An introductory guide to practice issues in Peer and Self-Assessment.

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Context and key issues

In an extensive review of literature about formative and self-assessment, Black & William, (1998) argued that "self-assessment is a *sine qua non* for effective learning" (p.26) and, as such, is "not an interesting option or luxury: it has to be seen as essential" (p.54-55). The same may be said of peer-assessment. As Boud (1995) explains, peer-assessment informs self-assessment because self-assessment necessarily incorporates the views and judgements of others. In Boud's words: "We live alongside others in community with them and share common cultures and values." (Boud, 1995, p. 15).

At Griffith, we have a vision which embraces diversity, a mission committed to lifelong learning, values that include rigorous standards of scholarship and participatory decision making. We also specify strategies which include engagement and equity (Griffith University Strategic Plan 2009 – 2013). All of these can be enhanced by use of peer and self-assessment.

Definitions

Boud (1995, p. 12) citing himself, defines self-assessment as:

"the involvement of students in identifying standards and/or criteria to apply to their work, and making judgements about the extent to which they have met these criteria and standards. (Boud, 1991, p. 5).

By extension, peer-assessment is the same, except that in this case students are explicitly involved in *helping each other* to identify the standards and criteria, and making judgements *about each other's work* in relation to those criteria. Importantly, engagement in these activities helps with the transfer of tacit knowledge from academics to students which is otherwise very difficult to convey, and also the development of skills of judgement which integrate that knowledge in a more holistic way (see: O'Donovan, Price, & Rust (2004) and Sadler (2008)).
Benefits

Chickering and Gamson (Chickering & Gamson, 1999, p. 76) outlined seven principles of good practice in undergraduate education which also relate well to most post-graduate education. In each case, peer and self-assessment activities can provide a means by which these good practices can be manifested. Thus, it can be argued (Nulty, 2009) that peer and self-assessment practices:

1. Encourage student-academic contact;
2. Encourage cooperation among students;
3. Encourage active learning;
4. Result in students receiving prompt feedback;
5. Emphasise time on task;
6. Communicate high expectations; and
7. Respect diverse talents and ways of learning.

Strategies for success

There are two primary essential components of strategies for success when implementing peer and self-assessment. These are to:

1. Engage students in the process of identifying standards and/or criteria by which their work, and that of their peers, will be judged; and
2. Engage students in the process of making judgements about the extent to which their work, and the work of other students, has and has not met the identified standards and/or criteria.

When attempting to introduce peer and self-assessment both these components must be present. What follows are 13 tips to help you to achieve this outcome. These are distilled primarily from Race, Brown and Smith (2005).

1. Take it one bit at a time.
   You, your colleagues and your students may be new to peer and/or self-assessment. Introducing it on a small scale first is prudent.

2. Keep everyone in the picture.
   Explaining to students and staff what you are doing and why helps everyone to understand, and to commit, to the technique. Provide everyone with clear information and directions.

3. Provide mark-free rehearsal opportunities
   Mark-free rehearsals help to create an environment in which students learn to collaborate and cooperate in supporting each other's learning without competition. They minimise fear and encourage risk taking leading to deeper learning. They provide students with the opportunity to practice what is required and to get feedback without penalty.
4. Provide, or (more ideally) negotiate, really clear assessment criteria
Use discussion, open critique, reflection, guidance and illustration to involve students directly in the development and specification of criteria and standards. This is a particularly potent way to reduce ambiguity and to enhance students understanding.

5. Make peer and self-assessment marks meaningful
It has already been noted that peer and self-assessment are uniquely useful for helping students to develop their understanding of criteria and standards used in judging their work, and that it is this quality which provides the primary learning benefit. Furthermore, ensuring students are informed of this fact, and directly experience, it is likely to enhance their engagement with peer and self-assessment. It may be argued that this is as far as peer and self-assessment should go – that is, its use should be solely formative. However, a contrary view consistent with the advice of Race, Brown and Smith (2005) is that student engagement can be further enhanced if a meaningful proportion of the marks used to determine final grades are derived using peer and self-assessment. That is to say: it should count for something more than just a learning aid.

6. Moderate peer and self assessment
If students are the sole arbiter of the marks awarded through peer and self-assessment there is the potential that they will see this as unfair. Similarly, students and other academics may be sceptical of the accuracy of marks awarded this way. There are several reasons.

First, students may not be confident that their judgements are accurate – or can be. This is a view likely to be shared by many academics (though, notably, most research shows that students at all levels are able to make reasonably accurate judgements about their performance if appropriately guided and supported – see Falchikov and Boud, 1989, Boud and Falchikov, 2007, and Topping, 1998.)

Second, it follows that students are seeking to learn (including how to make accurate judgements of their work) and expect the teachers to help them to do so. Likewise teachers have a professional responsibility to teach, and an expectation that they will make judgements about the quality of students' work. After all, traditionally, it is the academics who are the sole arbiter of marks awarded. Thus, some participation by teachers in teaching students how to assess is required to meet expectations and responsibility. Some process for moderation of marks also helps to ensure that students engage more meaningfully in the process, thereby also doing much to negate the possibility of collusion.

A deliberate component of moderation of peer and self-assessment is to accumulate evidence which can show how well students' judgements compare with that of academics. You, your students and colleagues can all be reassured by such data if student marks are found to be similar to those provided by lecturers. Where such data is not found, corrective actions can be taken.

7. Keep the system simple
Boud (1995) argues that the introduction of peer and self-assessment can reduce the total burden of marking accruing to academics. While this is not always realised in
practice, it is certain that the more complex the system the less likely workloads will be reduced, and the less likely it will be for students and tutors to engage with it.

8. **Allow plenty of time**
Assessing is a complex skill: whether by virtue of the need to amass prerequisite disciplinary knowledge, or by virtue of the complexities of the act of judging, or both (Boud, 1995; Sadler, 2008) it is a skill which needs time to develop. In addition, the nature of peer assessment in particular is that it is collaborative, this means that it involves discussion and debate, and implicitly a search for consensus – or, at least, shared understanding. Finally, when peer and self assessment are used, it is frequently done in group settings and/or in association with the presentation of students' work. All of this takes time – but, notably, research shows that it is time well spent in bringing about improved learning outcomes.

9. **Make peer and self-assessment an integral element of learning**
Ensure that peer and self assessment is used in a deliberate, systematic way to engender the development of skills which are consistent with lifelong learning (Race, Brown and Smith, 2005). In this regard Boud (1995) argues that self-assessment "is a necessary skill for lifelong learning" (p.13). By this he means that it is the responsibility of university educators to help students to develop the skills they will need to be effective beyond their university life. Citing Candy, Crebert, & O'Leary (1994) and Justice & Marienau (1988) he says that "The ability to self assess is a key foundation to a career as a lifelong learner." (p.14) and goes on to note that graduates skilled in self-assessment "are more likely to monitor their own performance without constant reference to fellow professionals" (p.14) - a key outcome for any graduate.

10. **Consider what no one but students can really assess.**
The point here is that the academic cannot observe all the learning processes students engage in, nor deduce all the learning outcomes these yield: some learning acts, and some learning outcomes can only be observed by the students themselves. Race (2001) has argued that one reason why peer and self-assessment can be so useful as a learning aid is that they can be used to directly assess the components of learning that are not visible to the teacher. In this way these components are legitimised in an explicit way to students, and students are rewarded for engaging them. This is appropriate because it motivates students to participate in these activities and such engagement is a pre-cursor to the achievement of the learning outcomes we desire. Examples are "when students have been thinking deeply about something because they have been involved in actually doing it" (Race, 2001, p. 6) or when assessing self and peer-contributions to group processes, or the amount of personal effort and motivation put into the tasks (Race et al., 2005).

11. **Emphasise the crucial relationship between criteria, evidence and self-evaluation.**
The advice provided by Race, Brown and Smith (Race et al., 2005) is simply to help students to focus their judgements of their own performance directly on the assessment criteria and to ensure that these judgements are informed and supported by similarly focussed evidence. In other words, students should be helped to learn how to make and justify their judgements using evidence that is directly relevant to particular criteria. In this respect, their advice is consistent with the intent noted
earlier as: "... a commitment to ensuring (so far as possible) that students are inducted into an understanding and appreciation of the grounds upon which grading decisions are made." Sadler (2008) (p.18, pre-print). However, the further point Race et al. (2005) make here is that students themselves need to learn to make these same grading decisions.

While this advice and intent is sound, the situation is often complex. For a wide range of student work, Sadler (2008) describes the precise complex nature of judgements made as "analytic" or "holistic" (Sadler, 2008 Pre-print p.3) (readers are directed to Sadler's article for a thorough explication of these terms). Further, O'Donovan et al. (2004) and Rust et al (2003) explain that, regardless of which approach is taken, these judgements can also involve an appreciation and application of tacit knowledge which is difficult to convey explicitly. Accordingly, these authors among others have noted the very high degree of difficulty associated with making judgements about students' work, in particular when that work is of a divergent or 'open' kind (Sadler, 1983, 2008). Clearly, that difficulty extends to the students themselves when they attempt to make such judgements. It follows that our commitment to helping students to understand and appreciate judgements about their work, and more importantly to develop the ability to make those judgements themselves, is a complex task – one for which, as Sadler (2008) advocates, peer and self-assessment can help significantly.

12. Encourage students to engage in a range of self-reflective activities.
What follows is a brief amalgam of several points from Race, et al. (2005) all of which specify particular activities that students can use to help develop their abilities to self-assess: use reflective accounts and journals; assess peers; use video to informally self-assess presentation skills; include self-assessment with student portfolios; include self-assessment when assessing group process; use flexible learning materials and approaches to embed more continuous forms of assessment and feedback throughout the learning process; provide opportunities for computer-based self-assessment; and, include the possibility that any self-assessment activity can be structured as a diagnostic aid which can then also either link to self-remedial study activities or help students to appreciate that their existing level of competence is sufficient.

13. Support students in peer and self-assessment
The simple message on which this list of key components for success concludes is that students need to be supported in their efforts to use peer and self-assessment.

Students, particularly first year students, may be regarded as lacking the requisite skills for peer or self-assessment (Gibbs, 1995). This is one reason why peer and self-assessment are not more widely used in first year (Nulty, Forthcoming). Yet, it is axiomatic that students are engaged in learning. Accordingly if, as is likely, students lack such skills in the first instance (Cassidy, 2007) this serves as both a reason for not proceeding with peer and self-assessment, and as an imperative to do so (Nulty, Forthcoming). Published literature strongly suggests a developmental model is appropriate for this endeavour. For example, Cassidy's work (Cassidy, 2007) suggested that students can develop their peer and self-assessment skills if appropriately supported. Similarly, van Hattum-Janssen & Lourenço (2006) have demonstrated that students peer-assessments were only less accurate than
academics' assessments in relation to criteria that "require a more profound knowledge of the course material that was not embedded explicitly in the criteria" (p.689). In other words, students' skills deficits were confined to aspects of their learning which were dependent on their learning of disciplinary material which is difficult to explicitly convey through course materials or explicit enunciation of assessment criteria. This is consistent with research findings of O'Donovan et al (2004) and Rust et al (2003) who nevertheless demonstrated (over three years) that students who engaged in a simple peer-assessment workshop at the start of their program of study achieved significant improvements in performance compared with those who did not.

References