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Case studies to enhance online student evaluation: Curtin University – A validated instrument assures quality

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Introduction

It is well recognised that the student voice has an important role in quality improvement processes in higher education. Student feedback on their experiences in teaching and learning is captured in evaluation surveys across the higher education sector in Australia. It has long been argued that in order to focus on quality improvement, evaluation surveys should focus on student learning outcomes rather than on teacher inputs. The research literature indicates that the quality of teaching can only be established when the quality of learning and subsequent achievement of learning outcomes is evaluated.

Background

In the early 2000's, an outcomes based approach to education was adopted in the Australian secondary education system, the Australian Vocational Education and Training sector and at some Western Australian universities. At the same time, a focus on student-centred learning in the higher education sector provided Curtin University with the impetus to reconceptualise teaching and learning, and to adopt an outcomes-focused approach to student learning. A new vision for teaching and learning was articulated through Curtin's philosophy in teaching and learning.

A thorough scan of evaluation systems around Australia and internationally and a comprehensive review of the research literature revealed that there was no survey that focused on student learning outcomes. This provided the motivation to create a new evaluation system called *eVALUate*. This online system was underpinned by research evidence and recognised best practice approaches established from the research literature and experiences of evaluation experts. Two surveys were developed. The *eVALUate* unit survey which asks students to their perceptions of what helps their achievement of learning outcomes, their level of motivation and engagement and their overall satisfaction with the unit. The *eVALUate* teaching survey asks students to report their agreement with items related to teacher characteristics. The teaching evaluation survey items are consistent with those teacher dimensions demonstrated to increase student learning outcomes. A major aim in collecting student feedback at Curtin has been to ensure feedback is used to improve the quality of the student experience of teaching and learning. This paper focuses on those elements of the *eVALUate* system and unit survey that have resulted in quality improvement at Curtin.

Key features

The approaches to quality improvement of the student experience in the eVALUate system lie in:

- 1) Staff and students reflecting on teaching and learning**
- 2) Closing the feedback loop to students, and**
- 3) Appropriate reporting and use of the data to improving the student experience**

The focus on the achievement of learning outcomes is developed through staff and students reflecting on elements of the design of a unit (i.e. clarity of unit learning outcomes, unit experiences, resources, assessments feedback on learning and workload) and on the overall quality of teaching in the unit. Student feedback on these items provide course designers with specific information that enable them to improve unit design and make decisions about the teaching, including the need for support and professional development. Three items ask student to reflect on what they bring to the teaching-learning partnership by asking them about their motivation and engagement in learning. Student motivation and engagement is based on research in the field of self-regulating learning, an important feature in the development of deep learning and academic success. Student feedback on each unit (including student comments) is integral to all teaching and learning quality improvement processes at Curtin.

Curtin is committed to responding to student feedback (closing the feedback loop) using various strategies. Feedback to students occurs in various modes at multiple levels. The eVALUate website contains a purpose built page titled 'Student Voice: What students are telling us and what we're doing about it'. Posted on the webpage is a general summary of student feedback for the university overall. Deans of Teaching and Learning provide an online response to students about faculty initiatives that are implemented and planned to improve their experience in teaching and learning. Unit Summary Reports (comprising aggregated quantitative unit data) are posted on the eVALUate website by default.

Unit coordinators can close the feedback loop using the Unit Summary Report by acknowledging student feedback, assuring them that their feedback is valued and indicating how the feedback will be taken into account when the unit is next offered. An eVALUate section is also included in unit outlines so that students are informed of changes resulting in their feedback.

Whilst students are important stakeholders in teaching and learning, until recently, there had been no standards or criteria for teaching. Many evaluation surveys focus on rating aspect of the teaching experience. The term 'rating' is mostly used to indicate there has been an assessment of the student experience against a known standard. As a result, teachers may be rated with a numerical score (see for example, Palmer 2012). This term, commonly used in the American and European literature was not regarded positively at the university. In common with many student evaluation surveys, students give feedback on the eVALUate survey items using a categorical scale (e.g. agreement, disagreement). This dichotomous data is often assigned a numerical value to produce a mean score. Although there is debate in the literature on how categorical scales are reported, reforming it as a five-point scale and calculating it with a mean is considered mathematically floored (Jones et al., 2012; Onwuegbuzie et al., 2009). In addition, Nair et al (2013) and Palmer (2012) guard against the practice of comparing scores across a teaching area or the university and judging the unit or teacher's performance against a mean score. This practice has the potential to emphasise the achievement of a rank or score rather than real and sustainable improvements in the quality of the student experience (Nair et al., 2013; Palmer, 2012).

Critics of evaluation surveys often focus on the teaching and teacher inputs and student satisfaction, sometimes referring to these surveys as 'happy forms' (Harvey 2003) or a measure of 'customer satisfaction' (Beecham, 2009).

These negative views by academics are intensified when evaluation surveys are poorly designed, are absent of a philosophy or consensus of good teaching (Johnson, 2000) or are not tested on their psychometric value (Richardson, 2005). In designing the eVALUate surveys and asking students their level of agreement with each item the rating scale underwent rigorous psychometric testing. The results are reported as percentage Agreement, percentage Disagreement or percentage Unable to Judge for **each item** of the survey.

A colour coded ‘traffic light’ method is used for course and school reports to assist heads of schools in interpreting the data. Items achieving 80 percentage agreement or higher are coded green (a very good achievement), items achieving 60 to 80 percentage agreement are coded orange (indicating possible room for improvement) and items achieving less than 60 percentage agreement are coded red (indicating a need for further investigation). These codes represent the de facto standards set by the university and ensures a university-wide standard, a weakness encountered when testing for the reliability of an evaluation survey (Morley, 2013). The coded course reports are integral to annual and comprehensive course reviews (Tucker, 2013b). Where possible (for university and faculty reports and for course review), qualitative feedback is analysed and reported along with the quantitative data and the themes identified from the student comments are tested against the quantitative results to ensure results are valid. Qualitative research tools (CEQuery and SPSS Text Analytics for Surveys) are utilised for the analysis of the student evaluation comments. These methods for reporting the data has been met positively and has brought about a significant cultural shift in teaching and learning practice at Curtin (Tucker 2013a).



The eVALUate reports are accessible to all stakeholders on a ‘need to know’ basis. Online access to reports and subsequent sharing of results is governed through clear policies and procedures and guidelines have been developed for interpreting each report and understanding any data biases (Tucker, 2013b). Key information about the number of student responses and response rates required to ascertain the representativeness of a sample are provided with all reports and guidelines. Representativeness has been calculated so that stakeholders can be 95 percent confident that the actual percent agreement is within 10% (\pm) of the observed percent agreement for the total student group enrolled in the unit. This reporting of data has been promoted by Nulty (2008) and is unique to eVALUate.

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Research and key findings

As the eVALUate system is integrated with the university’s student management system, research into student feedback on their experience of teaching and learning has been undertaken (see publication at <http://evaluate.curtin.edu.au/publications/>). The major research themes have been: which student groups participate in giving feedback, what students say, differences in perceptions of student subgroups and student experiences in relation to different teaching and learning practices and student outcomes including student grades and course retention (see publication at <http://evaluate.curtin.edu.au/publications/>).

eVALUate is now embedded within Curtin’s Teaching Excellence framework which aligns with the Australian University Teaching Criteria and Standards (Tucker et al., 2014). This framework provides a single set of criteria with supporting evidence (which includes eVALUate) for: the recruitment of academics; work planning and performance reviews; promotions; professional learning and support through peer review of teaching (a peer-based professional learning program); and teaching and learning award and grant programs. Outcomes of teaching excellence, including eVALUate data are monitored within Curtin’s Framework for Quality and Excellence in Teaching and Learning and reported within a governance framework.

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