and resources</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Examples of how others have done it are really useful.</td>
</tr>
<tr>
<td></td>
<td>• Website resources were especially useful.</td>
</tr>
<tr>
<td></td>
<td>• Examples of design were appreciated.</td>
</tr>
<tr>
<td></td>
<td>• Great set of resources.</td>
</tr>
<tr>
<td></td>
<td>• Love the animations and video, every word is crystal clear as are the slides!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Helpful resources that reinforce ideas about way forward – feeling quite illuminated. Thanks :)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum Design Workbench</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Romy’s Curriculum Design Workbench tool fills many gaps for us in this area!!!</td>
</tr>
<tr>
<td></td>
<td>• The ‘tool’ can't wait!</td>
</tr>
<tr>
<td></td>
<td>• The tool has been well thought out and I can’t wait to use it.</td>
</tr>
<tr>
<td></td>
<td>• The scope/spectrum of the tool and how it is used.</td>
</tr>
<tr>
<td></td>
<td>• Great to learn about the tool that Romy is developing – will try to make time to use this over the coming months or so.</td>
</tr>
<tr>
<td></td>
<td>• The course-design tool on the web looks amazing, would love to use it.</td>
</tr>
</tbody>
</table>

---

Curriculum design for assuring learning

39
Impact

- The tools have potential benefits for my Programme Team when planning our new programme, and [offer] coherence between units across levels.
- I plan to review our curriculum over the summer and will use some of the tools and approaches discussed to address this.
- I'll advocate for this approach and use it for a course I'm doing.
- Will use the 'Tool' from the assuring learning.com website.
- I am looking forward to using the 'Tool' and publicising it to my education design colleagues.
- Provides concepts and tools to apply to my work.
- I will be looking at the tool – and keeping up to date with Romy's work – I think she is blazing a trail in our world and will have long lasting impacts on our approach to design and assessment. Thanks, Romy.
- I can see your tool could help my colleagues and me a great deal in order to increase the coherence and cohesion of one of our programs.

Table 13: Resource feedback

<table>
<thead>
<tr>
<th>Have do you rate the online resources?</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Design Workbench</td>
<td>3.00 / 4</td>
</tr>
<tr>
<td>assuringlearning.com website</td>
<td>4.00 / 4</td>
</tr>
<tr>
<td>Workshop resources</td>
<td>3.40 / 4</td>
</tr>
</tbody>
</table>

Table 14: Coaching survey – resource ratings

Table 15 shows the universities from around the world that have requested accounts for the Curriculum Design Workbench to use it in developing their courses.

<table>
<thead>
<tr>
<th>University</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQ University</td>
<td>Aus</td>
</tr>
<tr>
<td>Deakin University</td>
<td>Aus</td>
</tr>
<tr>
<td>Eastern Institute of Technology</td>
<td>NZ</td>
</tr>
<tr>
<td>Flinders University</td>
<td>Aus</td>
</tr>
<tr>
<td>James Cook University</td>
<td>Aus</td>
</tr>
<tr>
<td>Manchester Metropolitan University</td>
<td>UK</td>
</tr>
<tr>
<td>Massey University</td>
<td>NZ</td>
</tr>
<tr>
<td>Monash University</td>
<td>Aus</td>
</tr>
<tr>
<td>Otago University</td>
<td>NZ</td>
</tr>
<tr>
<td>RMIT University</td>
<td>Aus</td>
</tr>
<tr>
<td>Stenden University Qatar</td>
<td>Qatar</td>
</tr>
<tr>
<td>Swansea University</td>
<td>UK</td>
</tr>
<tr>
<td>University of Tasmania</td>
<td>Aus</td>
</tr>
<tr>
<td>University of Technology Sydney</td>
<td>Aus</td>
</tr>
<tr>
<td>University of the Sunshine Coast</td>
<td>Aus</td>
</tr>
<tr>
<td>University of Wollongong</td>
<td>Aus</td>
</tr>
</tbody>
</table>

Table 15: Uptake of CDW by university
**Conclusions**

The fellowship provided many positive outcomes, and the feedback suggests it was seen as a very timely piece of work that provided operational strategies for course teams to use in practice. The number of people who were engaged with the whole-of-course approach and added to the conversation was considerable. These participants were from a range of higher-education providers across different countries; thus, comparison of the requirements articulated by the varying institutions was productive. The elements of the approach that were valued most highly included the emphasis on the essential role of collaboration in the course-design process in combating the silo approach that is commonly found, as well as the fact that the approach streamlined practice for academics by embedding course learning outcomes into the curriculum. This was an important feature, as academic workloads are already high, and effective ways to manage assurance of learning are needed. The final main achievement of the fellowship was the development of the Curriculum Design Workbench. This tool replicates the coaching incorporated in the courses, allowing teams to go through the same whole-of-course staged approach whilst capturing data. The tool has been highly anticipated, and in the few months since its release there have already been many requests for accounts.

The fellowship’s success was reliant on a number of factors:

- The cooperation of course-development teams, especially the course directors in convening the workshops and supporting the process;
- HERDSA collaboration in disseminating events, easing the marketing and organisation of events across Australia, NZ and HK (this has become an ongoing relationship between HERDSA and ALTF);
- Support from the home institution (UOW) in the form of a flexible work schedule to meet my fellowship activities, and in implementing the whole-of-degree approach;
- Support and feedback from experts: the reference group, external evaluator and mentor have all been very valuable in further developing the fellowship;
- All those who have engaged in the ‘conversation’. Dissemination began after the first month of the fellowship and the continual discussions around the work have been vital.
- Time to re-conceptualise and re-frame the approach and then conduct a pilot, ensuring it can be applied effectively in practice.

Naturally there have been challenges during the fellowship, but none have been overly detrimental to achieving the final outcomes. The main challenges included:

- Engagement – courses that had originally signed up to the fellowship withdrew or were slow in arranging dates for workshops. However, as the fellowship progressed and resources and recommendations were more evident, additional courses were keen to be involved. On completion of the fellowship a number of universities have requested further workshops to support their curriculum design.
- Course team commitment – the workshops allowed for discussion of practice and initial work in each area (for example, initial drafts of CLOs; developing a whole-of-course rubric for one or two CLOs), but continuation of this work between workshops was limited by academics’ workload. The concept of running a community of practice between workshops was not embraced due to these time
factors.

- Supporting teams in the future without personal coaching was identified as a challenge; thus an online tool was developed (Curriculum Development Workbench) to replicate the staged coaching process to support/guide/coach course teams through the approach.
- The fellowship was undertaken in conjunction with a full-time workload over a year, and whilst all the outcomes and deliverables (and more) have been achieved, the twelve months proved to be a heavy workload for the fellow.

The fellowship to date has been a valuable learning journey for me. It has provided opportunities to engage in discussions that have further developed both my thinking and the implementation of new ideas about curriculum design for assuring learning. The main lessons have been:

- Theory into practice – working directly with course teams has allowed for the concepts to be adapted so that they can be implemented in practice.
- Stages of design – the order of the curriculum design was altered as a result of the coached workshops to portray the natural design progression.
- The most important element of the approach is collaboration across course development teams. Approaching design in a whole-of-degree manner, working with other academics, is a change of mindset for many educators who are used to designing at a subject level. This cultural change has been powerful for both the academics and those students who experienced the newly designed courses.
- Working with greenfield (new course) design teams was found to be easier than brownfield (course revision), as the latter were already attached to certain practices within subjects, especially assessment tasks, which restricted them from wider thinking at times.
- The method has to be flexible as each context is different; thus, whereas I present an ideal design approach, I readily accept that each course team has to adapt this to their circumstances. For example, scaffolded assessment is problematic in courses that have open pathways, such as bachelor of arts degrees; courses with multiple majors may have to adopt a cascade system to replicate the approach for each major rather than across the whole degree.
- The approach outlines all the elements of design from concept to course approval and implementation. It is acknowledged that course-development teams may be at different stages, and thus may only initially adopt some elements of the approach, retrofitting later where appropriate.

The final question in this fellowship is to consider where this work needs to go next. As a result of the fellowship, many connections have been made with groups requesting support in their curriculum design (at both an institutional and course level). The other main result is that I have been honoured by representatives of a number of future projects asking me to be involved in supporting their work (Table 16).
<table>
<thead>
<tr>
<th>Project</th>
<th>Submission Type</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>360 Degree Quality Pursuit – a discovery, classification and dissemination framework for higher-education quality enhancement</td>
<td>OLT EOI November 2014</td>
<td>Reference Group</td>
</tr>
<tr>
<td>Developing a virtual resource to assess equivalence: An online adaptive resource for UG business programs</td>
<td>OLT I&amp;D November 2014</td>
<td>Reference Group</td>
</tr>
<tr>
<td>Consolidating Performance Indicators and developing a Benchmarking Framework for Quality Learning and Teaching Support</td>
<td>OLT I&amp;D November 2014</td>
<td>Project Team</td>
</tr>
<tr>
<td>Curriculum mapping software as a platform for authentic professional learning in higher education</td>
<td>OLT Seed Grant 2014</td>
<td>External Evaluator</td>
</tr>
<tr>
<td>Mapping of assessment across a whole social-work curriculum</td>
<td>OLT EOI November 2014</td>
<td>Reference Team</td>
</tr>
<tr>
<td>Gathering valid data for quality enhancement: assessing, reviewing, benchmarking and closing the loop for assurance of learning in regional universities</td>
<td>OLT Extension Grant 2014 - SUCCESSFUL</td>
<td>Project Leader</td>
</tr>
<tr>
<td>Curriculum evaluation</td>
<td>OLT I&amp;D 2015</td>
<td>Project Team</td>
</tr>
</tbody>
</table>

Table 16: Follow-up project requests

This fellowship has been a real privilege, for which I thank the OLT, and I intend to continue this work beyond the lifespan of the actual fellowship.
References


