



# 14

## Real World Learning and Authentic Assessment

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### Introduction

As students increasingly adopt a consumerist lifestyle academics are under pressure to assess and mark more students' assignments in quicker turn around periods. In no other area is the marketisation shift between student and academic more apparent in the accountability that academics now need to demonstrate to students in their grading and feedback (Boud & Molloy, 2013). When evaluating their higher education experience students are most likely to complain about their grading or

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D. A. Morley, M. G. Jamil (eds.), *Applied Pedagogies for Higher Education*,  
[https://doi.org/10.1007/978-3-030-46951-1\\_14](https://doi.org/10.1007/978-3-030-46951-1_14)

feedback (Boud & Molloy, 2013) and National Student Survey results consistently indicate that this category, more than any other, has the highest student dissatisfaction rates (Race, 2014).

Real world learning (RWL) encourages the development of student attributes for employment and lifelong learning. Over recent years the ethos in higher education has started to move towards a real world learning approach and student-led curriculum where a socio-constructivist positioning of students' learning invites students to be active partners in their higher education experience. The increasing incidence of group assessment and peer review is indicative of this change and traditional methods of marking have also been touched by this changing ethos (Nicol, Thomson, & Breslin, 2014). Students are encouraged to lessen their dependency and increase their pro activity in negotiating and building their academic and personal journey through higher education (Nicol & Macfarlane-Dick, 2006). Feedback has started to be positively repositioned as feed forward where students are encouraged to build on feedback for future development.

The recognition that academics need to be smarter about the time they spend marking (Race, 2014) supports a re-examination of assessment and feedback especially as traditional written feedback encourages passivity in students rather than a personal hunger to feed forward their learning into future development. It makes sense that academics step out of present practice to embrace assessment that actively engages students not only with their learning but the means to use feedback constructively for future learning and employability.

## **What Is Real World Learning and How Does It Relate to Assessment?**

This concept map was produced during a session to identify what RWL is and where it fits into higher education teaching and assessment frameworks (Fig. 14.1). The map explores the learning outcomes in relation to employability, understanding of the industry sector and identifies the opportunities for personal development and self-awareness. Recognising RWL as an authentic assessment experience, which can be personalised to

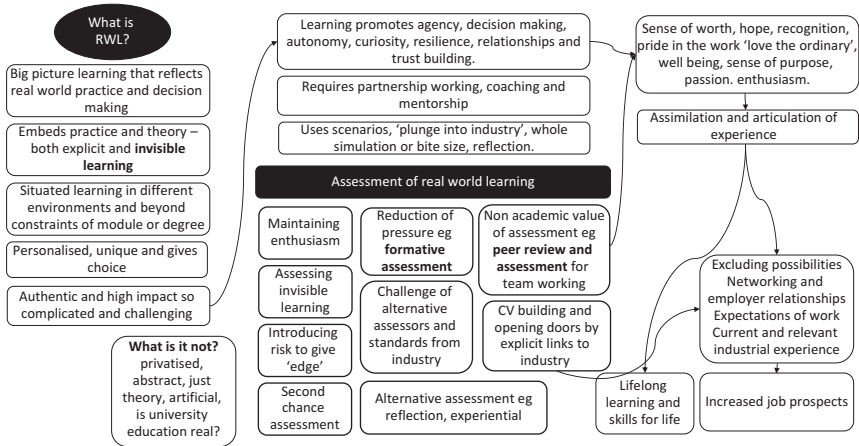


Fig. 14.1 Concept map from the authors

create challenging and unique learning, the concept map also ascertains that *formative* and *group peer review and assessment* will allow students to develop personal traits such as resilience, reflection and team working.

## Designing Authentic Assessment

Real world learning requires student assessment to replicate as close as possible the authenticity of real world experiences. Gulikers, Bastiaens and Kirschner (2004) in their examination of STEM subjects present the idea that authentic assessment requires students to use the same competencies, or combinations of knowledge, skills and attitudes that are applied in the criterion situated in professional life. The assessment criteria may necessarily differ according to the discipline area and Shulman (2005) argues that educators should try to develop signature pedagogies that link not only to ideas, practices and values, but also the behaviours adopted in inherent uncertainty. Authentic assessment may involve increased challenge and risk that initiate student affective engagement and reflection on the consequences of the decisions made. Traditional assessment, dominated by examinations and essays, risks creating a

schism between theory and practice while assessment remains dominated by academic procedure. Carefully designed assessment, that enhances work readiness as well as measuring learning, encourages a bridging of university learning and its practical application (Morley, Bettles, & Derham, 2019).

The case studies, presented in this chapter, are drawn from the different disciplines of yacht design and festival management. They are good examples of the differing signature pedagogies that Shulman (2005) presents; both courses require different pedagogies to suit each discipline.

In order to ensure assessment and feedback are relevant to RWL, practitioners must decide on the desired outcomes for the course. From the outset the module must fit with the title of the course. The BA (Hons) Yacht Design course focuses on the technical elements of the design process and the assessment would not be solely based on the model boat race, as described in the case study, but also based on other simulated and controlled environments that prepare students for working within the yachting industry. In contrast, the BA (Hons) Festival and Event Management course assessments focus on the management competencies required during the delivery stage of an event. This is assessed through tutor observation and peer assessment reflecting real world practice and decision making. Both courses require students to demonstrate how they would perform, act and react in a work environment thus providing the student with an enriched learning experience relevant and beneficial to their chosen career path.

Kolb (1984), Honey and Mumford and Lewin have all linked theory to practice when decoding the experiential learning process, presenting a cyclical method (Beard & Wilson, 2006). The design of this approach allows for reflection on experience during the formative feedback stages; however, the use of the model may not always be applicable in the summative stages of assessment when the physical action is the end product. Assessment design and timing should, therefore, be considered if the student is to benefit from the formative feedback experience in the RWL environment.

Academics must consider if there are enough steps in the assessment process to assist the delivery of an RWL programme—to build in reflective elements and to establish if these actually meet the learning criteria. As a

result of trying to make learning explicit and 'usable' for students, courses may need extra formative assessments, formal or informal, to give the students the best chance of performing to their best ability during a 'live' assessment through the feed forward gained en route.

The importance of dialogue is key to shifting feedback away from the notion of *telling* to students playing an active role in using the information presented to them. Hounsell (2008) reinforces the need for sustainability in feedback where feedback moves from the short-term gain to becoming embedded in the students' understanding of what constitutes acceptable work and within a framework, what needs improving. This can then be transferred to the world of work where students can engage meaningfully in their lifelong learning.

Group meetings, one-to-one support and online surveys are currently used to monitor students' progress throughout a course to give feedback on predicted academic outcomes. This would be an ideal opportunity to give the student time to reflect on how they will behave in the real world assessment by adding simulated tasks or problem-based activities, so the mid-term progress meetings would subsequently focus on academic and personal development in relation to the real world environment.

The use of Kolb's experiential learning cycle (1984) helps to counteract another challenge of using RWL assessment in that all student learning is not always accounted for in the specified learning outcomes of the teaching session. Assessment of experience, particularly in the disciplines of art and performance, is an example of these invisible learning outcomes. Described by De Bono (1976), logical and analytical thinking demonstrated and practised throughout the study process also interact with 'lateral' thinking or 'out of the box thinking' (Bladen & Kennell, 2014). Often the explicit and invisible learning is so inextricably linked that a physical action that they may cause an emotional reaction therefore affecting the outcome of the assessment. Students may behave differently during a simulation assessment, whereby the emotional effects of working under pressure or creative problem solving may impact student performance. However, the student responses to stress, group conflict or problems are skills essential in the workplace, and the individual's attitude and approach to learning should be considered in the assessment process. This authentic learning experience creates very

personal outcomes for the student, and the use of formative feedback, coaching and peer assessment can provide an enriched learning experience.

## Designing Real World Assessment

### Peer Review as Assessment of Real World Learning

The process of peer review had been defined as the process by which students give feedback on their peers and receive feedback from their peers (Nicol et al., 2014). Peer review will contribute to the formative feedback process by allowing students the opportunity to rate performance and reflect on a formative assessment ahead of the summative task. Peer assessment is the process by which students can grade each other as part of the final assessment. Both stages of the use of peer grading could be designed as a simple comparison of work whereby students grade as if they were the tutor or a more complex approach with set criteria and weightings on the results. Peer assessment allows for discussion and reflection on the assessment and is an important tool where the assessment may be an event or simulation. Evidence of contribution during group work can also be assessed using peer assessment, enabling the students to recognise where they fit into the group dynamic and how others view their work. The positive effect of this approach to learning is that the students contribute to the assessment and feedback process establishing ownership and a deeper understanding of their learning journey. Nicol et al. (2014) discuss using peer review to close the gap between feedback and assessment, allowing students an element of control and autonomy over their own learning and deepening student understanding of how to succeed in the summative assessment.

Case Study 1 is an example of how peer review and assessment can support the students to develop the invisible outcomes associated with experiential learning. Bladen and Kennell's (2014) 'out of the box' thinking is assessed with criteria such as attitude and leadership skills during the assessment cycle.

### Case Study 1

**Live Event Assessment (Melenie Archer, Lecturer Festival and Event Management, Solent University, UK)**

Students on the BA (Hons) Festival and Event Management course are required to fill out a group peer assessment at both the formative and summative stages of assessment and case study 1 explains this process in more detail. Students are also asked to grade themselves as part of this process, the peer assessment criteria are:

1. Ideas and suggestions
2. Leadership and administration of group
3. Event logistics (e.g. risk management and crowd management)
4. Staging (e.g. theming, décor and special effects)
5. Customer care (e.g. appearance, name badge and attitude)

Solent University Festival and Events students are required to host two live events at levels 4 and 5 to demonstrate their understanding of the specific industry disciplines during their three-year BA (Hons) course. When starting the academic year students are asked to choose an event team of up to eight students to work with for the duration of the unit, simulating working in an event or festival team in the workplace. It is recognised that group work poses its own problems in an academic setting, some students will want more control of their grades and prefer individual assessment and others may rely on their group to achieve their best work. For this reason, the core assessment is broken into three elements per year, the event manual (group work), the live event (group work) and a reflective essay (individual). This assessment format is the same for both the live event units, allowing the students to build a deeper level of knowledge by using the skills and theory learned in level 4 and applying them to level 5. This gives the students a clear understanding of expectations at each level and develops more a complex approach to problem solving as the course progresses.

In level 4 the students are given the opportunity to run a practice event before their assessed live event, this takes place in the classroom as it is a

low-risk environment allowing students to concentrate on the very basics of running an event. Students host the event for the rest of the class and have sole responsibility for the theme, style and format of the event. Due to the safe environment student's focus on making the event fun and engaging, and the formative assessment is an enjoyable experience for all involved. Students understand that this practice event is part of the formative assessment process and are supported to try new concepts and develop practical skills they have not had experience of previously. The formative assessment is very much a nurturing process where students are given verbal, written and peer feedback timed a few months before the final live event assessment to give students time to reflect and adapt.

The first 'real' assessment is the event manual where students must divide the workload to produce one piece of group work which is graded by the tutor, and the group is given a collective grade mark. As the whole group has contributed to the project the students are given the opportunity to award their peers individual grades based on five criteria, ideas and suggestions, leadership and administration, event logistics, staging and customer care. The final grade is a 50% split contribution between the tutor and the student peer assessed grade. The tutor has the authority to override an unbalanced peer grade if they think the decision is not based on academic effort.

When the final event manual grades are released, students are told the grade the tutor initially awarded and their final peer assessed grade. This gives the students a balanced indication of how well they did according to the tutor (the client) and their peers (workmates). Often this is not taken well, and one-to-one tutorials are offered to support students who did not do as well as they thought or who may feel they have to justify their performance to the tutor.

Introducing peer assessment to the students from the very beginning gives them the opportunity to reflect and improve on their performance by using it as a formative assessment tool. By the time the second part of the assessment, the live event, comes around the students are well aware of their tutor expectations as well as what their event group expect from them.

Annie (anonymised) underperformed in her first year, she rarely attended seminars and group meetings and her contribution to group work in all her level 4 units was poor. She received a lower score to her



peers in her first-year core unit and blamed everyone else in her reflective essay. At this stage of Annie's learning she was not ready to acknowledge that she was responsible for her own learning and performance. Annie passed the first year and returned still blaming the rest of her previous group for her poor grades. It was only when the class were asked to choose their event groups for the second year that Annie started to realise the effect this would have when in seminar time the whole class had chosen their groups and Annie sat on her own group less. The tutor intervened and both groups said they did not want her in the group due to her reputation for freeloading in group work. Annie had to make a case to each group as to why they should give her another chance and she was made to sign a group contract. Annie over delivered to all parts of the group work as she realised that it was her own attitude to learning that was holding her back. Annie graduated with a 2:1 in 2018.

Peer assessment is successful on this course as it opens a dialogue on individual and group performance between the student and tutor, reflecting the world of work and the structure of the festival and event industry.

When grading themselves for the first time, students will often inflate their own grade overestimating their contribution to group work. Falchikov (2005) argues that in the peer assessment process there will always be an element of over and under rating of peer performance; this can be monitored through the formative feedback process. As in Case Study 1, the student was not aware of her own shortcomings and when evaluating the assessment in a reflective essay still believed that the rest of the group were to blame. In this instance, the formative feedback did not have an instant effect on Annie's behaviour as she needed more proof that her own behaviour and approach to the task was the problem, triggering an emotional response to the situation. Beard and Wilson (2006) confirm the significance of emotions in student engagement and response to learning. The feed forward process resulted in a positive outcome in this instance by allowing the student time to reflect on her actions, increasing awareness of self.

Boud and Molloy (2013) comment that the use of self and peer assessment seemed to accentuate students' critical processes and their ability to make judgements about their work. Both self and peer assessments were

predominantly given in ‘real time’ with no delay to feedback and at best required some facilitation by the academic through, for example, an assessment handout for students to structure their responses. This sort of academic intervention addresses Carless’ (2008) concerns that an element of trust and credibility needs to be built between peers if peer assessment is to be successful and for educationalists to work in a climate where review is valued, where they can share practice which is both celebrated as well as requiring change.

This self-reflection process is in contrast to the students participating in the BEng (Hons) Yacht and Powercraft Design and the BEng (Hons) Yacht Design and production. In Case Study 2 the students are given a clear end goal, to be the winner of the model yacht race. Students on these courses learn in a simulated environment throughout the year, outside of the traditional classroom set up. The students receive formative feedback throughout the learning journey, as described by Hattie and Timperley (2007) as a feed forward process.

### Case Study 2

**Model Yacht Assessment (Jean Baptiste Soupez, Senior Lecturer in Yacht Design and Composite Engineering, Solent University, UK)**

The first year of a degree typically covers all the underpinning knowledge on which the rest of the course will be built but is often not appreciated as such by the students, overwhelmed with theory and missing on the practical applications. Consequently, it is vital to provide a real world and tangible learning outcomes, involving decision making and unique choices, in the form of an engaging assessment. To demonstrate the practical applications of all the knowledge and skills acquired in the first year of the BEng (Hons) Yacht and Powercraft Design and BEng (Hons) Yacht Design and Production at Solent University, students compete in a model yacht design, build and race.

In this piece of coursework, students are issued a design rule and are tasked with entirely designing their 70 cm long, 1.8 m tall model boats,

building them and eventually racing them, making numerous informed decisions driven by their acquired theoretical understanding of naval architecture along the way. The race itself takes place in the very last week of the year and as such is a nice social event to showcase the student's achievements; nonetheless, the ranking is worth 20% of the assessment: the winner scoring full marks, and the sinkers none! Anecdotally, one's victory in the model yacht race is considered a terrific achievement, owing to prestigious yacht designers having won this particular event, and in one instance, one's victory was mentioned over 20 years later when being awarded an honorary PhD.

Throughout the academic year, this particular unit is focussed on building towards this final assessment and inherent deliverables and thus is structured in a manner that supports the students in successfully reaching the model yacht assessment. Firstly, the unit is only taught in seminar session, where students have a dedicated work station and work on an individual task. This allows the lecturer to assist and support each student individually, thus creating a more learner-centred environment, with room for personalised advice and practice.

Secondly, blended learning is utilised as part of the unit when looking at the use of specialist software, by either utilising existing online courses ([Lynda.com](http://Lynda.com)) and videos tutorials made in-house. The students can therefore follow those at home, with the seminars being focussed on the practical application of the knowledge gained. With each session having a clear objective in the bigger picture of the overall coursework, a patchwork assessment style is adopted, keeping the students on track while providing ample opportunities to make their own design decisions.

Feedback is conceptualised by Hattie and Timperley (2007) who imply that the feedback is a consequence of a performance, and therefore comes too late to allow the learner to make the necessary progresses. This led to the feed forward concept which, coupled with formative assessments, will provide students with the valuable support they need in prevision of the summative assessment. This is the rationale behind the unit's structure: each summative assessment occurs after a similar formative one has been undertaken, with formative feedback given and opportunities for self-assessment and reflection, allowing the students to assess their own

performance and critically evaluate changes to be made for the summative one. This strategy has proven to significantly reduce the pressure of the assessment and build student confidence. Eventually, the race also provides students with more than just the final assessor's comments, but a physical realisation of how their model boat compares to the rest of the class.

Lastly, the unit aims to build a skill set that will support a final tangible outcome: in this instance, the design, build and race of a model yacht. This represents a perfect example of an authentic learning activity, as defined by Ashford-Rowe, Herrington and Brown (2013), and a tremendous tool to boost engagement, but also motivates the students to achieve their best, and materialise their skills into designing and building their first yacht. The physical nature of the deliverable and the friendly, yet competitive, peer pressure of the race allows to build up the knowledge throughout the year with the model yacht as a clear objective. Furthermore, the highly social nature of the construction and race has proven a key strategy to ensure a strong cohesion across the cohort, building trust but also introducing peer mentoring. Indeed, as all students face similar challenges in the process, they will naturally support each other.

Over the decades, the model yacht assessment has become a flagship assessment of the Yacht Engineering courses at Solent University thanks to its real world nature, providing the students with a clear learning journey, building towards a physical assessment that is engaging, challenging and fun and draws together the whole of the first year's theory into the first yacht of their career as naval architects.

## **Use for Formative Feedback and Assessment to Enhance Real World Learning**

Boud and Molloy (2013, p. 704) applaud “an approach to feedback that not only respects students’ agency in their own processes of learning but can develop the dispositions needed for identifying and using feedback

beyond formal educational structures". A student must be able to translate academic feedback into a form that is meaningful to themselves so that it can subsequently be used (Nicol, 2009). Feed forward provides a valuable alternative strategy to assessment and feedback for the emphasis is placed on active student engagement in the use of their feedback to encourage their own self-regulation (Murtagh & Baker, 2009). This has important potential benefits to students' learning and academics' time trying to support it.

The very nature of the assessment simulates the real work environment, and, in this instance, there is a tangible outcome. The exposure of students to learning within simulated environments where the feed forward activity contributed to the ongoing development of students' familiarity, and therefore their professional identity, within that setting. Any opportunity that allows students to learn and be critiqued by experts potentially adds to what Polanyi (1966) identifies as students' learning through the tacit dimension of learning found to contribute to students' fluency and criticality of their performance in practice (Benner, 1984).

The use of feed forward, in familiarising students with potentially complex environments that they will have to perform in a professional role in the future, embeds tacit knowledge into students' learning for future recall and builds confidence for the world of work, as long as the educationalist can articulate, against specific criteria, exactly how the student can improve.

Students are supported to achieve with constant and structured formative feedback, where the students are set online learning to complete at home and feedback and guidance are delivered through timetable tutorial and seminar classes. Students are given the framework and structure of the content of sessions therefore giving them the ownership and agency to develop themselves combining partnership working, coaching and mentorship.

The concept of an assessment being a competition as a standalone measurement of student learning would be neither fair nor productive; however, the feed forward structure of this course enables the students to develop their reflective practice in this learner-centred environment. The idea of winning and losing as an assessment replicates the risks involved within the industry, and to give students the opportunity to practise

managing risk gives this assessment value and purpose. Shulman (2005) identifies that without a certain amount of anxiety and risk, there are limits to how much learning occurs. As a result of the structure of the assessment, overcoming hazards and dealing with unplanned situations heighten the students' sense of achievement and passion for their subject, and the excitement on race day embeds RWL in the process of making assessments fun, meaningful and memorable.

Taking a more active stance in their learning requires students to be tutored in new processes and attitudes that extend to students taking a more active role in their assessments (Boud & Molloy 2013). Academics themselves therefore need to be cognisant of a wider range of assessment methods and design, as well as their own personal practice that will encourage students to actively learn from previous performance. Boud and Molloy (2013) reinforce that the majority of publications on feedback in higher and professional education concentrate on the micro-skills of the educator in feedback. Whilst all teaching staff bring their own personal style to the giving of feedback, Carless, Salter, Yang and Lam (2011, p. 2) view feedback as a much wider skill set and offer characteristics of sustainable feedback that involve the student in the process of learning from the feedback given:

1. Involve students in dialogues about learning which raise their awareness of quality performance
2. Facilitating feedback processes through which students are stimulated to develop capacities in monitoring and evaluating their own learning
3. Enhancing student capacities for ongoing lifelong learning by student development of skills for goal setting and planning their learning
4. Designing assessment tasks to facilitate student engagement over time in which feedback from varied sources is generated, processed and used to enhance performance.

The literature therefore highlights two ways that students may use feed forward in their work. The first is a focused version of feed forward when the formative assessment shapes and drives the performance of students towards the summative assessment (Sadler, 1989; Hounsell, 2008). The second offers a broader interpretation of Carless et al.'s (2011)

characteristics of sustainable feedback when a longitudinal view on student feed forward is used outside the specific boundaries of the formative-summative continuum for ongoing self-development. In other words, the feedback is used beyond the assignment for the development of future academic or professional skills. If students can attain self-regulation skills (Murtagh & Baker, 2009) through real world learning pedagogy, that allow them to interpret their feedback, these skills will work for them across courses and longitudinally during their academic careers.

The feed forward method gives the student the opportunity to reflect and grow both academically and emotionally, and the concept of a two-step assessment approach allows for a second chance approach to achieving the final grade mark, Sambell, McDowell and Montgomery (2013) describe the process as opening up a space where students can learn through failure and be supported to develop. Students do not always respond well to group assessment feedback and may seek to blame others when group work fails, as emphasis is often placed on individual academic achievement within an assessment framework (Boud & Hawke, 2004). By receiving detailed formative feedback from peer and tutors, the student can process and understand in more depth what they need to do in order to succeed, as this dual approach to feedback will also mimic the workplace.

To get the most positive results from this process, the assessment criteria must be transparent from the outset; students need to understand what it is exactly that they are being assessed on and, just as importantly, what they will not be graded on. For instance, simulated assessed tasks can involve pressurised scenarios with the added challenges associated with observation assessments. There may not be a physical product produced during the course of the assessment therefore tutors must establish and communicate to students what success looks like. How invisible outcomes can be assessed, such as, atmosphere and enjoyment must be communicated to the students and the complexity of the nature of the assessment will require an increased amount of coaching and mentoring. Again, the use of formative peer and tutor assessments will give the individual student a greater comprehension of how to succeed and what they will need to deliver in the summative assessment. To avoid marking students on personality traits or emotional response, and for formative feedback to be fair and constant, it must be based on the criteria the tutor has co-constructed with the class.

Formative assessment and feedback deepen students' understanding of the assessment particularly when the assessment criteria are complex and have the potential for the outcomes to be influenced by individual or group physical and emotional responses to a task. It was felt that common complaints of students only focusing on assessment-driven learning (Koen, Bitzer, & Beets, 2012) could start to be addressed if a balance was taken between two forms of feed forward when it was specifically placed within modules of learning as a formative activity as well as being used as a wider ethos for students' self-development.

## Conclusion

Assessment emphasis on long-term development is currently at odds with the immediate approach to assessment and feedback to which students and universities have become accustomed. This chapter argues that academics designing learning programmes can identify the twin components of peer and formative review as a means of developing real world and unique assessment methods. Embedding practice and theory together are essential elements of RWL and authentic assessment.

It is also recommended that real world learning assessment needs to incorporate reflection as part of the formative or summative assessment. If reflection is not at a formative stage, students should go through the assessment cycle with reflection at the end. This can be addressed by inserting a 'What if?' stage which could be adopted into the assessment framework. A formative sample of 'what if?' scenarios would challenge the students to address the potential pitfalls of the summative assessment task and their personal and professional response to problems. For example, students in the BA (Hons) Festival and Event Management course could be presented with 'What if?' situations such as 'the venue cancels the day of your event' or 'adverse weather conditions affects staff transport to the venue' to prepare them for the Real World Assessment. Student reflection has to be part of authentic assessment whether implicitly or explicitly and course design and structure are key to the RWL framework.

The case studies present examples of development and sequential assessment, the use of other assessors other than the academic and an increasing co-constructive element between student and academic as



described by Boud and Soler (2016). Consensus understanding by the teaching staff and the student of the meaning of assessment standards and their application and interpretation are an essential element to this co-constructive responsibility for feed forward. Student literacy needs to be supported by “meta-dialogues [to] discuss processes and strategies for assessment and feedback rather than the specifics of a particular piece of work” (Carless & Boud, 2018, p. 8).

Complaints as to the sometimes subjective nature of marking and grading of assignments will only be mitigated against if academic staff can articulate the strengths and limitations of any one assignment and in particular to express themselves well in identifying the way forward for students. The underlying ethos of Duncan, Prowse, Wakeman and Harrison (2003/2004) project could be built upon and named members of academic teams assist students to collate the essence of the feed forward recommendations and help the students to plan these into their next year’s study. In this way, feed forward could be built into undergraduate courses early on rather than students arriving at it by chance or by the preference of individual academics.

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