Perceptions and Use of Exemplars and Peer Feedback in Student Revisions

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Abstract

Exemplars and peer feedback are generally accepted as instructional tools that have a positive impact on student evaluative judgment, but little is known about students' perceptions of those tools in an online context and how they are used in assessment tasks. The present study examined perceptions of 26 undergraduate students on the use of exemplars and peer feedback to support learning. The study also highlighted the types of revisions students made following the viewing of exemplars and peer feedback comments. Qualitative data were collected through self-evaluation surveys, peer feedback comments, and exemplars. Ninety-six percent of students expressed positive sentiments on the utility of the resources indicating that it fosters community building and prompts self-reflection and evaluation. The feedback comment types varied from motivational, content-skill related or future learning. Though only 35% (n=9 students) reported making revisions to their work, revisions centred on providing elaborations or new content, correcting errors and making structural changes. Theoretical and practical assessment design implications of the findings are discussed in light of the findings.

Keywords: peer feedback, exemplars, feedback perceptions, feedback implementation, text revision

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Introduction

Feedback can be defined as "all post-response information that is provided to a learner to inform the learning on his or her actual state of learning or performance" (Narciss, 2008, p. 127). In fact, the aim of feedback is to bridge the gap that exists between the actual level of performance and the desired learning goal. Furthermore, feedback is said to occur only when this gap is bridged and has an impact on learning (Wiliam, 2011). Boud (2000) succinctly notes:

> The only way to tell if learning results from feedback is for students to make some kind of response to complete the feedback loop (Sadler, 2005). This is one of the most often forgotten aspects of formative assessment. Unless students are able to use the feedback to produce improved work, through for example, re-doing the same assignment, neither they nor those giving the feedback will know that it has been effective. (p. 158)

There is strong consensus in the research literature that feedback is the single most powerful influence on student achievement (Hattie & Timperley, 2007). In fact, feedback contributes to a quality learning experience as it can improve motivation (Narciss, 2008), promote self-efficacy (Bobo, 2010), self-regulation (Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006), and learning process and outcomes (Shute & Zapata-Rivera, 2008).

Peer feedback, also termed peer review or peer assessment, can be considered as the educational activity in which students review and comment on the quality of their peer's work usually as part of a formative activity (Topping, 1998). Peer feedback is increasingly becoming commonplace in higher education institutions where teaching staff faces challenges of providing timely feedback to students and instructors are seeking new methods to promote critical thinking, reflection, and collaborative learning (Topping, 1998; van der Pol et al., 2008).

While peer feedback is not a new phenomenon in academia, the medium through which peer feedback occurs has changed in recent times. In the online learning setting, most feedback is asynchronous and written (van Popta et al., 2017). Feedback in this setting is even more critical than in a traditional face-to-face class (Palloff & Pratt, 2007) as the reciprocal learning process can promote social interaction and self-appraisal – two skills that are of utmost importance in the online context (van Popta et al., 2017). Though much has been researched on peer feedback and student perspectives on peer feedback, little research has been conducted on the nature of feedback students receive from their peers (Mulder et al., 2014); their perceptions of the value of feedback in an online setting (van Popta et al., 2017); and how they use that information to revise their work (Wu & Schunn, 2020).

Literature Review

Students' integration of feedback into their final drafts is dependent on several factors: nature of feedback (Patchan et al., 2016), student attitude to feedback (Panadero, 2016), and psychological barriers (Winstone et al., 2017). However, the types or nature of peer feedback which impact final revisions have been largely unresearched (Wu & Schunn, 2020).

Feedback Types and Implementation Uptake

For this study, Brown and Glover's (2006) feedback classification system will be utilized. The scheme is organized into five categories: content, skills, further learning, motivational and de-motivational comments. The categories content and skill were joined so that there were four categories in total:

- Content/Skill- degree of understanding and knowledge of the topic area
- Further Learning – comments which can be fed forward or applied to other contexts
- Motivational – praise and encouragement
- De-motivational – harsh language, negative judgment

Another aspect of the classification scheme addresses depth:

- Depth Level 1 – acknowledgement of a gap in knowledge
- Depth Level 2 – corrective feedback – feedback which equips the student with the tools needed to close the gap
- Depth Level 3 – explanation owing to the inappropriateness of the response and or why correction is needed

For the most part, the literature highlights surface-level feedback as the most common type of feedback provided to students (Allen & Mills, 2016). The feedback would be either vague, lacking explanation or centering on grammar and mechanics (Dressler et al., 2019; Ekşi, 2012). Wu and Schunn (2020) investigated peer feedback types, feedback perceptions, and feedback implementation and found that high school students who were presented with 'general suggestions' were less likely to adopt them in the revised assignments as they required more cognitive effort to interpret and apply the vague comments into specific solutions.

Moreover, most feedback would be commendatory (Patchan et al., 2016) or consist of mitigating praise which attempted to soften the blow of critical feedback (Wu & Schunn, 2020). Meaningful feedback which had greater depth, explanation of errors and ideas for improvement, though it led to increased performance, was not as widespread (Patchan et al., 2016). In many cases, the lack of meaningful feedback was attributed to students' low confidence levels in their domain-specific knowledge. Similarly, the feedback receivers also doubted their peers' ability to provide impactful feedback (Wu & Schunn, 2020). Therefore, students' perceptions of the adequacy and quality of the feedback impacted their inclination to use it (Strijbos et al., 2010).

Students' Perception of Peer Feedback

Most empirical studies on students' attitudes to peer feedback centre on the general experience of receiving or giving peer feedback (Mostert & Snowball, 2013). The research is mixed as it relates to students' overall perception of peer feedback. On the one hand, some studies show that peer feedback has a positive effect to the extent that they deem the exercise as meaningful and in some cases are motivated to improve on subsequent learning episodes (van der Pol et al., 2008). In one study (Cho & MacArthur, 2010), students made improvements to the quality of their draft assignments when they received feedback from multiple peers as opposed to from a single peer or a single instructor. Additionally, students place greater value on peer feedback over feedback received from the instructor as feedback received from peers is more understandable and helpful as it is written in a language that is more familiar to students (Topping, 1998).

Huisman, Saab, van Driel and van den Broek (2018) conducted a study investigating the relationship between students' feedback perception and the nature of peer feedback received and academic performance. In a multidisciplinary course, students were required to write and submit a draft essay. Following verbal instructions on how to provide constructive feedback, students provided anonymous feedback to their peers after which students had the opportunity to revise their drafts and submit a final copy for grading. Students' perceptions of peer feedback were measured on a post-test that is an adaptation of the feedback questionnaire from Strijbos et al. (2010). The findings of the study revealed that explanatory comments in particular, were positively related ($\beta = 0.69$, $p = 0.004$, $\eta^2_p = 0.45$) to student perceptions of the adequacy of feedback and willingness to improve.

Despite the reported positive perceptions students have of peer feedback, the negative perceptions far outweigh the positive (Kaufman & Schunn, 2011). Nicol, Thomson and Breslin (2014) attribute this finding to the fact that most peer reviews include a marking component whereby students grade the performance of their peers. They contend that this added feature provokes feelings of discomfort therefore, students lack confidence in their peers to provide a meaningful, accurate assessment of their learning. However, there is an apparent link between students' perceptions of the quality of the feedback and subsequent performance.

Exemplars

Students' academic performance is also impacted by the combined use of exemplars with peer feedback (Carless & Winstone, 2020; To, Panadero, & Carless, 2021). Carless and Chan (2017, p. 1) define exemplars as "carefully chosen samples of student work which are used to illustrate dimensions of quality and clarify assessment expectations." These assessment pieces are typically model samples; however, there are some cases in which poor-quality samples are utilized so that students can have an appreciation for and an understanding of all achievement standards. Exemplars are often used as a complement to other tools which elucidate assessment criteria. They are used in tandem with rubrics, self or peer assessment and dialogic feedback (To et al., 2021).

The clarification of assessment criteria is said to help reduce the cognitive load imposed on students. In providing model work, learners can devote more cognitive capacity in studying and understanding the material presented in the example instead of having to resort to help-seeking to find answers. Exemplars can therefore aid in knowledge construction and by extension better performance as students utilize self-explanation, self-evaluation, and self-reaction to compare examples against their own work and make improvements to their work as needed (Chamberland et al., 2014; Delen et al., 2014).

Exemplars have been used for a wide variety of tasks ranging from highly structured to less structured tasks. However, most of the research has centred on clinical and other science-based fields (Chamberland et al., 2014; Renkl, 2014). Very few studies have examined exemplars in an online learning modality in social sciences or education fields. Moreover, there is a gap in the research on students' perceptions of how exemplars impact student cognitive processes and learning outcomes (Wen & Tsai, 2006).

Purpose of the Study

The purpose of this study is threefold. First, this study seeks to discover the kinds of feedback students receive from their peers on individual projects. Second, it seeks to determine students' perceptions on the value of peer feedback and exemplars. Third, it explores the nature of revisions made following peer feedback. This study builds upon our understanding of peer formative feedback by examining the kinds of feedback received, and discovering how they are used in their final drafts. It is anticipated that this research would assist researchers and instructional designers in exploring the nature of feedback provided, and its usefulness in promoting learning transfer as evidenced by revisions to learning products. The following research questions, therefore, guide this study:

1. What kinds of feedback are reported by peers?
2. What are students' perceptions of the value of exemplars and peer feedback?
3. What types of revisions do students make in response to exemplars and peer feedback?

Methodology

Research Design

This research reports an exploratory study of students' perceptions of the value of exemplars and peer review in an online setting. Given that there are few studies that have explored this research problem in an online learning context, the exploratory approach would allow the researchers to gain insight and increase knowledge of the phenomenon (Shields & Rangarajan, 2013).

Instructional Context

The course utilised for this study was an undergraduate 300-level course. The premise of the course was to promote critical thinking on the impact technology has on our everyday lives. The aim was for students to learn to differentiate the positive, negative, and ethical impacts of various technologies such as nuclear power, war, human needs such as water and food, and the application of technologies in medical settings. Students had access to various forms of learning materials in order to help shape and ground their learning. Videos, case studies, book chapters, news sources, and a discussion board were utilized during the period of the course.

Participants

This study was conducted in a public, southeastern university in the United States. The participants comprised online undergraduate students enrolled in a STEM related course titled *Technology and Society*. This is a multi-disciplinary course that focuses on the nature and impact of technology on society. Convenience sampling method was used to select participants. In total, 26 students (n=26) participated in this study, 19 females and 7 males. Informed consent and permission from the Internal Review Board (IRB) was obtained prior to conducting research. The criteria for selection included:

1. Students who completed the future wheel assignment (paper and presentation)
2. Students who reviewed and commented on peers' work.

Students who were absent or failed to complete the future wheel assignment as well as students who were unwilling to participate were excluded from the study.

Procedure

Before the study was conducted, IRB approval was obtained from the university from which the sample population was drawn. It should be noted that the researcher did not perceive any risks from student involvement in this study. Participation was voluntary and students had the option to withdraw at any time without consequences of any kind.

Materials collected from the participants were de-identified by the lecturer and encrypted on a local computer for safe keeping.

In the fourth week of the semester, students completed an assignment called the "Future Wheel." Students were asked to create a graphic organizer based on a technology of their choice that lists current and future uses of that technology. They then had to provide positive and negative impacts that come from utilising that technology for that particular purpose. The assignment was posted on the class discussion board. Following submission, the lecturer posted a class announcement informing students that the deadline for the assignment would be extended to the following week.

Additionally, students were asked to provide feedback on one of their peer's assignments during the assignment extension time in the electronic discussion forum on Blackboard.

After receiving the peer formative feedback on their initial drafts, students had an additional week to revise their own work (if they deemed necessary). The revised drafts were then submitted to the assigned dropbox. To guide the peer feedback, the instructor designed two questions so that student comments could be focused. They were as follows:

1. What suggestions, thoughts, or ideas can you share with your partner about their mind map?

2. Look at a few other classmates' mind maps on the discussion board. Did you see something that might help improve your partner's mind map?

Future Wheel Assignment

This study focused on an assignment which students were required to complete during the semester. The assignment was an open-ended, ill-structured assignment requiring students to select a technological product and prepare a future wheel in the form of a mind map depicting its uses. In addition to creating a future wheel, students wrote a one-page essay detailing the negative and positive impacts of the technological product. The initial draft of the future wheel assignment constituted the peer work example (exemplar) that was viewed by all students.

Given that the exemplars were taken from the sample population, the examples used as scaffolds varied according to mixed abilities of the students. That is, samples varied from low-performing, mid-performing and high-performing students. The course lecturer graded the initial draft however the grades of the initial drafts were not reported to students.

Self-evaluation Survey on Peer Exemplars

Another source of data stemmed from an open-ended self-evaluation survey that questioned students on their decision to revise or not revise their initial drafts following viewing peer exemplars and how the examples may have assisted them in reconstructing their final submission. As such, students responded to the following questions:

1. Did you make changes to your work after viewing your peer exemplar? Why or why not?
2. Do you think exemplars are a valuable tool? Why or why not?
3. Do you expect that your final draft assignment will be significantly better than your first submission? What, in your estimation, accounted for this change?

Peer Review

For the peer review activity, all students were assigned a peer to provide feedback on their work. Students logged into the learning management system, and viewed online or downloaded their assigned peer's work. After reading through their peers' initial drafts on the future wheel assignment, and evaluating it against the guiding questions provided by the instructor, students provided comments via the discussion forum relating to their thoughts, ideas and recommendations for improvement on the future wheel. Responses did not exceed 150 words. Students had one week to complete this task.

Self-Evaluation Survey

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Data Analysis

Data analysis focused on students' initial and revised future wheels, the self-evaluation survey, and peer feedback. A feedback classification scheme was used to analyse the peer feedback. Bryan and Clegg's (2006) scheme was chosen as it is widely accepted in the literature as a tool that can decipher which feedback types are most usable by students (Walker, 2009). For the purpose of this study, the categories of the scheme were merged from five to four as follows: content/skills, further learning, motivational, and de-motivational comments. The feedback comments were further analysed and coded based on the depth or the extent to which the feedback facilitated improvement. Depth level 1 represents the lowest type of feedback that identifies a problem. At the highest level, depth 3, an explanation of the problem together with a possible solution is provided. The coding scheme was adopted from Brown and Glover (2006). For example, the code 'Ce' was used to identify comments addressing errors made.

In addition to classifying and analysing feedback comments, the initial and revised future wheels of each student were compared to observe differences. The marked changes were categorised as before, and frequency counts were provided for the number of feedback items provided by the assessor as well as the number of feedback items which were revised by the recipients. This yielded a percentage score for revisions made following peer assessment.

The self-assessment surveys were analysed thematically according to Braun and Clarke's (2006) method. Initial codes were identified and then collated into themes, for example "value of exemplars", "revision rationale," and "revision types."

Results

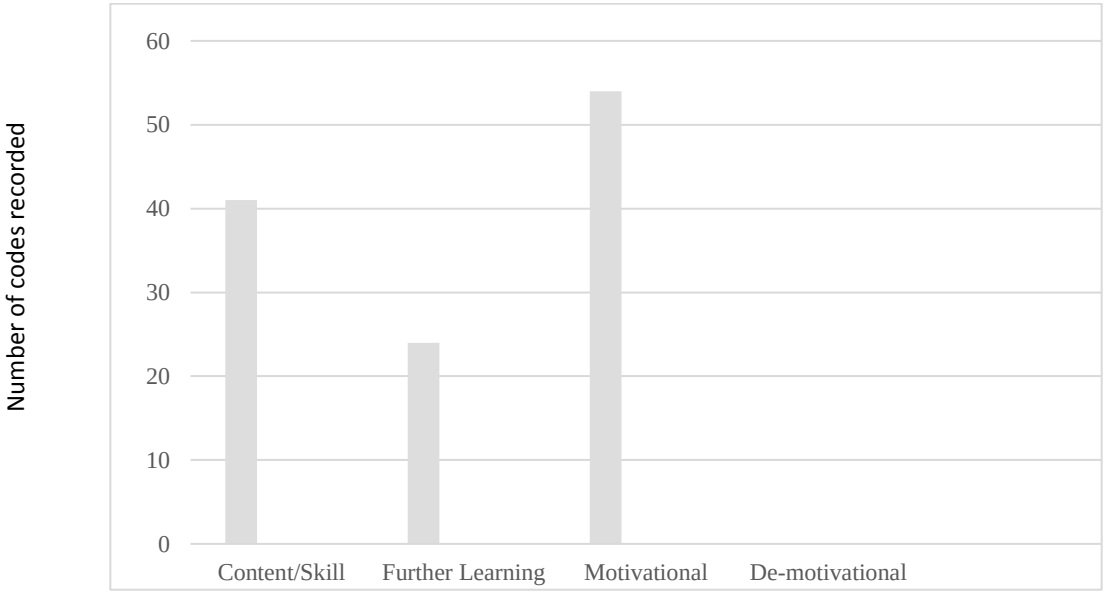
A total of 26 participants each received between 1-2 feedback postings for a total of 43 comments. Based on the coding, the 43 comments generated a total of 95 codes, an average of about 2 codes per student initial draft. The mean score for the future wheel mind map was 41.

Types of Feedback Received

Of the four feedback types, motivational comments were the most prevalent while de-motivational feedback was the least prevalent, with no students providing de-motivational comments. Each of the categories was subdivided in order to give a more detailed analysis of the feedback types within each category and these analyses are presented in Figure 1.

Figure 1

Analysis of Feedback Categories



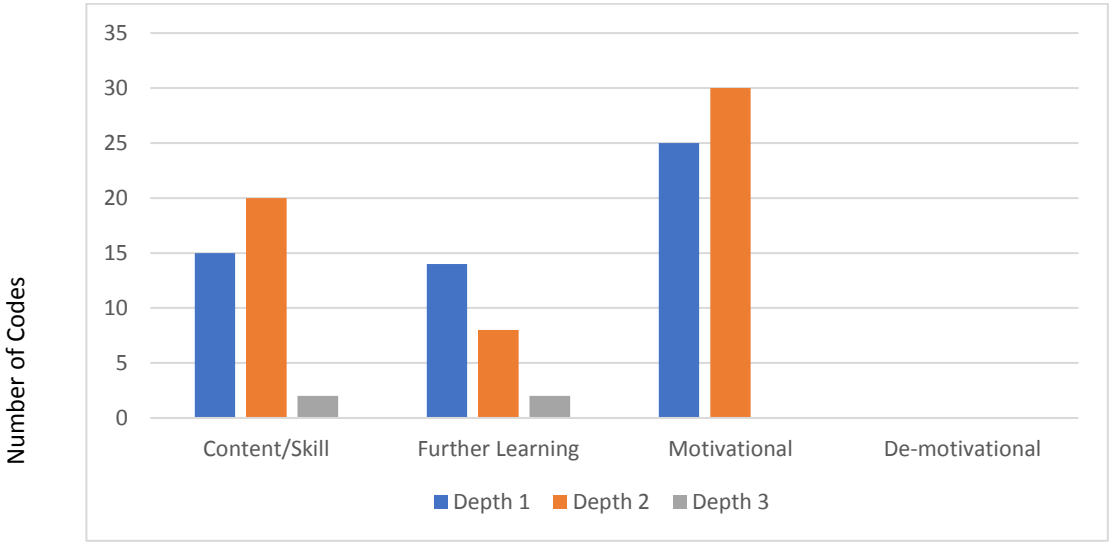
Motivational Comments

Using the framework provided by Bryan and Clegg (2006), motivational feedback was subdivided into praise for achievement and encouragement about performance. Analysis revealed that all of the motivational comments (n=55) offered praise for achievement. Many students provided basic motivational feedback such as "Good job!" (S1), "Everything looks great!" (S26) and thus, it was classified at the Depth 1 level. These level 1 comments (n=25) however were often qualified by more elaborative and in-depth comments such as:

Peer feedback S21: I like that you brought up negative aspects of how social media feeds the insecurity of acceptance.
Peer feedback 15: I think the main topic of car transportation was a great idea since I definitely see, through your slide, about the negative and positive impacts of this technology.

Bryan and Clegg (2006) posit that the degree of explanation given for the motivational comment would determine whether it is a level 2 or 3 comment. It should be noted however that there were no recorded motivational comments at level 3 of depth. Furthermore, no de-motivational comments were made.

Figure 2
Feedback According to Depth



Content/Skill Comments
Comments specific to content varied from: content on errors, omission of relevant material, inclusion of irrelevant material, English usage, and structure of content (see Table 1). An examination of the peer feedback suggests that feedback relating to the structure (n=19) of the mind map was most frequent, while comments about irrelevant material (n=3) were infrequent. This can be attributed to the nature of the assignment. The assignment required students to create a mind map reflecting the positive and negative impacts of a technological product. This mind map therefore had more visual than textual information. Thus, it is not alarming that the feedback centred on areas such as the placement of directional arrows, the colour schemes, organisation of the map and similar features:

> *Peer feedback S11:* Just having straighter lines and making sure none of the lines overlay over each other just so there is no confusion.
> *Peer feedback S12:* I think the color choice could be improved upon. For instance, it's kind of hard to actually see the "legend" you have provided because of the pastel colors chosen makes it hard to decipher and the actual layout is a little off.
> *Peer feedback S2:* … Maybe add a key like (S12) did in hers so that it will be a little more organized.

Most students structured their feedback as such that the general motivational comments preceded comments specific to the content. The following example illustrates this point.

> *Peer comments for S1:* I thought your mind map was very thoroughly thought out and presented in a very clear manner. I saw a few areas where you could elaborate further and show both positive and negative implications of each point. Under your employment section, for example, you could have a further branch off your employment tab, for increased jobs for mechanics, gas stations, and a decrease in jobs for public transportation workers. Also, for your transportation tap, another negative implication is increased congestion. Overall, your flow and clear concise manner of your map is impressive. Good job!

It is also worth noting that the depth of the comments was almost equally divided between Level 1 and 2 with Level 1 having nine comments on structure of content and Level 2, 10.

Table 1
Analysis of Types of Content Feedback

Content Type	Depth Level			
	Level 1	Level 2	Level 3	Total by Content Type
Ce[a]	0	4	0	4
Co[b]	4	9	2	15
Ci[c]	2	1	0	3
Cs[d]	9	10	0	19

[a]error
[b]omission of relevant material
[c]irrelevant material included
[d]structure

The second highest type of feedback recorded was omission of relevant material. Most of the 'Co' comments called for the students to add more information as it relates to the positive and negative aspects of the technological product. In this regard, students could give a more comprehensive picture of how the technology under examination has impacted on them personally. The following illustrates some of the comments regarding omission of relevant material:

> *Peer feedback S2:* ... But if you could elaborate each underlying point further I think the mind map would be more useful. For instance, under education add a negative connotation. Also, if you could add more positive or negative connotations for each main point other than just one example.

> *Peer example S10:* ... Some pluses that you could add would be it can be used instead of an alarm clock and it is great for picture taking and storage.

Though one of the criteria for the assignment called for suggestions for improvement on the mind map based on the student's own views and what was observed from other exemplars, seven students opted not to provide feedback on the second feedback question: *'Look at a few other classmates' mind maps on the discussion board. Did you see something that might help improve your partner's mind map?*

Moreover, only about three to five comments were recorded to reflect feedback on errors in content and the inclusion of irrelevant material. The following provides examples of this point.

> *Peer feedback S23:* Additionally, I would probably remove the "produce less fumes" note, as this is not an economical advantage or disadvantage.

> *Peer feedback S9*: Although I do not know a lot about computers but wouldn't hacking be under the internet because that's how you hack into other computers?

> *Peer feedback S16:* You have that as a negative and positive. But one might perceive that as a positive completely or a negative completely.

> *Peer feedback S24:* It could be improved by putting less information since the mind map looks so full. This could be done by removing a lot of repeating or similar ideas that are present on the mind map.

Student Perceptions on Exemplars and Peer Feedback

The self-evaluation survey sought to respond to the last two research questions. First, regarding students' perceptions of the utility of peer exemplars and peer feedback, the data showed that the

majority of the participants (96%) expressed positive sentiments regarding the value of viewing exemplars and receiving peer feedback. However, relatively few students (35%) went on to revise their initial submissions.

Students affirmed that exemplars and peer assessment offered the possibility to view your work from a "different perspective" (S1), and it offered a "second set of eyes to help proof read the work" (S8). Moreover, peer review allowed the students to engage in reflection and evaluation of their own work where they would weigh the validity of some recommendations made by their peers and improve on their own product. Exemplars and peer assessment therefore provided a benchmark upon which students could review their own work.

> Yes, I believe that peer examples are valuable…with peer suggestion, we can reconsider and take the good things [if there] are any (S8).
>
> Yes, it gave me something to compare mine to and be able to better mine (S21).
>
> ... So peer feedback can help with gauging your own progress (S19).

Furthermore, one student expressed the view that the exchange of ideas and products via peer examples and peer review provided added "learning opportunities for both givers and receivers of the feedback, making the online experience more personable, and building a sense of comradery (sic) with students" (S19).

Therefore, one student saw that the exercise was meaningful not only to the receiver of feedback but also to the giver as well. Moreover, peer exchange helped to foster community building by creating a greater social presence among students.

Apart from the learning gains that can be obtained from viewing exemplars and receiving feedback, one student noted that this exercise could also breed "copy-cats" (S12) who essentially will copy ideas from others and use them as their own.

Nature of Student Revisions

In total, nine students chose to make revisions to their assignments. All nine students can be considered as high performers as their mean score was 96.7% on the initial draft for the future wheel. Changes made included further clarification or new information added to final drafts. This accounted for 55.5% of the total changes. The changes made centred on addressing the positive and negative implications of the chosen technological product. That is, five out of nine students revised their drafts to include more implications of the product. The following outlines the nature of the changes made by two students:

> Yes, I added two branches to the "increased job opportunities…" tab, and I also added "more traffic congestion" as another negative outcome" (S1).

> Yes, I made the change of adding a negative category to the education aspect of smartphone usage, to bring this category to one positive and one negative which was the requirement from the original map" (S19).

Not only did students seek to add additional points to their mind maps, they also sought to correct errors which were highlighted in the peer feedback. As such, there was one reported content-error change:

> I did change one box on my slide. Where it used to say "produce less fumes" I change[d] to "cost less to owner". The fumes did not fit under economic (S23).

Structural changes were also included in the revised draft. At times, the initial draft was unclear and so students changed the colour scheme so that the categorisation of concepts could be more readily understood.

> I changed some of the color scheme to make the points more visible (S8).

> So I decided to change the background in the original mind map, from cream to white to show better contrast in the colors. In my opinion, it is now easier to decipher and interpret the key. Also, I changed the thought bubbles from a blue to the same stark white color, this allows for better viewing of how each group is categorized. Hopefully, others have better clarity on the design (S12).

Discussion

Student integration of feedback into final drafts is dependent on several factors: student attitude to feedback (Panadero, 2016), nature of feedback (Patchan et al., 2016), and psychological barriers (Winstone et al., 2017).

The findings suggest that students perceive peer feedback and viewing exemplars as a meaningful exercise. They outlined several benefits to peer review including: access to different viewpoints; fostering of an online community by having an exchange of ideas; greater social presence; and judgment of one's own learning. These findings are consistent with those found by Ertmer et al. (2011). Notwithstanding the fact that most students valued peer review, one student expressed some reservations about peer feedback and exemplars. The student reported that viewing peers' work can generate "copycat" behaviour in which students will simply replicate the ideas observed from their peer's work. Given this sentiment, students may be apprehensive in sharing their work lest their ideas be stolen. Additionally, exemplars may stifle creativity and may promote

plagiarism as students may have the impression that the exemplar is the only correct representation of quality work (Grainger et al., 2018). Nevertheless, its positive impact on student self-regulated learning is a counter-argument to that student's position (Grainger et al., 2018; To et al., 2021).

As it relates to the kinds of feedback received, the results of the study indicate that student revisions were more content-specific than structural in nature. Of all the content-specific comments received, most were elaborative, offering suggestions for improvement of work. Specifically, most reviewers proffered alternative positive and negative impacts to the technological product in the future wheel. This finding contradicts a previous study which found that most feedback received was vague (Patchan et al., 2016).

Secondly, the feedback comments most often received by students were motivational in nature. A total of 54 motivational comments as opposed to 41 content-related comments were posted. The lower number in content-related comments could be attributed to students' own insecurities about their usefulness in providing meaningful feedback to peers (Panadero, 2016). This argument is supported in the literature where students doubted their competency in being able to provide meaningful content-related feedback (Sluijsmans et al., 2001; Wang, 2014).

Furthermore, the literature highlights some reticence on the part of some student assessors who affirm that peer assessment is not "their job" (Wilson et al., 2015). Further research can therefore explore the impact motivational-type feedback comments have on students' likelihood to revise their work. Additionally, further investigation is needed to ascertain the extent to which trust among peers is related to the effectiveness of peer assessment.

In order for the peer assessment process to work more effectively, students should initially be exposed to a "low-threat practice" with peer review so that they will be gradually attuned to the expectations of peer review, and in the process, they will get to know each other better (Brill & Hodges, 2011). In this regard, students can develop a level of trust and community spirit so that they may be less inclined to "copy-cat" so that they will view exemplars and use them as a launching pad on which new ideas can be generated (Panadero, 2016). Herein, the question of expertise is raised. Students may question the competence of their peers in providing evaluations of their performance. Therefore, further research is needed to determine the impact of student competence on the quality of peer review (Panadero, 2016).

Moreover, the reluctance of the majority of the participants (65%) to make changes to their work should not go unnoted. These students expressed confidence in their initial work as meeting the expected criteria and so the various suggestions made by peers were not acted on.

> I did not make any changes to my PowerPoint slide as I thought that I articulated good/bad implications for the computer accordingly (S9).
>
> I really appreciated my partner's feedback, but I did not choose to revise my mind map,

because I think it is acceptable the way it is and straight to the point (S26).

Conversely, the dual action of viewing a wide array of exemplars and receiving peer feedback assisted the students in scrutinizing their own work and using others' work and comments as a benchmark for this assessment. Therefore, the exchange of examples and feedback supported students in making judgments about their own work which then informed them of the changes (if any) that needed to be adopted. This finding is consistent with other studies that reported on the impact that giving and receiving feedback have on students' ability to make judgments of their own work (McConlogue, 2015) and aid in self-regulation (Ku & Lohr, 2003). Dunlap (2005) succinctly captures this idea by affirming that "the process of reviewing someone else's work can help learners reflect on and articulate their own views and ideas, ultimately improving their own work" (p.20).

Conclusion

The results of this study highlight the kinds of feedback provided by peers in an online environment, as well as student perceptions of the value of peer feedback and their implementation of the same. Notwithstanding the perceived usefulness of peer feedback, only nine participants acted on the feedback received by peers. Perhaps one of the limitations of this study owing to this result is that the research activity was conducted toward the end of the semester when students had exhausted all energy and motivation to continue with learning tasks. Another limitation of this study is that the data collected were purely qualitative and therefore cannot be generalized. Future research therefore can seek to employ quantitative measures to assess student perceptions and measure student revision rates. A study on the impact of exemplars and peer feedback on academic achievement can also be explored. Finally, an additional direction for future study is the examination of factors preventing students from revising their work following peer feedback.

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