

Peer Assessment in Online Learning: Perspectives of Teacher and Students in an Online Graduate Course

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ABSTRACT

Peer assessment has been recognized as promoting the ideals of open education as it allows the active engagement of students in the whole learning process. This study was aimed at understanding the perspectives of both teacher and students on the use of peer assessment in an online environment. A review of the assessment practices of teachers in an online graduate program was done to identify which course was using peer assessment as an assessment method. Narratives of teacher and students on their experiences in the use of peer assessment in their particular course were collected through interview and email, respectively. The teacher views peer assessment as participation in the creation of knowledge rather than as a passing responsibility and involves preparing or equipping students to be good evaluators. Meanwhile, the students view peer assessment as participation in the teaching and learning process and providing space for creation of cultural sensitivity among their peers.

Keywords: *peer assessment, online education, narrative analysis*

INTRODUCTION

In an online learning environment, the separation of teachers and students leads to different ways of assessing learning. When students are involved, it takes the form of self-assessment, peer assessment, or collaborative assessment. Willey & Gardner (2009) observed that the use of self-assessment and peer assessment in conjunction with collaborative peer learning activities increased the benefits to students and improved engagement. These activities engage students to make judgement through standards and criteria (Falchikov & Goldfinch, 2000). Studies have found that peer assessment is vital to effective learning (Dickinson, 1988), promotes learning (Falchikov, 1986) and is grounded in the philosophies of active learning (Piaget, 1971).

Perspective defines the use or non-use of a teaching-learning innovation such as peer assessment in online learning. This qualitative study aims to understand the use of peer assessment in an online learning environment through the eyes of both teacher and students at the graduate level. Understanding their perspectives can guide peer assessment design in online learning.

Literature Review

Both teachers and students are able to provide opportunities and challenges for students to learn (Davis, Kumtep & Aydeniz, 2007). Innovative assessment practices, which include peer assessment, have been known to be effective in helping students evaluate their own progress and develop critical thinking skills, communication and cooperation. There are different forms and categorizations of peer assessment. Kane & Lawler (1978) identified three types of peer assessment: (1) *Peer ranking*, where members rank other members from best to worst; (2) *peer nomination*, where each member of the group nominates who they think is best from particular characteristics, dimensions or performance; and (3) *peer rating*, where members rate other members on a given set of performance or personal characteristics, using any kind of rating scale.

Bostock (as cited in Liu, 2007, p.16) classified peer assessment into two larger categories. One type asks students to assess the learning process and product of their peers. This type of assessment encourages students to learn from each other, increases students' evaluation skills, decreases instructors' workload, and gives students a wider range of providing feedback. The other is teamwork assessment, in which students are asked to assess how much and in what way their teammates contribute to a team project. In the teamwork assessment method, free-rider problems are avoided, team projects are fairer, and communication, participation, and group skills can also be improved (Crockett & Peter, 2002).

A number of studies have been conducted on the use of peer assessment in an online environment. In the study of Arend (2006) on the relationship between course assessment practices and student learning strategies in online courses, papers, assignments, and discussions were found to encourage students to use critical thinking skills as they are forced to formulate their own ideas about the course concepts. Another study by Liu & Lee (2013) found that students used feedback provided by their classmates to generate new ideas or research directions. Peer assessment has been found to be beneficial to learners both as assessor and assessee, leading to positive impact on students' performance in examinations (Zou, Schunn, Wang & Zhang, 2018).

In Gouli, Gogoulou, & Grigoriadou's study on e-learning (2008), students showed positive attitude towards peer assessment as their involvement in peer assessment activities made them work at a deeper level of understanding and enabled them to benefit both from experience and comments received. Meanwhile, Lee (2008) found three factors associated with perceptions, attitudes, and feelings in the conduct of online peer and self-assessment: 1) learning context consisting of course elements, online assessment system, types of assessment feedback, and graduate school environment; 2) individual differences (stringency-lenency in ratings, objectivity of ratings, previous assessment experience, purpose of the assessment, and degree of self-confidence in assessing); and 3) online learning community (group composition, engagement of group members and sense of community).

Sridharan, Muttakin & Mihret (2018) identified the three critical dimensions in effective peer assessment, which are design, tool and content. Peer assessment design ensures

validity of the mechanisms used to enhance the authenticity and reliability of peer assessment including type of assessment, choice of assessor, method used to calculate marks and logistics of conducting the peer assessment. Peer assessment tool refers to selecting effective systems that enable students to mark their peers. Peer assessment content refers to the choice of appropriate and relevant content or questions related to the given assignment. It was found in their study that a well-designed and executed peer assessment could reduce free riding, minimize conflict and improve communication and the quality of team member contribution to teamwork.

The study was aimed at understanding the perspectives of both teacher and students on peer assessment in the context of an online graduate program to be able to contribute to the building of knowledge on assessment in an online setting and in the context of graduate education.

Research Methodology

Using the qualitative methodology, a review of the assessment practices in thirty courses in an online graduate program was done to identify which courses were using peer assessment as an assessment method. The review yields the practices highlighted in Figure 1. Of the 30 courses offered during two academic years, only one course, Art in the ASEAN Region, made use of peer assessment as shown in the Table 1.

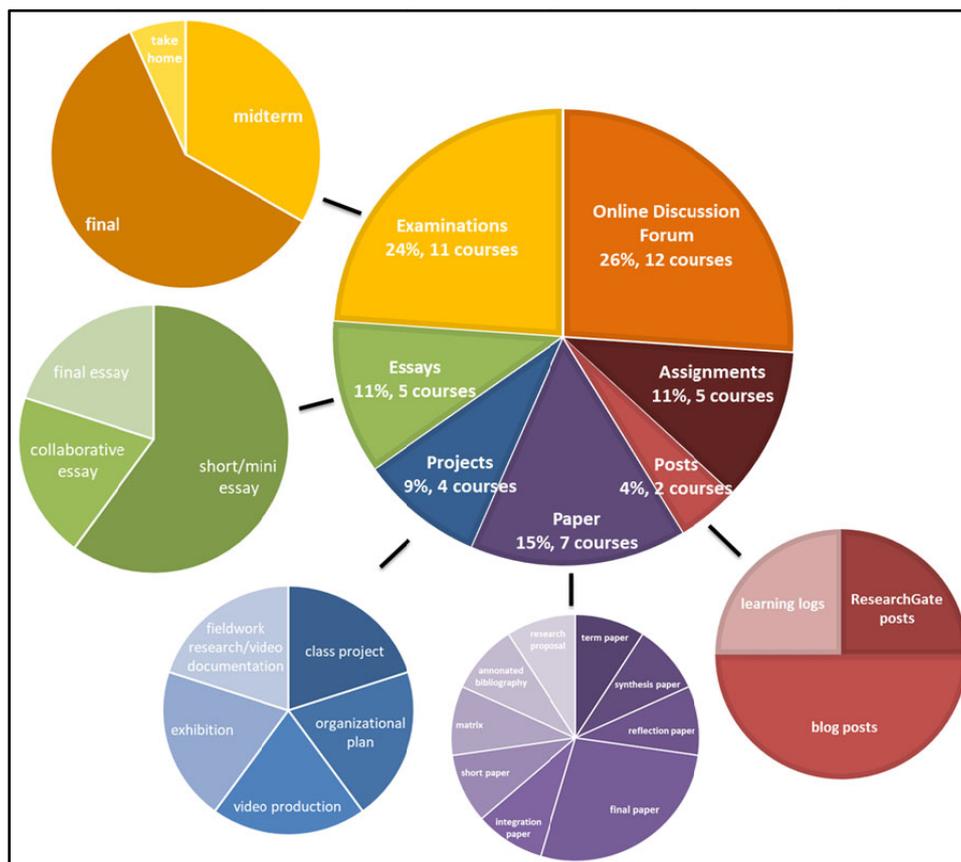


Figure 1. Distribution of assessment practices in the 30 courses under the ASEAN Studies Graduate Program

Table 1
Number of Courses that Employ Peer Assessment

Peer Assessment	Number of Courses
With	1
Without	29

The course that employed peer assessment required students to do the following:

- read the resources, search for more materials and join a forum in which they would post links of two new articles or video materials that can help add to the discourse on the course topic;
- submit a synthesis paper on the required readings. A synthesis paper is the analysis and/or critique of the materials read and viewed focusing on the highlights and presenting the gist of these materials. It also discusses the significance of the materials in understanding the subject matters presented;
- add to the list of art forms with a description of why the art form should be part of the list;
- read and view materials and recommend to “our community of ASEAN scholars what to you are the two most useful articles on each country. So, these are twenty articles that you consider as "must read" and why. Post the brief annotations and recommendations in the forum.”;
- submit comprehensive annotations and syntheses on the same 20 resource materials from the given list;
- submit the 15-minutes-or-less Art in ASEAN Video Documentary Production;
- join the Art in ASEAN Forum and Exhibition Space and submit the video production URL; and
- view all video documentaries and submit top three choices out of the productions. Use 200 words to describe each video production. Write the 1) title, 2) name of the video maker and 3) reason for choosing each video production.

The teacher of the course was interviewed and the students in the two academic years were requested to send through email narratives of their experiences in using peer assessment.

Findings and Discussion

The Teacher’s Perspective

The teacher’s perspective on peer assessment is contextualized within the teaching and learning process. From the teacher’s point of view, peer assessment is part of the process of teaching and learning, does not constitute as passing the assessment responsibility to the student and requires preparing the students to be good evaluators.

Part of the Process of Teaching and Learning

For the teacher, it is part of the process of teaching and learning as stated in the following narrative:

Assessment is something that I designed together with my course.

Assessment is not giving a standard outside of the process; it has to come together. If you notice, that is why the design of my courses, at first, aims to equip my students to be critics, assessors, pushing them to always be reflexive, always make decisions, synthesize and analyze as part of the course because I am pushing them to be creators and co-creators of text. With that in mind, assessment is not something that is alien: [it is not simply] coming in, looking into a course. That is why you notice my design has always included a reflection or synthesis paper because I want to engage the students to already be practicing.

I always make sure that my courses are research courses. [They are] creation of academic texts in the discipline. That is why, to me, even if the medium is different, even in multimedia, I use it as research. If they read literature about something, I always ask them to critique what they have read. I don't consider it as text that should only be swallowed by students, even if it is written by somebody who is known. I always ask, what do you think about it? Do you believe in what he/she is saying? So there are no tools in any of the texts. If they read something, I always ask them, do you think it's good? Do you think it's useful?

So we get used to making sure that they are also looking at the materials in this virtual world. That, to me, is very important. Does what happen in the real classroom really concentrate in the creation of new knowledge? Assessment to me is really a part of the course.

Not Passing the Assessment Responsibility to the Student

Peer assessment is not the passing of responsibility on assessment, but it is used because the teacher believes in the capacity of the students to assess their own learning as the teacher articulated in the following excerpt:

Assessment to me is a flow, and it is part of the process to equip everyone and for them to know that their views are as good as mine. [It is important] to give them the confidence.

I promise that their thoughts are as good as mine so the peer review can therefore make the course participants take ownership of the ideas that come out of the course.

It should also be practiced in engaging in dialogue, decision-making and the participants' own construction of meaning. To me, these are important aspects of peer evaluation. They should not be afraid; they should welcome it because it is theirs. It is their idea. They can even construct design.

Preparing Students to be Good Evaluators

Peer assessment is a way of giving students the confidence to assess their peers that involves developing and designing activities that can prepare them to conduct peer assessment, as shared by the teacher in the following account:

What do I do? First, I equip my students with the knowledge to assess and I do this by getting them to come up with critical analysis through their

papers. If it involves content, we also include the synthesis paper, which tries to equip them with tools be assessors.

At the end of my course, I always ask them to become the judges and evaluators. So at the start of the course, I will have to make sure to turn them into people who trust their own judgement, who are open into looking at innovation and creativity without shielding them or trying to take them away from the process, so they are able to see the brilliant moments and ideas in the teaching and learning process. It is a kind of dynamism.

The assessment itself is designed into the course. There are no disadvantages, just advantages. I do not feel that there should be. We should encourage students to be more inclusive but deserving. They should know how to practice and respect other people.

The Students' Perspective

The students' perspective on peer assessment is oriented towards the relational context of learning. From the students' point of view, involving them in the evaluation process makes them feel that their opinions matter, and in doing peer assessment, there is merit in observing personal and cultural sensitivity.

Makes You Feel that Your Opinions Matter

The traditional way of conducting assessment places the authority and centrality of the teacher in the whole learning process. In peer assessment, a central place is given to students, creating a sense that they matter in the whole process:

If I remember correctly, the peer assessment was done based on the video documentary that we submitted as a final assignment for the subject. Each of us were asked to pick the top three video documentaries made by our classmates and then provide feedback on why we selected their work.

Initially I felt uneasy about it since it came across as something like a competition as you would definitely want to be selected or be one of the top three picked by your classmates. Perhaps it was only me who initially thought of it that way, others may have perceived it positively throughout. During the selection process, it was difficult because not all of my classmates submitted their videos ahead of the deadline. Some did it on the due date, so that affected how quickly you can pick since you can only select from what was available in the forum. Though I was expecting the results of the top three overall, based on the number of votes or selection by the class, would be revealed, that was not the case. So, whatever the results were, only our teacher knew.

*Overall, the experience was good though as mentioned, initially it was stressful because you definitely wanted to be picked by your classmates. In the end though, **what is important is that you participated, and it makes you feel like your opinion matters and that the teacher gave you consideration** in providing feedback to what your classmates do in class.*

Merit in Observing Personal and Cultural Sensitivity

When students conduct peer assessment, they are conscious about the community or their peers, resulting in personal and cultural sensitivity as expressed in the following account:

*Peer evaluation is definitely a good platform because it gives you the chance to **critique** your classmates' work based on the criteria you have made and using the knowledge you've gained from the class forum. Although you somehow feel like a fault-finder here, **you have to observe personal and cultural sensitivity so as not to offend the author of the work. You also find the merits of it.***

*The exercise gives you a means to **understand other voices or interpretations** of the readings given to the class (if the peer evaluation is to come up with a synthesis) and to appreciate narratives and themes presented by the narratives.*

If the peer evaluation involves videos or documentaries, since it is a small, intimate class, you are required to view or watch all videos or documentaries. In my case, I would watch the videos at least twice to understand the narrative and to assess the audio-visual aspects of it. From there, I jot down notes on the merits and parts that need to be improved. After, I write my critique and upload it to the bin. Once it is there, feedback or responses from the author and other students also come in. And then, they react and everyone has the liberty to react again and make things clearer.

Conclusion

Both teachers and students see the value of peer assessment. For the teacher, peer assessment is part of the process of teaching and learning and does not constitute passing the responsibility to the students. For the students, peer assessment makes them feel that what they say matters and there is merit in observing personal and cultural sensitivity. These results are in accordance with the literature, which states that peer assessment has been known to be effective in helping students evaluate their own progress and develop their critical thinking skills, communication and cooperation. There is one result that is unique in the study, which is the preparation of the students to be good evaluators as mentioned by the teacher. This should be part of the instructional design of online courses that plan to make use of peer assessment.

References

- Arend, B. D. (2006). *Course assessment practices and student learning strategies in online college courses* (Order No. 3218967). Retrieved from ProQuest Dissertations & Theses Global. (305325411)
<https://search.proquest.com/docview/305325411?accountid=47253>
- Crockett, G., & Peter, V. (2002, February). Peer assessment and team work as a professional skill in a second year economics unit. [Teaching and Learning Forum]. Message posted to <http://clt.curtin.edu.au/events/conferences/tlf/tlf2002/crockett.html>

- Davis, N. T., Kumtepe, E. G., & Aydeniz, M. (2007). Fostering continuous improvement and learning through peer assessment: Part of an integral model of assessment. *Journal Educational Assessment*, 12(2), 113-135.
- Dickinson, L. (1988). Collaborative assessment: an interim account. In H. Holec (Ed.), *Autonomy and self-directed learning: present fields of application* (pp. 121–128). Strasbourg, France: Council of Europe.
- Falchikov, N. (1986). Product comparisons and process benefits of collaborative peer group and self-assessments. *Assessment and Evaluation in Higher Education*, 11(2), 146-166.
- Falchikov, N., & Goldfinch, J. (2000). Student peer assessment in higher education: A meta-analysis comparing peer and teacher marks. *Review of Educational Research*, 70, 287-322.
- Gouli, E., Gogoulou, A., & Grigoriadou, M. (2008). Supporting self-, peer-, and collaborative-assessment in e-learning: the case of the Peer and Collaborative ASSESSMENT Environment (PECASSE). *Journal of Interactive Learning Research*, 19(4), 615.
- Kane, J. S., & Lawler, E. E. (1978). Methods of peer assessment. *Psychological bulletin*, 85(3), 555.
- Lee, H. (2008). *Students' perceptions of peer and self-assessment in a higher education online collaborative learning environment* (Order No. 3320978). Retrieved from ProQuest Central; ProQuest Dissertations & Theses Global. (304475365) <http://search.proquest.com/docview/304475365?accountid=47253>
- Liu, E. Z., & Lee, C.-Y. (2013). Using peer feedback to improve learning via online peer assessment. *Turkish Online Journal of Educational Technology*, 12(1), 187-199
- Liu, S. (2007). *Design and use of assessment tasks in online graduate courses: Instructors' practices, reflections, and perceptions* (Order No. 3330791). Retrieved from ProQuest Central; ProQuest Dissertations & Theses Global. (304853289) <http://search.proquest.com/docview/304853289?accountid=47253>
- Piaget, J. (1971). The theory of stages in cognitive development. *Innovations in Education and Teaching International*, 43(1), 69-82.
- Sridharan, B., Muttakin, M. B., & Mihret, D. G. (2018). Students' perceptions of peer assessment effectiveness: an explorative study. *Accounting Education*, 27(3), 259-285.
- Willey, K., & Gardner, A. (2009). Improving self- and peer assessment processes with technology. *Campus – Wide Information Systems*, 26(5), 379-399. doi:<http://dx.doi.org/10.1108/10650740911004804>
- Zou, Y., Schunn, C. D., Wang, Y., & Zhang, F. (2018). Student attitudes that predict participation in peer assessment. *Assessment & Evaluation in Higher Education*, 43(5), 800-811.