'Barriers in the Peer Review Process: overcoming the distress using a Critical Incidents Approach'

Dr Anna Romanova

Applied Engineering & Management, University of Greenwich, Chatham Maritime, ME4 4TB

A.Romanova@gre.ac.uk

ABSTRACT

Peer Review has always been an important part of group work. Group work is often used in HE context as a vehicle for learning how to work, sustain efforts, compromise, negotiate and deliver. Nevertheless group work is a source of distress and thus individual behaviour in a group is of great importance as well as the reaction of that group to an individual. This work reports on the transition between the historical peer-review models towards an authentic peer learning journey that utilises a critical incident method. The method educates students through story telling of past peer interactions (i.e. critical incidents, trivial or detrimental) in order to prepare them for the stressful experience of group work aiming to improve reflective performance, peer acknowledgement and credibility of their experience. In traditional Peer Review paradigms the process would often relegate into a blame or a narcissistic self-praise. This work describes a five factor Peer Review process that benchmarks and maps out the assessment evolution over 4 years in Higher Education practice of students undertaking a Group Business Project activity.

PAPER

Introduction

The Peer Review has been known for its ability to imbue student with an interest to participate and undertake the assessment in a best possible way. This forms the foundation to the practical skills of critical thinking, evaluation and self-development (Collins 2001, Nathan 2001, Hines et al 2008). However things become different when the Peer Review is not just used for its formative nature but also as part of summative assessment, especially when it is anonymous. Although the main purpose of the Peer Review should be to help constructively colleagues to develop (Kidder and Bowes-Sperry 2012), the perception of those involved in HE can be quite different (Table 1).

Table 1. Peer Review conceptual understanding

Lecturer	Student
(i) This is an authentic way to help students assess	(i) This is a way to complain about poor-performing
critically their performance that leads towards their	students / undermine outcast students / manipulate marks;
Continuous Professional Development (CPD);	(ii) Excel personal contribution and performance;
(ii) This method helps to identify poor or non-engaging	(iii) An exercise that carries extra burden with little, no, or
student's, and thus helps to allocate marks correctly.	negative marginal utility.

This paper will explore the inclusion of critical incidents (Sitkin 1996, Kapur 2008, Kapur 2016, Whitton 2016, Bledow et al 2017) as a means of alleviating distress of group work as students prepare to undertake group work and prepare for a Peer Review (Mayer and Land 2003, Yorke 2006, Land 2018).

The students undertaking the Group Business Project (GBP) at the University of Greenwich in years from 2014-2018, cohorts of 120-50 students each year, are considered in this transitional study. GBP is a complex activity where students from year two, form a company, pitch for a project (offered by external client, i.e. a real company), employ students from year one and undertake project with an aim to meet specific project objectives. The outcomes are assessed through Presentation, Report and Peer Review (Romanova 2017).

Methodology

The Peer Review format is available to the students from the start of the course so that they can familiarise with it in advance. There are five discrete criteria, 20% each (see Table 2) set as a benchmark for the students to follow: (i) attendance, (ii) presentation, (iii) report, (iv) interpersonal skills and (v) reflective review. Elements' (i-iv) are numeric, i.e. 100%-0%, and element (v) is qualitative. The resulting number is further used as a multiplier to award individual student marks for their presentation & report efforts. In addition, students from year two, can nominate students from year one to undertake specific managerial roles next academic year in GBP, this is optional and is non mark-bearing. Overall, separate students could be part of a very successful group but individually fail the course as they did not participate nor contributed to the overall group work.

Table 2. Five Factors of Peer Review

Factors	Year 1 students	Year 2 students		
i	Attendance at the Company meetings.			
	i.e. if they attended all meeting score them 100, if the	ney attended only few score them 20, etc.		
ii	Contribution to Presentation: ability to complete	Contribution to Presentation: task allocation, fair		
	allocated tasks to good quality standard and on	workload distribution, group work organisation, group		
	time, their participation in slide and speech	time management, information gathering and		
	preparation and attendance at rehearsal.	organisation, information analysis, slide and speech		
		preparation, presentation rehearsal.		
iii	Contribution to Report: their ability to complete	Contribution to Report: task allocation, fair workload		
	allocated tasks to good quality standard and on	distribution, group work organisation, group time		
	time, general contribution and enthusiasm to be	management, information gathering and organisation,		
	involved in the work as well as attendance at	information analysis, material preparation for the		
	meetings.	report and write-up process organisation.		
iv	Interpersonal Skills: Verbal Communication, Non-	Interpersonal Skills: Verbal Communication, Non-		
	Verbal Communication, Listening Skills and	Verbal Communication, Listening Skills, Negotiation,		
	Professional Manners.	Problem Solving, Decision Making, Professional		
		Manners and Assertiveness.		
v	Consider their ability to work as part of the team, define their best practise approaches, their ability to apply			
	learned knowledge and complete set tasks, mention the elements they have to improve for the future.			

The design of the Peer Review described above may seem traditional, however the induction approach is quite different. In preparation for GBP, students are told a story each week about the previous unpleasant, ultimately failing, experience of past peer groups and the consequences of such mistakes, consciously attempting to connect the content to lecture topics where applicable (O'Neill et al 2017). The story can be different to capture different problematic aspects of doing GBP and the pitfalls. However, the overall narrative (see Table 3) of each story stays the same. The 'tales' are based on real incidences and over time the 'collection' of these stories covers a range of topics from discrimination based on gender, race, age, to personal intolerance, personal affection, plagiarism, data falsification, incompetence, and even bullying.

Table 3. Critical incident narrative

Elements	Character	Setting	Plot	Conflict	Results	Evaluation	Theme
Details	Students.	Time, Place, Project.	Series of events or actions.	Critical incident.	Outcome for the group and individual students (Lecturer's Perspective).	Individual Feelings and evaluation of oneself and others (Student's Perspective).	Recap of GBP and Peer Review aim's. Link to lecture topic.
Example: discrimin ation based on gender	A group of students, 5 males and 1 female, just like yourself	Took part in a GBP few years back working on XYZ project	Group males have decided that they do not want to include female in their work, stopped communicat ing with her and effectively took a vote to exclude her from the group	When the matter was raised and questioned, males claimed that she was 3 months pregnant, they don't want anything to do with her and that she could not possibly be an asset to the group	Male students have been referred to Government's Employability Law's, to University's Counselling Service and to Council's Family Life Planning service. Following which they had to attend an interview with Director of Student Experience to reinstate their student's status, following an apology to the female.	Males, given their power of majority, felt they would achieve better results working without the 'burden' student. Female felt outcast, anxious and depressed.	Team work SWOT Employability law Equality Ethics Professional behaviour Management Motivation

Results

In the first academic year, 2014-15 (GEN1), of applying this critical incident narrative approach to help students overcome distress and to focus the content of their peer review (see Table 1) there was little effect. The exposure of both group of students, year one and two, to such teaching and learning approach was seen as provocative.

However, in 2015-16 (GEN2), as the first year students from GEN1 moved to the second year they had some experience with the approach. They were familiar with some of the critical incident stories and the second time around the people involved became living 'story' characters. Those students who had been directly or indirectly affected by these incidents would confirm the evaluations of the narrative and hence spread the knowledge amongst the peers outside of the classroom. The feedback from the course evaluations confirmed that those affected became keen to eliminate any such mistakes made by predecessor groups, thus improve their skills. However, year one students of GEN 2 though they witnessed the 'whisper buzz' were still new to the system.

In 2016-17 (GEN3), the second year students had the advantage of being the first generation who could rely on the full cycle of the experience. GEN3 students got a full flavour of the critical incident narrative from the GEN2 students. They now appreciated the learning experience that GBP provided and were able to concentrate on the benefits that the group work offered as well as the individual gains from the Peer Review, which included detailed analysis of actions, feeling and results.

In 2017-18 (GEN4), students were well equipped to perform and bypass of all the group formation stages (Tuckman 1965). The work they undertook focused on quality and professional behaviour, where each of members played an important role in helping to educate and improve peers. This was a mutual symbiosis seen as privilege rather than a burden (Romanova 2018). Some of the quotes

provided by the peer's students formed part of Cover Letters and CV profiles (Culkin and Mallick 2011). Figure 1 demonstrates that in GEN4, the provision of fully reflective reviews of the peers dominated for the first time in four years. This has proven to provide the most gain to others in the group and to the cohort overall. It should be noted that the marks gained for submitting peer-review are fixed and no extras are given for the quality of reflection. Table 4 provides examples of Peer Reviews, with Low, Medium and Full qualitative evaluations.

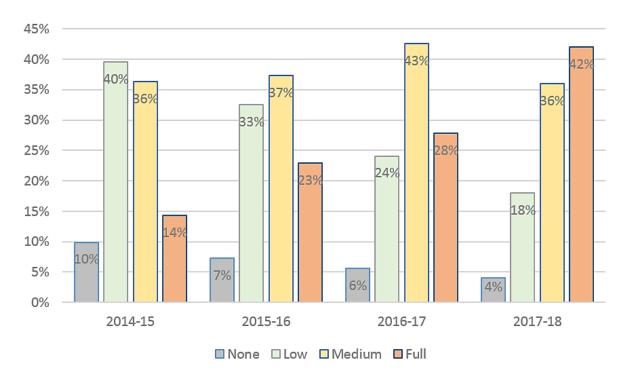


Figure 1. Peer Review quality by year groups

Table 4. Peer Review qualitative evaluation examples

Peer Review	Example	Comments Provided by the Peers
Qualitative		(names and gender indications replaced with X)
Evaluation		
Low	1	Wanted to do all of the work Xself.
	2	X worked hard on any handed work and cooperated extremely well with all members.
	3	Very quiet and did not put forward any ideas or contribute to the work much.
Medium	4	X was a great leader and is good at giving team the morale to do the work. However X could sometimes be lazy and do the work extremely last minute with only contributing just about a substantial amount of work. Due to X relaxed personality it was a pleasure to talk to X.
	5	X was really motivated at the first part of this project but when it came to producing any form of work X lacked the drive. X lacked control and delegation and relied heavily on other to produce any work, X was more hands on when it came to the fun aspects of this project, in which X proved to have a natural flair in front of the camera.
	6	Was a pleasure to work with this member as X was effective in the workflow of the group and was a supportive member, which was very good, only weakness is that X can get stressed over minor issues and time management was poor.
Full	7	X has worked well and was very easy to get along with. X job in the company was to analyse all the research that had been done by other company members and X carried it out well. Although work X produced had many spelling and grammatical errors, X understood what was being asked and produced relevant work. X was very active in asking about the work that was supposed to be done and how to go about doing it. I found this to

	be a great quality as X was always ready to help when needed. X was only given a small section of the report as X didn't know how to go about doing any of the other sections. X tries best in whatever is given, which makes X a good team player.
8	Although X joined the second year from overseas and knew nothing about project requirements X was a hardworking and enthusiastic member of the team who kept us all informed on project news and changes. X was not shy in asking for support when it was needed. X kept the channels of communication going for all the project team. Despite the difficulty of understanding things sometimes, X made Xself and the team proud in presenting and writing the report in a professional manner. For future group and project work X needs to learn effective research methods.
9	As a CEO X was meant to lead the team, allocate tasks to company members, guide us and make crucial decisions. Instead, majorly X did not turn up for the company meetings, meeting with the client and project presentation and let the other members to make the decisions. X did not contribute in the creation of the presentation, nor dress appropriately because this project "wasn't that serious." When X rarely attended meetings it was to charge the phone, cause arguments and saying "I'm the CEO, you should do all the work!" X was asked to write at least the conclusions for the report but due to poor work this had to be rewritten by the rest of the team. It was a highly unpleasant experience to work with this individual, due to lack of interpersonal skills, professionalism and engagement!

Conclusions

Learning through critical incident or exposure to minor failures of predecessor groups seems to help alleviate distress with the peer review process and group work and educated cohorts to extract the personal gains, and to improve learner voice without undermining others, on the contrary the process would help peers thrive. It took four consecutive years to build a 'story wisdom' bank with the students until the point where the process helped manage the stress and the process of peer reviewing and enabling students to engage in the Peer Review by providing in-depth constructive criticism, and taking a well-weighted holistic approach.

References

- Bledow, R., Carette, B., Kühnel, J. and Bister D. (2017), Learning From Others' Failures: The Effectiveness of Failure Stories for Managerial Learning, Academy of Management Learning & EducationVol. 16, No. 1, 39-53.
- Collins, J. (2001) Good to Great. Random House.
- Culkin, N. and S. Mallick (2011). "Producing work-ready graduates." International Journal of Market Research 53(3): 347-368.
- Hines, P., Found, P., Griffiths, G. and Harrison R. (2008), Staying Lean: Thriving not just surviving. Lean Enterprise Research Centre, Cardiff University.
- Kapur, M. (2008), Productive failure, Cognition and Instruction, Vol. 26, No. 3 (Jul. Sep., 2008), pp. 379-425.
- Kapur, M. (2016). Examining productive failure, productive success, unproductive failure, and unproductive success in learning. Educational Psychologist, 51(2), 289-299.
- Kidder L. D. and Bowes-Sperry L. (2012), 'Examining the Influence of Team Project Design Decisions on Student Perceptions and Evaluations of Instructors', Academy of Management Learning & Education, 2012, Vol. 11, No. 1, 69–81.
- Kofinas, A.K, Romanova, A., Tsay, C. and Ahmed, S. (2018) 'Coping Cycle and its importance when designing an Assessment: Reflections on the Learning Process' Chartered ABS: Learning, Teaching & Student Experience conference (LTSE, 24-25 April, Glasgow, UK).
- Land, R. (2018), 'Learning, risk and difficulty: teaching in unprecedented times', Key Note Presentation, CABS, Learning, Teaching & Student Experience 2018, Glasgow. [Accessible online at] https://www.slideshare.net/secret/bWXH72U8RTedHN

- Meyer, J. H. F. and Land, R. (2003) 'Threshold Concepts and Troublesome Knowledge 1 Linkages to Ways of Thinking and Practising' in Improving Student Learning Ten Years On. C.Rust (Ed), OCSLD, Oxford.
- Nathan, N. (2001), Pastoral Leadership: A Guide to Improving Your Management Skills, Routledge Falmer.
- Romanova, A. (2017) 'Hands on delivery of Group Business Project', SHIFT Annual Conference of Learning, Teaching and Assessment, Greenwich, London, UK (6 Jan 2017). [Accessible online at] https://showtime.gre.ac.uk/index.php/edu/shift2017/paper/viewPaper/1082
- Romanova, A. (2018) 'Personal Belbin types and MBTI preferences combination in group work assuring success', SHIFT Annual Conference of Learning, Teaching and Assessment, Greenwich, London, UK (5 Jan 2018). [Accessible online at] https://showtime.gre.ac.uk/index.php/edu/shift2018/paper/viewPaper/1204
- Sitkin, S. B. (1996). Learning through failure: The strategy of small losses.
- Thomas A. O'Neill, Genevieve C. Hoffart, Matthew M. J. W. McLarnon, Hayden J. Woodley, Marjan Eggermont, William Rosehart, and Robert Brennan, (2017), 'Constructive Controversy and Reflexivity Training Promotes Effective Conflict Profiles and Team Functioning in Student Learning Teams', Academy of Management Learning & EducationVol. 16, No. 2, 257-276.
- Tuckman, B. W. (1965), 'Developmental Sequence in Small Groups', Psychological Bulletin 63. Whitton, N. (2016), 'Some thoughts on failure and learning', Play Think Learn blog. [Accessible online at] http://playthinklearn.net/some-thoughts-on-failure-and-learning/
- Yorke, M. (2006). Student engagement: Deep, surface or strategic. Keynote address to the 9th Pacific Rim Conference on the First Year in Higher Education, Griffith University, Australia.