Tapping into the Power of Online Peer Assessment

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ABSTRACT

Events Management employers seek graduates who can demonstrate that they can work in teams effectively. There are issues associated with assessing groupwork for both tutors and students. As most of the groupwork is completed outside of timetabled classes it is often difficult for the tutor to ascertain if the groupwork has been completed evenly amongst the group members. From a student's perspective there are often feelings of unfairness associated with group assessments and demands for individual grades to be awarded based on contribution.

The overall aim of this study is to understand what a best practice approach is to online peer assessment and to trial an online tool thus, reducing the workload for the tutor of a paper-based approach. An online peer assessment tool called SPARKPlus was used for this research. Second and final year BA Events Management students used SPARKPlus and the results of a post-trial survey were collated. Interviews were conducted with six students involved in the trial.

The findings indicate that the students had a positive experience using SPARKPlus. They believe peer assessment is a fair method of assessing groupwork and individual grades should be awarded. These results concurred with the literature regarding what constitutes a best practice approach to online peer assessment. Furthermore, some new themes emerged which would warrant further future research; including formative peer assessment and introducing face to face feedback.

TAPPING INTO THE POWER OF ONLINE PEER ASSESSMENT

INTRODUCTION

The Higher Education (HE) landscape has changed dramatically in the last few years. The advent of tuition fees within England for HE courses has driven student expectations in terms of course content, quality and value, particularly as far as future employment prospects are concerned (Kandiko & Mawer, 2013). Employers in the events management sector seek graduates who can demonstrate that they can effectively work in teams (People 1st 2010; Arcodia & Barker 2003; Lowden 2011) and therefore assessment design needs to include opportunities for students to work in teams so that they can evidence this skill at interview. Furthermore, a recent report from the Association of Business Schools (ABS, 2014) shows that 47% of employers seek graduates with team skills.

There has been a 17% increase in undergraduate student numbers at UK Universities from 2007 to 2013, (Universities, 2014) . This has led to larger class sizes in the BA events management degree at the University of Northampton, which makes assessing groupwork in a traditional paper-based format, challenging for tutors. The previous method the researcher implemented to assess individual contribution to groupwork was paper based. It required students to allocate a fictional £100 amongst all group members, including themselves, and justifying the amount for each peer by providing some written feedback. The researcher used this to calculate and allocate an individual grade. However, the students did not receive the written feedback with regards to their grade as this would have been a very time consuming exercise for the researcher. It is felt that this peer feedback is an important aspect of learning and development, which is currently inaccessible

to the students. Furthermore, the manual nature of the peer assessment is open to tutor error. For these reasons, the researcher wanted to find an online peer assessment tool that would overcome these challenges. Additionally, over the next four years the course will be moving to a blended delivery and therefore the introduction of online tools is essential in the development of this course. The overall aim of this study will focus on a best practice approach to online peer assessment specifically, for individual contribution to groupwork, as this is relevant to the events management industry.

GROUPWORK

Groupwork is now accepted as part of the overall assessment strategy used in higher education (Elliot & Higgins, 2005; Kench et al., 2009). There are numerous benefits associated with groupwork which include an understanding of group dynamics, development of interpersonal skills, increased productivity, awareness of others' points of view and as an effective method of learning (Kench et al., 2009:158). These are valuable skills that employers seek in graduates as it is closely linked with the reality of teamwork in the workplace (Loughry et al., 2007; Loughry et al., 2014). Many employers and academics agree that teamwork skills are lacking in business graduates (Loughry et al., 2007, Loughry et al., 2014).

Students often dislike the fact that others who contribute less receive the same grade as those who have contributed more. This creates feelings of unfairness within a group. Wandel and Willey (2012) found that students felt that they should receive individual grades for their groupwork rather than the same grade. There is a wide discussion relating to issues of unfairness when conducting

group assessments (Gordon, 2010; Kao, 2013, Kali & Ronen, 2008). One of the main issues of unfairness relates to 'free riders' or 'social loafers' (Webb 1995, cited by Cheng & Warren, 2000:244; Boud et al., 1999; Boud, 2001; Elliot & Higgins, 2005; Freeman & McKenzie, 2001; Kench et al., 2009; Cantwell, & Andrews, 2002). This is where members of the group contribute very little to the group assessment which causes feelings of unfairness and demotivation amongst other group members. Many students will insist on an individual grade and strongly object to receiving a group grade (Loddington et al., 2009). However, studies have found that students do not want to receive a grade from their peers unless it is moderated by their tutor (Kearney, 2013; Boud et al., 1999).

Quite often a lot of groupwork is completed outside of lectures, seminars and tutorials and therefore is conducted without the presence of the tutor. This results in it being difficult for the tutor to fairly assess the contribution made by each team member (Willey & Gardner, 2009; Willmot et al., 2008). Issues of fairness is also a problem for tutors in being able to allocate grades to individuals based on their contribution in groupwork (Loddington et al., 2009:329). It is argued that the students are in the best place to assess individual contributions (Race 2001, cited by Willmot et al., 2008:17) and therefore, peer assessment provides the tutor with an insight into how individual students behaved and contributed to group tasks (Loddington et al., 2009; McAlpine et al., 2006).

PEER ASSESSMENT

Peer assessment has been used by educators for in excess of fifty years (Luxton-Reilly, 2009). This form of assessment can be used in both the formative and summative sense. The advancement of

online tools to support peer assessment has seen monumental growth in recent years and brings with it many benefits to students and tutors (Chetwynd et al, 2013). It provides tutors with a more viable approach to peer learning (Chetwynd et al, 2013). Brindley and Scoffield (1998) argue that peer assessment is valuable as it aids student self-development and prepares them for their future careers.

Goldfinch and Raeside (1990, cited by Cheng & Warren, 2000:245) argue that 'peer assessment develops responsibility and enterprise and increases students' maturity and confidence'. Brindley and Scoffield (1998:88) found that deep learning occurred and that students said their performance improved as a result of being involved with peer assessment. They go on to observe that 'peer assessment also promotes autonomous learning, reflective learning and less dependence on the teacher as the supposed expert' (Brindley & Scoffield, 1998:88). This supports the collaborative nature of groupwork and reinforces that the student must also take responsibility for their own learning.

Other benefits include that it provides an opportunity for students to reflect on their groupwork, teamwork skills, communication and evaluation skills, it allows those who work hard to be rewarded and those who don't to be penalised (Loddington et al., 2009). Some student's behaviour is improved if they know that they are going to be assessed by their peers (Loddington et al., 2009). Other advantages of peer assessment include that students may receive more frequent and timely feedback from their peers and that the workload for tutors is reduced (Gielen et al., 2010; Loddington et al., 2009).

Feedback from peers is often found to be more understandable than the feedback from the tutor (Nicol, 2011). Although this feedback may not be of a similar quality to that provided by the tutor the fact that it is often more timely and frequent is a real advantage (Nicol, 2011). Honeychurch et al. (2013:2) agree by suggesting that it's possible for students to receive a 'greater volume of feedback in a relatively short time frame'. Furthermore, students are more willing to accept the feedback from their peers and find it less threatening than the feedback from their tutors (Topping 1998 cited by Lu & Zhang, 2012:315).

Peer feedback not only develops skills in receiving feedback but also in constructing feedback (Mostert & Snowball, 2013). Nicol and Macfarlane-Dick (2006) state that it is the giving of feedback and making judgments which is far more important and leads to more productive learning than actually receiving feedback. Honeychurch et al. (2013:2) support this view stating that the 'real value of peer assessment resides not in the feedback itself (the product) but in the process of constructing the feedback'. This develops the notion of students being 'constructors' of feedback and taking responsibility for their own learning.

METHODOLOGY

The researcher had previously used paper-based, manual forms for conducting peer assessment. However, these methods were time consuming, open to error and, most importantly, there was no easy mechanism for students to receive written feedback from their peers. There are few online peer assessment tools available for assessing individual contribution to groupwork. The three tools researched were SPARKPlus, Web PA and CATME. Following this extensive research, which

included interviewing the developers of each tool, SPARKPlus was chosen for a pilot study as it has a main advantage over the other tools in that the written feedback is seen by the students. With WebPA and CATME only the tutor see's the feedback.

The results and feedback that students receive is anonymous, therefore the identity of their peers is hidden. Importantly, the tutor can see the identity of each peer. Tutors can establish their own grading criteria on both SPARKPlus and WebPA, however, with CATME the criteria are pre-set. SPARKPlus and CATME identify over-raters, under-raters and free riders. SPARKPlus additionally identifies saboteurs and provides a useful visual radar chart for each group. All three tools require the student to assess themselves and each of their peers. To conclude, SPARKPlus included all of the functionality that was being sought.

Undergraduate second and final year Events Management students were chosen for the trial of SPARKPlus; a total of 102 students. The module selected was the one whereby they have to deliver an event within a small group. The tutor established the grading criteria (appendix 1). The students were required to use SPARKPlus after they had submitted their post-event report. They were then asked to complete a questionnaire (appendix 2) to capture their feedback on the use of SPARKPlus and peer assessment in general. In addition, six students were interviewed to enable more in-depth qualitative data to be captured.

SPARKPlus produces a numerical result for each student based on the scoring for the peer assessment grading criteria. The calculation of this result includes both the self-assessed and peer assessed score. The tutor marks the group report and then multiplies this grade by the SPARKPlus

result which produces an individual grade. The SPARKPlus results can then be published so that the students can read their results and written feedback from their peers.

FINDINGS

QUESTIONNAIRE RESULTS

Out of the 102 students, 47% completed the questionnaire. When asked if peer assessment is a fair method of assessing individual's contributions to groupwork, the majority (71%) agreed. Furthermore, 71% felt that the grade should go towards their final assessment grade. It is not evident whether the peer assessment increased the student's motivation to participate in the groupwork. It would have been interesting to have asked an open ended question about this in order to gain a fuller understanding.

When asked if the students had confidence in their peer's ability to fairly score them, 29% agreed that they did, however, 27% neither agreed nor disagreed and 25% disagreed. Again, the rationale behind these responses is unclear without any supporting qualitative data.

What students liked most about peer assessment was the written feedback. Furthermore, they liked to construct the feedback and provide honest and constructive criticism. This concurs with the views of Honeychurch et al. (2013) in that the real value of the peer feedback is the notion of students being 'constructors' of the feedback. Respondents made comments regarding the written feedback on SPARKPlus suggesting that this should be included for each criterion and that more written comments should be allowed. This suggests that some students seek a greater volume of

written feedback. When asked if they liked the fact that their scoring and written feedback was anonymous, 79% agreed.

The main factor contributing to what they least liked about peer assessment was bias. The concerns included being marked down if someone did not like them, peers providing false information or lying, feedback that included personal issues and friends not providing honest feedback in case it had an adverse impact on their relationship. These findings are supported by the literature.

67% of respondents said they preferred using SPARKPlus as opposed to the previous methods used. The majority of respondents found the SPARKPlus instructions easy to follow. When it came to using the tool, 81% found it easy to use.

INTERVIEWS

The aspect the students surveyed liked most about peer assessment was the writing and receiving of the written feedback. This corresponds with the interview data collected, in that, the students wanted to be able to provide more written feedback, not just having one box at the end, but a text box for each criterion.

With regards to anonymity, it was interesting to note that from the student interviews, they all said that they liked the fact that the scoring was anonymous. However, the anonymity of the feedback was not important to them. The reasons stated were that after the results many wanted to know who had said what about them, it created a strange atmosphere, you shouldn't hide behind your

comments and some students could tell who had written the feedback as they knew each other's writing style so well.

The questionnaire results show that 71% agreed or strongly agreed that peer assessment is a fair way of measuring individual contribution. This is supported by the student interviews. However, issues of bias were the main dislike of peer assessment. The students interviewed felt that some students may use the peer assessment to settle an argument, gang up on a group member or provide a biased opinion. The inclusion of self and peer assessment helps the tutor identify bias which is a feature of SPARKPlus. Additionally, the functionality of SPARKPlus clearly identifies issues within a group such as over-raters, under-raters, social loafing and saboteurs which will reduce the risk of bias.

When asked what improvements could be made, the majority of the comments from the survey was associated with the scoring system used. This included more information on what the scale used meant, i.e. average, above average, etc. This view is supported by student F who found the scoring difficult to understand. Some students surveyed suggested a percentage, numerical or grade scoring system would be easier. It is possible to tailor SPARKPlus to an alternative scoring system. The students are used to a grading system of A to F so this could be implemented in SPARKPlus.

All six students interviewed suggested that the peer assessment should be completed at the end of the first semester, not just at the end of the academic year. The reasons stated include that it could

help resolve issues and conflict, provide an opportunity for students to receive feedback, to improve or change their behaviour, act as a progress check and be motivating if positive comments were received.

During the interviews a new aspect emerged, that of, face to face feedback. 'I think we should give the feedback face to face too…. the most important bit is getting the feedback' said Student A. All students interviewed said that face to face feedback would be useful and most suggested that this should be conducted with the tutor present to provide a 'safe' environment. Student F commented that doing this face to face feedback just at the end is too late as 'you can't change anything or a person's opinion of you'. This student went on to argue that in the workplace you will get feedback and 'you need to learn how to deal with it professionally'.

CONCLUSION

The overall aim of this study was to find a best practice approach to online peer assessment specifically for individual contribution to groupwork for BA Events Management students. Firstly, the literature identifies that peer assessment is a fair method of assessing individual contribution to groupwork. This is supported by the views of the students and that some feel that the same summative group grade should not be awarded to all group members. It should be adjusted to take into account individual contribution. Feedback is a key component of peer assessment and is a critical aspect of the learning process.

The findings of the survey indicate that conducting the peer assessment anonymously was important. However, some of the students interviewed felt that it was not important. The reasons stated were that they could identify who had written the feedback via the writing style and that in the workplace they would receive non-anonymous feedback and have to learn how to deal with this. Face to face feedback was suggested by some students. With the tutor present, they felt it was important to seek further feedback from their peers and to clarify the feedback they had given to their peers.

SPARKPlus is the only tool whereby students can read written feedback from their peers. The majority of the findings from the students who used SPARKPlus concur with the literature with regards to a best practice approach. The written feedback was important and, in fact, the interviews with the students indicated that they wanted more feedback, with the option of a text box next to each criterion. The students suggested the inclusion of formative assessment at the end of semester one.

The students understood the instructions on how to use SPARKPlus and they found it easy to use. This online system meant that they could complete their peer assessment in a safe, non-threatening and secure environment. The suggestions for improvements were to include a text box next to each criterion, implement a different scoring system and to use it formatively. From a tutor perspective it was straightforward to set up, monitor and produce the results. The technical support from the SPARKPlus team was excellent and it was far less time consuming that the previous paper-based

method. The results were easily converted into an Excel spreadsheet in order to calculate an individual grade.

The findings from this study have clearly identified the key components of a best practice approach to online peer assessment. The use of SPARKPlus has been a positive experience for the students and researcher.

There are several aspects of this study that would warrant further future research; adjusting the scoring system to one that the students are familiar with, use SPARKPlus at the end of semester one formatively and to implement face to face feedback sessions.

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