Scientia Education Investment Fund Grants Final Report

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Enhancing QILT Survey Outcomes

UNSW Business School

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1. Executive Summary

QILT results 2015-2017 show that the student experience at the Business School, and UNSW in general, is below the national average and other Go8 universities. This project addresses SEIF Priority 6 and aims to significantly improve the student experience in the Bachelor of Commerce at the Business School in four project stages. The second project aim is to develop a standardised QILT improvement process that is transferrable across programs and faculties.

In Phase 1, a Course Impact Factor was developed to identify Flagship courses with high student enrolments and the potential to lift their course satisfaction ratings (myExperience) relative to faculty averages. Phase 2 focuses on course diagnostics using quantitative and qualitative analysis of existing student feedback (CATEI, myExperience) and input from the teaching team to determine key weaknesses and areas for improvement. Phase 3 is the crux of the project, where Education Designers and Digital Learning staff work with the teaching team to redesign each Flagship course based on the course diagnostics results. In Phase 4, we evaluate the effectiveness of the course redesigns with Focus groups, myExperience results, and in the medium-term, the QILT SES results in 2018 and 2019.

Project outputs are a standardised approach to identify Flagship courses using the Course Impact Factor and data visualisation in Tableau, a text analysis protocol using NVivo and Leximancer to extract themes from myExperience student comments, and important insights from the one-on-one approach of course redesign that can be applicable to other courses.

Key findings include:

- Course size and student satisfaction are not always correlated.
- Clear course alignment, meaningful assessment, and feedback that helps students learn are most strongly correlated with overall course satisfaction.
- Text analysis of myExperience comments identify interesting content with real-world relevance and enthusiastic teaching staff as key strengths; common complaints centre around unclear or missing assessment information, a lack of structure, and learning tasks that do not prepare students for final summative assessments.
- Teaching staff value the opportunity for customised course improvement with the support of education designers and digital learning experts.
- QILT course redesign and Digital Uplift should be sequential yet closely aligned.

The Identification-Diagnostics-Redesign process we developed seems very effective, and the Business School will continue to use it for continuous curriculum improvement. We have also extended the project scope to include postgraduate courses.

To date, we have identified and completed course diagnostics for 32 UG and 15 PG courses. Course redesign has been completed for one course and 11 are undergoing redesign in preparation for Semester 2.

2. Outcomes and impact

Deliverable 1: Identification of priority courses using student satisfaction data

The project proposal set out to identify 20 undergraduate courses that have the potentially biggest impact on the student experience. To do so, we developed a Course Impact Factor (CIF) that uses existing information, namely myExperience results and course enrolments.

Courses were then ranked based on their CIF, and classified as Priority 1 (redesign during S1, 2018), Priority 2 (S2, 2018) and Priority 3 (2019). In total, we identified 32 Priority 1-3 UG courses, and selected 20 Priority 1 and 2 courses for the scope of the SEIF-funded project.

Using the same method, we also identified 15 Priority 1-3 PG courses.

The CIF has been shared across UNSW as a metric-based method to identify high-impact courses.

These include compulsory first year courses that are relevant to most of our UG Programs, and courses in the largest majors with an annual enrolment approximately between 300 and 2500, as well as Postgraduate courses that have been identified as Priority 1 (enrolments between 500 and 700 students).

This list was then cross-checked with the Digital Uplift schedule to ensure maximum synergies.

We also applied the CIF to identify outstanding large courses, to benchmark student feedback in Phase 2.

Deliverable 2: Course-Specific Diagnostics Reports

For each of the priority courses, the following data analysis of myExperience data was completed to identify areas of strengths and areas for improvement:

- Quantitative analysis: correlation and regression analysis of myExperience Q1-Q6 as predictors of overall course satisfaction (Q7), for all available semesters.
- Qualitative analysis: thematic text analysis of student comments about "Best Features" and "Needs Improvement" using NVivo and Leximancer, for all available semesters.

The course specific information was complemented with program-level information based on the quantitative and qualitative data about the Bachelor of Commerce from the QILT SES 2016 survey.

Diagnostics Reports were shared with the relevant teaching staff in a face-to-face meeting with the Project Leader, Education Designer, 3+ Education Designer, and Digital Learning Staff in attendance.

Prior to meeting with teaching teams, the Project Leader met with the relevant Heads of School to provide background information about the project, and which priority courses were identified in their School. I met with 5 of 8 Heads of School so far, who were all very supportive, and concurred with the course selection.

Deliverable 3: Course Redesign

As an outcome of the diagnostic phase, to date meetings were established with the nominated LICs and their teaching teams for nine Priority 1 and two Priority 2 courses. Coordinated by the Academic Director UG Program, the meeting participants also included the 3+ Educational Designer, the QILT Educational Designer, a representative from the Business Digital Team and, on occasions, the Head/Deputy Head of nominated Schools.

The aims of the meetings were to consider strategies that would improve the quality of each course. The approach adopted in the intervention phase was framed around Brookfield's four lenses (student lens, peer lens, autobiographical lens, literature lens) (Brookfield, 1995).

The QILT Educational Designer arranged a series of follow-up meetings to consider strategic course redesign outcomes that addressed the student feedback (both positive elements and those that suggested improvements). To provide additional student feedback for two Flagship courses, focus groups elicited information on improving teaching quality. Questions such as *How do you define teaching quality? What were the main strengths and weaknesses of the assessment design?* and *Did you receive feedback which helped you to learn?* were asked. Between May 1 and June 27, a

total of 25 meetings were held with LICs and teaching teams of Flagship courses across UG and PG programs over five UNSW Business Schools.

Examples of Course Redesign

The LICs and their teaching teams were highly motivated to address student feedback and strongly engaged with the support being offered for course redesign. As each course is unique, the provision of individualised and customised course redesign advice could not be created in a 'cookie cutter' method. There are however, some key common themes that arose as part of the course redesign conversations, including a review of threshold concepts; realignment of Course Learning Outcomes and assessment; and engagement in large classes, as noted below.

Theme 1 - Threshold concept review

Within the nominated 11 Flagship courses, about 1/3 indicated that the students needed to be more cognisant with the threshold concepts before commencing the course. Several suggestions were proposed that could lead to an improved students' understanding of the threshold concepts (Meyer & Land, 2003). These included:

- Creating a self-directed learning module that students would complete in O-Week (or Week 1 in Semester 2, 2018). The purpose of this module would be to pre-test students' understanding of the threshold concepts, provide feedback to them on any missing knowledge gaps and point to additional resources. Resources from pre-requisite courses could be utilised. (Assistance to develop these modules through Digital Uplift can be considered.)
- Incorporating a reflective journal in Week 1 that continues throughout the semester/term would enable students to consolidate their understanding of threshold concepts.
- Inviting students to create their own 'mind map' or 'concept map' of the course that points to how threshold concepts have been used to underpin the new content and builds on their previous knowledge.
- Creating a 'Welcome to the Course' video that outlines the aims of the course and how they link to the threshold concepts.
- Creating a series of concept videos (with the support of Digital Uplift) on core topics
- Designing a Course map that consolidates topics, assessment and shows the learning journey. By creating a story journey that follows the concept map, students can more easily follow how the topics/ activities/ assessments are grouped and aligned. The digitisation of this map can be a future consideration.
- Using a Lightboard video to demonstrate how to work through problems.
- Digitising pre-lecture presentations with animations as part of the Digital Uplift project.

Transferrable ideas that could be shared between Faculties include a:

- model of the self-directed threshold module
- sample course map
- script outline for the welcome video

Theme 2 - Realignment of Course Learning Outcomes and assessment

Research has shown that assessment is a key driver for student learning (Ramsden, 2003). QILT student feedback noted that the quality and quantity of assessments were often not clearly aligned to Course Learning Outcomes (Sadler, 2016). In addition, often-insufficient feedback (whether in rubric or not) was noted.

To frame the redesign of Course Learning Outcomes and assessment conversations, the theoretical frameworks that underpin sound practice, notably the Constructive Alignment theory (Biggs, 1996, 1999, 2003; Prosser & Trigwell, 2013) and the SOLO taxonomy (Biggs & Collis, 2014) were explained to the LICs and teaching teams. At some course redesign meetings, a simple template was completed to simplify and enhance the alignment between CLOs and assessment.

A range of solutions to the realignment of CLOs and assessment is listed below.

- Creating and rewriting Course Learning Outcomes using the SOLO taxonomy. For three courses this exercise proved to be highly effective and provided increased clarity around what and how the students would learn.
- Realigning the assessments (both summative and formative) to match the CLOs and PLOs was undertaken. The difference between formative and summative assessment provided new options for academics to consider.
- Ensuring the assessment weighting, word count and provision of feedback are aligned. Feedback is an important aspect that can help students to learn more deeply (Dawson et. al, 2018; Trigwell, Ashwin, & Millan, 2013). Sharing of rubrics at Faculty/program level would be useful.
- Creating rubrics to ensure students received appropriate feedback against the assessment criteria (Dawson et. al, 2018).
- Considering a wider range of assessments (such as replacing mid-semester exams with more online collaborative and reflective activities).
- Expanding the databank of multiple-choice questions would improve authenticity in assessment. The adoption of a program such as the 'Quizerator' (UNSW's randomised and customised quiz experience, developed by Tumarkin, Andersen) could help to support individualised and customised assessments and feedback.

Transferrable ideas that could be shared between Faculties include:

- A simple constructive alignment template
- A sample rubric for providing feedback on formative assessments such as reflective journals
- Promoting the advantages of using the 'Quizerator' to support individualised student learning

Theme 3 - Engaging students in large classes

Drawing on the Autobiographical lens (Brookfield, 1995), about half of the Flagship LICs and teaching teams expressed an interest in knowing more about how to engage students in large lectures. LICs and their teaching teams noted that the large amount of content they were expected to cover in lectures/seminars/tutorials often precluded engaging students more actively in their learning. There is often a link between the perceptions of the learning and teaching context and approach to learning and teaching that teachers and students adopt, which determines learning outcomes (Prosser & Trigwell, 2017).

Considering this relationship, several solutions to improve student engagement in large classes included:

- Reconsidering how the content was to be taught/learnt by students – do lecturers have to tell students everything for them to learn it? Are there other ways that students can adopt a self-directed learning approach to the content?
- Applying relevant, authentic and current PBL (problem-based learning) activities at regular intervals in lectures

- Adopting active learning strategies – drawing on think/share/pair discussions; group discussions; role plays (see UNSW Active Learning Best Practice Guide - copies provided to teaching teams)
- Creating blended and flipped learning opportunities
- Developing extension activities that supported students who wanted more extensive content
- Introducing appropriate technologies to support more active engagement (such as Kahoot, Lecture Recording +, using a 360-degree camera for recoding video presentations)
- Incorporating the iLab in some tutorials
- Providing Tutor guides and processes that enabled more student engagement.

Transferrable ideas that could be shared between Faculties include:
- Sharing Tutor guides and process
- Presentations by LICs on how they blend, flip, and build in active /authentic learning, possibly using technologies (e.g. Kahoot).

Deliverable 4: Evaluation

Due to the timing of the course redesign phase, initial myExperience results to evaluate the impact of course redesign on course satisfaction will not be available until July 11.

Focus groups were conducted in Week 13 of Semester 1 to gauge students' reactions to the course design innovations of two courses, with more to follow in Semester 2. We are currently assessing the feedback.

Informal feedback from academics involved in the project, as well as Heads of School, has been very positive. Indeed, one Head of School would like to nominate all their courses for "QILT uplift".

A more formal evaluation will be completed at the end of 2018, when 11 Flagship courses have been taught for the first or second time after redesign, with another evaluation in 2019 once all 32 UG and 15 PG Flagship courses have been completed.

Deliverable 5: Documentation of standardised, transferrable QILT improvement process

The approach taken to identify and diagnose priority courses has been documented and shared in various forms.

The next step will be to document lessons learnt from the course redesign phase that are transferrable to other programs and faculties, as outlined under Deliverable 3.

References

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2. Dissemination strategies and outputs

We have shared our approach and insights in a number of formal and informal settings. For example,

- Meetings with the Faculties of the Built Environment and Arts and Social Sciences to share the Course Impact Factor approach, data visualisations, and the data analysis templates used.
- Presentation to University Academic Quality Committee in October 2017
- Presentations at various Faculty committees, such as Program Quality Committee and Education Committee.

In the near future, we further intend to disseminate our findings as follows:

- Presentation to University Academic Quality Committee in July 2018
- PVCE Connections Seminar in August 2018
- Presentation at the UNSW L&T Forum in November 2018
- Conference Presentation preceding AMA Winter Conference, February 2019
- Manuscript to be submitted to a Special Issue of the Journal of Marketing Research "Education and Marketing: Decision Making, Spending and Consumption"
- Continued collaboration with other faculties
- Workshops with Schools on transferrable ideas to complement the individualised course redesign approach with a "self-serve" light touch.

3. Evaluation of project outcomes

While formal evaluation of improved student satisfaction as measured by myExperience (course level) and QILT SES (program level) can occur once the relevant data is available, the following information allows interim evaluation of the project outcomes:

- The project scope has been extended to also include postgraduate courses, due to its success in undergraduate courses.
- We have identified 32 Undergraduate courses (5 Priority 1, 15 Priority 2, and 12 Priority 3) and 15 Postgraduate courses (5 Priority 1, 6 Priority 2, 4 Priority 3) using the Course Impact

Factor. The selection approach is robust, with the same courses identified at the same priority level across 3 semesters.

- 11 courses are undergoing redesign and will be offered in the new format in S2, 2018. One course (compulsory first year core course) was completed in S1, 2018, with further refinements planned for S2 and 2019.
- Teaching staff have been highly motivated to work with the Education Designer and Digital Learning Staff on course redesign. Staff of non-priority courses have asked to be included.
- Heads of Schools have been very supportive. One School invited the project team to work with all academics in their school, leading to a wider reach and transferability of the approach.