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Assessment for learning at scale at UNSW Sydney

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Abstract

Societal expectations of Higher-Education's ability to produce work-ready graduates continues to struggle against a fundamental challenge related to the conflicting purposes of assessment as primarily a vehicle of certification or as an opportunity for learning. Assessment for learning is proposed as a powerful theory for improving learning from assessment. However numerous blockers including inadequate technological systems retard the adoption of student-centered assessment (Ibarra-Sáiz, Rodríguez-Gómez, & Boud, 2020). This article reports on a ten-year initiative using an assessment platform (REVIEW) as a technological base driving Standards Based Assessment. Use of this software has enabled assessment for learning type practices in hundreds of courses, providing beneficial learning outcomes and experience of assessment for staff and students. This paper highlights the affordances that technology platforms can provide in systematizing beneficial practices, improved assessment experiences and filling a long-standing gap between theory, policy and practice.

Keywords: criteria-referenced assessment; self and peer-assessment; assessment for learning; assessment systems

1. Description of Teaching/Learning Context

This paper presents a snapshot report of use of an online, criteria-based marking system (REVIEW) used in assessments at the UNSW Business School, Sydney, Australia. The software provides academics with an easy to use, online, assessment platform for criteria-based marking and feedback. The platform enables both student self and peer assessment and this is done even in large enrolment classes. This is significant because while research has established that these practices are very beneficial, they remain poorly implemented in most LMS platforms and require time-consuming manual approaches of academics. UNSW REVIEW is extensively used for peer to peer feedback in group activity, in classes of up to 1,800 students. In 2019, 17, 837 students undertook peer feedback activity on the platform. This widespread activity promotes a culture of group accountability, development and expression of individual's judgement, and teacher's insight and confidence into the process of group work through increased transparency, even in high-enrolment subjects.

After ten years of annual usage growth, REVIEW has systematically contributed to academics' adoption of standards-based marking through their wider use of criteria-based assessment. Additionally, the increase in student self and peer assessment has contributed to a change in the student experience of assessment from a predominantly certification (of knowledge) exercise towards inclusion of judgement and skills development. Aside from its primary role for direct assessment, REVIEW maps criteria in assessments to Degree Goals or Graduate Attributes (such as Knowledge, Teamwork or Ethics). This is done visually and through personalized reports, helping students, staff and the institution connect short and long-term outcomes of assessment.



Figure 1: REVIEW student view of Program Goal weighting in an assessment task

This connection of granular criteria and higher-order skills and attributes assists students to engage with immediate feedback while seeing the 'bigger-picture' linkage of the immediate with the graduate attributes it is linked to (Algeo, Thompson, Leigh, & Carroll, 2018).

2. Literature Review

Much research has focused on the positive role assessment can have on student learning (Hattie, & Timperley, 2007; Boud, Cohen & Sampson, 2014). Over two decades, research variously labelled assessment for learning, assessment as learning and learning centered assessment has informed and influenced educational assessment thinking (Carless, Joughin, & Mok, 2006; Boud, & Soler, 2016). Accordingly, most university assessment policies now mandate the constructive alignment of course assessments to both course and program goals. In practice however, the student experience in actual assessments remains atomistic, with little connection to ongoing development of skills or attributes (Thompson, Treleaven, Kamvounias, Beem, & Hill, 2008). For students, much assessment and feedback continues to be experienced as vague, fragmented and not particularly helpful (Boud & Soler, 2016).

Blockers to progress in assessment include institutional and bureaucratic rigidity, lack of lecturer education and support and inadequate technological resources and systems (Ibarra-Sáiz et al. 2020). Even where institutional policies highlight the importance of assessment for learning approaches, most assessment proceeds from a certification mind-set.

Learning and assessment that engages learners in reflection and dialogic improvement, supporting the transition to learner independence has been the subject of much research (Brookfield, 1998; Dirkx, Mezirow, & Cranton, 2006). Self and peer-assessment activity are widely advanced as vehicles to reduce student passivity, drive their participation in assessment and develop beneficial self-regulatory and independent judgement processes (Brown, & Harris, 2014). However, self and peer-assessment activity remains more an occasional inclusion than a norm in most assessment (Panadero, Brown, & Strijbos, 2015). To easily provision participation in assessment and judgement processes, faculty leaders need to adopt assessment systems that systematically enable these beneficial practices (Carroll, 2016).

Finally, many students possess traditional predispositions towards dependence on teachers. This contrasts with the dominant learning paradigms (constructivism and social constructivism) and societal expectations of graduates being independent, work-ready, learners with professionally relevant skills and attributes (Litchfield, Frawley, & Nettleton, 2010). Although the widespread incorporation of active learning approaches in learning design and delivery has benefitted much teaching delivery, the same cannot be said of systemic recent advancement in assessment design. Institutionally supported platforms that systemically provide student participation in assessment, judgement and feedback practices would mark a fundamental advance in the practice of assessment.

3. Findings

A range of evidence and data is presented speaking to the REVIEW system scale of usage and observed impacts on staff and student experience of marking, feedback and development of judgement at UNSW Sydney.

3.1. Scale of REVIEW use at UNSW

From the initial three course trial in 2010, REVIEW usage has steadily grown into two major faculties at UNSW. In 2019, it was used in nearly 500 courses, with 52,848 student users and over 1,300 staff. The system ran and preserved marking and feedback on over 1000 assessment tasks and approximately 500 peer feedback exercises, mostly connected with assessable group work. Google analytics tracking data showed 1.3 million-page views by staff and students in 2019.

3.2. Examples of impact on student learning

Local qualitative studies of student engagement with criteria-based feedback and self-assessment have been generally very positive (Carroll, 2015). The affordances of online, scalable systems show that in classes of up to 1,500 students, students who undertake optional self-assessment access online feedback at higher rates than non-self-assessors. Studies of students in medium-sized courses (up to 250 students) have shown self-assessors consistently outperform non-self-assessors (Carroll, 2018). Student focus groups consistently elicit their feedback that the 'clarity' of visual, criteria-based sliders assist them to quickly identify areas of weakness, focusing them on where response and improvement is really needed.

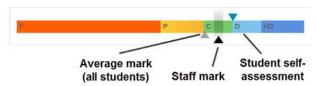


Figure 2: REVIEW criteria slider (after publication)

Finally, students have been observed to participate readily in peer feedback activity and comment positively on it (REVIEW at UNSW Business School).

3.3. Examples of impact on staff

Staff report that the clarity provided by criteria judgement approaches has improved their experience of marking and ability to provide focused feedback to students. This is accompanied by widespread feedback of marking efficiency, intuitive interfaces and helpful workflows (REVIEW: Academics describe marking efficiency). Further, customisations made by UNSW, including dashboards that visualize marking progress, marker averages and

grade distributions support staff by making data intelligible and actionable. Another popular example of surfacing assessment data is tracking student access to published feedback, reassuring academic staff that feedback is being received and read.

4. Reflection on / analysis of implications for practice

Extensive usage of REVIEW in two faculties has contributed to both local systemic improvement in assessment for learning practices and demonstrated a path forward to meet key institutional strategic goals. These include:

- Wider uptake of criteria & rubrics in hundreds of courses
- Embedding of degree (program) goals IN assessment
- Reduction of student passivity in assessment
- Student engagement in assessment
- Contributes to university strategy for personalized student learning and 'being digital'

This project has demonstrated that changing assessment practices systemically requires the combination of institutional ability to support and sustain beneficial change, support staff in the change and maintain and expand future-oriented assessment systems that enable staff to readily implement assessment for learning practices.

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