A reflective evaluation of group assessment

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Introduction

There is a general agreement in the literature that groupwork helps to develop important interpersonal and personal skills (Race, 2001; Visram & Joy, 2003; Elliot & Higgins, 2005; Kench et al, 2008). However, one of the problems with groupwork for both students and lecturers is how the work should be assessed (Parsons & Kassabova, 2002). The possibility of having 'free-riders' and the difficulty of fairly awarding marks to reflect the level of students' contribution to a group output are some of the key problem areas in groupwork assessment (Race, 2001). Peer assessment is seen as one of the methods to deal with these problems. It can generally involve students assessing each other's level of contribution to the group's output (Visram & Joy, 2003). This paper provides our reflection on the use of peer assessment on a student group project.

Peer assessment

Several authors have identified the advantages and disadvantages of peer assessment. The existence of passengers and freeloaders is widely acknowledged as a potential problem with groupwork (Parsons & Kassabova, 2002). Freeman & McKenzie (as cited by Elliot & Higgins, 2005) argue that students view groupwork assessment as unfair if there is equal reward for unequal contributions. Visram & Joy (2003) acknowledge that sometimes students may lack the ability to evaluate each other. However, Elliot & Higgins (2005) in their study on group assessment found that generally students view peer assessment as a fair way of distributing marks. Nordberg (2006) noted that groupwork can have an effect on both weak and strong students. He suggests that while weak students can have a free ride in group projects, strong students can be held back from achieving higher marks as the work of individuals is subsumed in the group output. Peer assessment may therefore provide a useful mechanism for differentiation of marks in groupwork. Kennedy (2005) also identified some issues with peer assessment, including:

- the reluctance of students to judge others

- the propensity by students to (significantly) mark down those who had not done a fair share

- lack of consistency in judgement between students in a group

- the potential for peer assessment to limit weaker students' contribution to the project as they may be ignored or given less important tasks

- the possibility of generating tension instead of true teamwork.

While Kennedy (2005) acknowledges the possibility of inconsistencies in judgement, Baker (2008) suggests that students are in a better position to assess their peers and that the aggregate rating score increases reliability of the system.

Despite the potential problems with peer assessment as cited above, it is generally agreed that it can bring potential benefits. Visram & Joy (2003) for example cited the following as advantages of peer assessment:

- students actively participate and take responsibility for the assessment process

- students can critically analyse work done by others rather than simply receiving a mark as feedback

- the process can encourage students to be accountable to the team

- it helps to reduce or avoid freeloading

- the process makes it easier to identify students who do not contribute effectively as it is the students themselves who make the judgement.

The Interprofessional Studies Module

The Interprofessional Studies module is a Level 6 module with students from three disciplines in the School of the Built Environment, including Architectural Technology, Building Surveying and Quantity Surveying. The module is project-based, requiring students to work in inter-disciplinary groups mirroring industry working practice. In order to run appropriately, the groups are required to appoint a team leader and to sign a group contract which defines the expected group conduct. The assessment for the project work includes intra-peer assessment. The peer assessment (PA) scores are used to adjust 50% of the awarded group mark to reflect individual students' contribution to the groupwork.

A reflection

Below is our reflection, based on an analysis of the performance of 26 groups over three years, in relation to various peer assessment issues identified in the literature. Overall our experience suggests that peer assessment provides a useful mechanism for recognising individual effort in groupwork. It helps to differentiate marks between students to reflect the level of contribution to the group output.

Motivation to participate

Generally students actively participate in the assessment of the module. The groupwork seems to give the students an element of independence and responsibility. The peer assessment component plus the group contract make students more accountable to the group. It must be said, however, that the design of the groupwork is such that every student's input should have a direct bearing on the others. Therefore in order for the group task to be completed all components have to be completed, thus making all students accountable. This makes the students more aware of the impact of their input to the group output.

Ability to assess

Evidence suggests that students fairly assess each other's contribution. Although there have been instances where a group member has complained of a low PA score, it seems that in the majority of cases the scores have been fair. The level of contribution is also evidenced from minutes of group meetings. Each group is required to keep weekly minutes as evidence of group discussions and these are also used as a record of attendance and performance. There seems to be a correlation between the evidence in the group meeting minutes and the peer assessment scores. Students seem to clearly acknowledge those who have contributed more. For example Group X, in Table 1 below, is a group where one student has been awarded the highest marks, meaning that all students acknowledged his/her input.

Table 1: Example of peer assessment scores

Group	Student	PA Score
Group X	St1	24.00
	St2	22.00
	St3	21.67
	St4	18.50
	St5	12.50
	St6	11.17
Group Y	St1	24.00
	St2	24.00
	St3	24.00
	St4	24.00
	St5	24.00
Group Z	St1	24.00
	St2	24.00
	St3	24.00
	St4	24.00
	St5	3.20

[PA Scores: these are aggregate peer assessment scores for each student with 24 as the highest possible score a student can get.]

Although literature suggests that in some cases students may not want to downgrade other students in order to preserve friendships (Visram & Joy, 2003; Kennedy, 2005), our experience suggests that the friendship effect may be minimal. Of all the 26 groups examined only six groups chose to give each other equal marks (such as in Group Y in Table 1). It is not clear, however, whether this reflects the inability of the students to assess, as it may also reflect a group where all the team members actively participated. The data however suggest a general willingness by students to participate in peer assessment. Group Z in Table 1 also shows a situation where students have awarded one particular student a very low mark. This to some extent suggests that students are able to discriminate in marking, particularly against those who would like to take a free ride.

Consistency

Generally in the majority of cases the assessment scores are consistent across the board. Assessing others seems to be consistent except in a minority of cases where students give themselves exaggerated scores. The table below shows the average peer assessment scores and standard deviations for each year. The statistics suggest a level of consistency year on year.

Table 2: Average PA scores

Year	Mean PA Score	Standard Deviation
1	21.91	3.17
2	22.27	2.07
3	21.41	3.39

The 'weak' and the 'strong'

Groupwork has some disadvantages in that it is difficult sometimes to identify 'weaker' students early as their level of performance in the group is only known at the end of the peer assessment. Our project brief requires groups to keep minutes for all meetings. These are used by tutors to discuss group progress and individual members' performance. This therefore makes it possible to identify problems within the group early. As suggested also by Nordberg (2006), the participation of 'stronger' students may be hampered by group work. Our experience suggests that this may not necessarily be the case in this module. An examination of the correlation between peer assessment scores and individual marks for individual components on the project shows a very strong correlation (0.812), suggesting that students who contribute more in the group component and have a relatively high PA score are likely to achieve better marks in their individual component in the project.

Conclusion

A review of literature shows that generally peer assessment can be used effectively to allocate marks to account for levels of students' contribution towards groupwork. Our experiences on the module also show that peer assessment can be successfully used to award and discriminate between marks. While acknowledging the potential problems with group assessment, we are generally supportive of the use of peer assessment and are confident that students are capable of fairly assessing each other's level of contribution to groupwork. As discussed earlier, one of the problem areas with groupwork in general is that 'weaker' students may be put at a disadvantage as they may be identified late. We recommend that an appropriate approach to deal with this needs to be put in place. The use of a group contract and the requirement for the groups to keep minutes of their meetings can provide a mechanism for tutors to check students' performance before the final peer assessment. This may be helpful in identifying and providing support to 'weaker' students.

References

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