Peer feedback via mobile devices: Is it useful? Is it trustworthy? Is it safe?



Higher Education Academy Annual Conference 3-5 July 2018 Aston Conference Centre Birmingham, UK

Outline

- 1. Aim & rationales of study
- 2. Theoretical background
- 3. Methods





1. Aim of study

Focus group findings from a teaching development grant (TDG) project at a university in Hong Kong.



To explore research questions:

- How do interpersonal & power relationships influence the ways students engage in and respond emotionally to the peer feedback process?
- How do students' disciplinary backgrounds influencing their peer feedback process?
- Whether and how can e-learning tools (such as mobile learning technologies) facilitate students to make the most of peer feedback practices?

Rationales of this study



Not for publication or further reproduction.

 Existing studies have reported students' perceptions of the interpersonal and emotional facets of peer feedback in relation to perceived usefulness of peer feedback (van Gennip, Segers, & Tillema, 2009; Yang, Sin, Li, Guo, & Lui, 2014)

- However the majority of existing evidence on these aspects has been reported from experimental and survey research.
- Hence, there is a need to gain in-depth understanding using qualitative methodologies.

Rationales of this study

 Existing research is also limited in understanding how the peer feedback process interacts with students' *socialcultural backgrounds* in influencing their learning.

 This study has also considered the growing interest in the role of technology in enhancing the efficacy of peer feedback practices

For private study or research only. Not for publication or further reproduction.

2. Theoretical background:

Relevant themes from existing studies



Why studying peer feedback?

- Feedback is most powerful when it is recognized and acted upon by students to achieve learning goals (Hattie, 2012)
- Peer assessment where students exchange feedback comments with fellow students is seen as a helpful way of enhancing the quantity and quality of feedback that students receive on their work (Kollar & Fischer, 2010)

Theoretical background: *Relevant themes (cont.)*



Advantages of peer assessment & feedback :

- Students understand their peers' approaches to tasks much better than their teachers do
- O Students' ways of expressing comments are more readily accessible to peers than their teachers' feedback, thus increasing uptake of feedback
- O By engaging in peer feedback process, students' capability for critical knowledge building & self-evaluation is improved (Nicol, Thomson, & Breslin, 2014).

Theoretical background: *Relevant themes (cont.)*



Disadvantages of peer feedback :

- Actions of giving, receiving and using feedback are social practices involving sensitive issues (Yang & Carless, 2013)
- Power relationships among teachers and students play an important part in peer feedback practices, which might affect how students engage with peer feedback cognitively and emotionally (Panadero, 2016; van Gennip, Segers, & Tillema, 2009)

Theoretical background: *Relevant themes* (cont.)

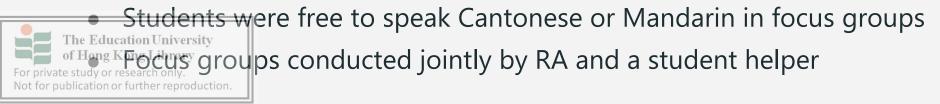


Disadvantages of peer feedback (cont.):

 Quality of peer feedback and selffeedback is also called into question by students; student-led feedback tends to be less comprehensive than teacher feedback (Harris, Brown, & Harnett, 2015)

3. Methods

- Participants: 13 students (11 females; 2 males) in 3 focus groups:
 - 11 Year-4 students in a course of educational leadership students were all majored in early childhood education
 - 2 Year-1 students in a general education foundation course students in the course were from different majors
- The courses involved students in giving peer feedback and selffeedback in group presentations (graded) in lessons or end of term
- Students were invited from respondents why took part in a postcourse questionnaire survey
- Ethical procedures were followed



Methods – Data collection

	Sample questions asked	
1	(i) Experience of taking part in PASA practices	 Have you used the feedback given by peers to improve your assignment? Was it helpful/unhelpful? Did your own self-feedback help you do better in completing the final assignment?
1	(ii) Experience of using learning technologies in peer feedback practices	 How do you feel about using Padlet in the peer- assessment practice activity during class? How do you feel about giving feedback to anonymous peers /being given peer-feedback by anonymous peers on Moodle?
	The Education University of Hong Kong Library or private study or research only. ot for publication or further reproduction.	3. To what extend do you think you and your peers have consistent understanding about the standards for evaluating the assignment?

Methods – Data collection

Sample questions asked (cont.)

(iii) Social and emotional experiences in peer feedback practices	 Did you feel safe/relaxed or unsafe/nervous in the peer- assessment activity on Moodle? Why? If given options of doing peer-feedback with your own friends or anonymous peers, which way would you prefer? Why? Do you feel you are a competent feedback giver? Do you feel your peers are competent feedback giver? Why/why not?
(iv) Suggestions on how the PASA strategies and resources mayibery of Hong Kong Library improved research only. Not for publication or further reproduction	 Overall, to what extent has your participation in PASA practices facilitated your (a) your engagement in the course? (b) improvement of your assignments? Can you provide any suggestions on how the PASA practices can be made more helpful to students in this course / in other courses?

Methods – Data analysis

> The Education University of Hong Kong Library

Not for publication or further reproduction.

For private study or research only.

- Verbatim transcription and translation by student helpers
- Proof-reading to ensure accuracy by RA
- Thematic analysis of the transcripts:
- Initial analysis by RA for key points expressed by participants;
- Subsequently more in-depth analysis by PI to
 - identify important aspects of student experience and perceptions of engaging in peer feedback practices
 - interpret findings in relation to research literature

4. Findings Theme 1: What counted as useful peer feedback? 1a. Quality of feedback determined usefulness of feedback:

- Criteria for usefulness of peer feedback: whether peer feedback
 - (1) was concrete: focused on their problems or weaknesses, and not only stating strengths
 - (2) could "makes sense" by giving justifications to persuade the feedback receiver as convincing
 - (3) *showed empathy and sensitivity* through careful listening and deeper understanding of peers' work

(4) provided suggestions on how to improve

The Education University of Hong Kosg Li Mere criticisms were likely to induce negative emotions (anger, Not for publication or further reproduction. Deing upset, causing arguments) and be regarded as biased *Students' interpretation:*

Classmates demonstrated different practices of giving concrete and constructive peer feedback

- A piece of good feedback is really clear, because we have it for an assignment, and I think focus on my question and problems, maybe about the mistake in understanding concepts, or other points I didn't correct or I need to add.
- Some classmates would tell you where lies the problem and what is correct, but others may just tell you where is wrong and to revise the whole thing. Then I have no idea what to correct, I think it needs to be more concrete.



The Education University of Hong Kong Library

For private study or research only. Not for publication or further reproduction. Constraints for students to give concrete and constructive peer feedback

- Insufficient confidence in giving constructive feedback:
 - There are certain constraints in giving peer feedback: perhaps my peers are afraid of misleading me, then their comments are always too generic, just like you can do better in presentation skills.
- Lacking sufficient background knowledge about peers' topics:

 The audience have few ideas about the topics of other groups' presentations, so I think it is hard for them to offer constructive ideas regarding the content. They can talk about the flow, how to direct the content, or some parts in the middle, like the settings of PowerPoint, the form of speech, the gesture and speed, these are easier for them.

For private study or research only. Not for publication or further reproduction

Students' interpretation:

publication or further reproduction.

- Peer feedback should make sense to the peer receiving it by giving justification
 - It depends on if the feedback is authentic, then we can see if they have considered about it [our topic] already. If the feedback content is in depth then I think it is good; or the feedback is bad as it does not telling me the reason for the comment, then I think that is not that useful.
 - And I think it is better if they can put aside their own opinions when they listen to our opinions, and feel modest to listen,

accept or understand me, because sometimes their opinions are The Education University of Hong Kong Li Opposite to ours, like in a debate. Students' interpretation:

- Peer feedback should make sense to the peer receiving it by showing empathy and sensitivity
 - We had a course in my major about fictions, there was a senior student sitting beside to listen, and we presented about the fiction we chose. He started to talk before we finished the first part, and we had to agree with him, otherwise he would not stop talking. We had 20 minutes for presentation at first, but 30 minutes passed after he finished talking, and our presentation used 50 minutes finally. This was really a negative experience of peer feedback to me.



For private study or research only. Not for publication or further reproduction.

Theme 1:

What counted as

useful peer feedback?

On the other hand, feedback from *unfamiliar* peers of different disciplinary backgrounds was seen to stimulate creativity and critical thinking

 Observed by the Year-1 students in the GE course

Observed by the Year-4 students in the ECE course

mates of assignments) were regarded useful, since familiar peers knew about their way of doing things, and had a deeper understanding of their ongoing work

1b. Usefulness of feedback was also related to

students' social relationships with feedback giver

Feedback from *familiar* peers (friends or group

- Useful feedback from peers in one's study group sharing a similar disciplinary background (early childhood education):
 - I think the feedback in group is useful, because most of the time you do your part (of the group work), when you discuss in group and then you can recognise something you have missed, and you can make it better
- Useful feedback from peers of other disciplines (general education):
 - We need some students from different background, or the peers thinking in different ways, so that they offer me a new way to think. For example, my teammate is from mathematics major, and I major in English, and we have different ways of thinking, and also different habits in class, only when we have some conflicts during the Education University Hong preparation for presentation that we can think of many different we produce a topic to work on.

Findings Theme 2: what counted as trustworthy feedback?

2a.Trustworthiness of feedback that students received from others was determined by whether the feedback giver was 'qualified' /competent. Students' criteria of a qualified feedback giver included:

- being knowledgeable about or having interest in the topic,
- having rich work experience in the school setting,
- making great effort in learning.
- Thus apart from their teachers who were considered the most

professional and knowledgeable persons to give trustworthy The Education University of Education University if Discretion if university if university Teachers' professional knowledge being the ultimate source of reliable feedback

- There was such a case in a Project. I have a different version from another student and we argue about it for a long time, finally we went to see the professor together to decide whose explanation was better.
 When peers' feedback is more important than teacher feedback
- When doing a group project you talk about this project together with the team mates, and their feedback is valuable that moment compared to teacher feedback, who don't really understand your group project, and at that moment teachers' feedback is just for reference

When the assignment is related to creativity then I think, peers' opinions are more important, because everyone have different creative ideas and for private the different ways, then we can refer to such creative ideas Theme 2: what feedback? counted as trustworthy feedback? (cont.)

2b. Most participants distrusted their unfamiliar peers as feedback givers

- they believed such peers might not be
- knowledgeable enough to identify problems and provide useful suggestions, or might not be willing to help them.
- Thus participants tended to ignore peer feedback given by unfamiliar classmates

2c. Conversely, the majority of participants also did not trust themselves to be competent feedback givers

- **The Education University of Hong Kong Library** For private study or research only. Not for publication or further reproduction.
- they did not feel self-confident because they felt they might not have profound knowledge about the topic peers discussed

Students' perceptions of giving feedback to unfamiliar peers:

- If I trust this peer and he is helpful, if I don't trust this peer I won't care about him. The peer whom you trust will help you sincerely. As for the peers whom you don't trust, you are not sure if they really want to help you, they might even write something wrong and mislead you.
- Generally, I will not initiate giving peer feedback. Giving feedback can show
 I respect their perspectives and want to express how I think, and it can show
 our critical thinking, but if I have not paid attention to the presentation and
 know little about the topic, or if I would feel that even I listen carefully, but
 in case of embarrassment or misunderstanding, then my ignorance would
 be seen of this sentiment, I will not give feedback to peers.

For private study or research only. Not for publication or further reproductior Theme 3: when did students feel safe to receive / give peer feedback?



3a. Role of social relationship in peer feedback process – receiving peer feedback

- Students mostly felt safe when receiving peer
 feedback from friends /group mates, since they
 believed in such peers' good will in helping
 themselves improve.
- They were divided regarding whether they felt safe when receiving peer feedback from unfamiliar peers
 - A few felt relatively safe because peers' feedback was meant to help improvement
 - A student mentioned fearing that peers' criticisms might remind teacher to reduce her grade

- I am always nervous being evaluated by others, because usually you don't think there is any problem in your part, but when your problems are pointed out by others, you'll be a little bit afraid of it
- I am nervous about peer feedback because it might influence the grade, if he said something that reminds the teacher, will that influence the grade?
- I may be more cautious with peers' anonymous feedback (on Moodle discussion forum). For example if I receive some reply or feedback, because it's the communication in writing, you don't know how the other person feels (through facial expression), he might be really upset or probably he might rot have any emotions, and I would be more nervous and careful provide study or research only.

Not for publication or further reproduction.

Theme 3: when did students feel safe to receive and give peer feedback? (cont.)



3b. Role of social relationship in peer feedback process – giving peer feedback

- Most students felt relaxed when giving praises as peer feedback, but felt unsafe when giving negative or critical feedback fear of hurting peers' feelings.
- Feeling unsafe when giving criticisms to peers exposed that the peers' work was weak, which induced their own embarrassment and sense of guilt for potentially upsetting the peer.

Giving negative feedback to peers was preferably done anonymously – saving face and protecting relationships:

- I had such an experience before where a classmate asked me to give feedback for his assignment. I already gave my feedback earlier, but I still had something to say furthermore which is negative, and that's when I want to keep my feedback anonymous because I don't want him to regard himself to be weak, so that he won't get mad.
- If I criticise others, it is not so good to provide my name, and that sure. Coz that will influence our relationships. But if my peer wants to give me suggestions maybe he will write his name down, I think it's ok, if I still have

For prisomer confusion or what I want to say then I can ask him.

Theme 4: What was the role of technology in the peer feedback process?

Padlet:

an e-learning software application that allows teacher or audience pace in sharing opinions by

The Education University Typing. Qfk.upiQaQing For private study or research only. NATULITIAL Collar File Suction. 4a. Improved efficiency of sharing peer feedback via the Padlet platform using iPads or mobile phones

- students appreciated the instant feedback that was displayed on the classroom screen.
- Students accepted Padlet to be user-friendly and relaxing, similar to social media like WhatsApp.
- They could improve on similar problems identified in the peer groups' work and the suggestions provided them with new ways of thinking.

Padlet allowed sharing of peer feedback immediately, but might lack details:

 Peer feedback via Padlet is instant, you can see every group's suggestion for you at once instead of asking it one by one. However, you can ask for more details when receiving peer feedback face to face, whereas on Padlet feedback messages are usually brief, just one or two sentences.

Giving peer feedback on Padlet was relaxing:

Because compared to raise up the hands to give comment and everyone is staring at you, and you are afraid of speaking something wrong, using pallets to give comment is not that stressful as long as you are not chosen by the teacher. Usually the feedback will be seen by yourself, if the peer The Education University thunks this feedback is not useful, it doesn't matter he can continue to see For private study or research only. Not for the attent of the model.

Theme 4: What was the role of technology in the peer feedback process? 4b. Increased student receptiveness of peer feedback when shared via Padlet or Moodle

- Teachers' follow-up guidance on shared peer feedback enhanced understanding of the peer feedback
- Peer feedback shared via Padlet or Moodle after some deliberation would be more thoughtful and helpful



Teacher facilitation in Padlet-supported peer feedback

 After we finished our group project the teacher gave us the padlet link to upload our feedback for different groups. On the Padlet page, we can see some of the points raised by the groups or they have considered about. Then teachers will put forward her own ideas based on the peers' opinions and sometimes she might ask us reflection questions.

Increased receptivity when peer feedback is shared via Padlet

 I would say it's comfortable and safe when giving peer feedback on Padlet, because if you talk to him face-to-face. he might dislike it. If you talk about it through devices he might accepted more and because he will have such a time to calm down and to consider about the questions or advice you give

The Education University of Hong Kong Library r private study or research only.

Not for publication or further reproduction.

1. Concurring with existing research:

 the students emphasized good feedback to be timely, specific about their problems, and offering suggestions for improvements.



- 2. Interpersonal and power relationships significantly influenced students' engagement with peer feedback.
 - Students regarded their teachers as the most trustworthy feedback givers, since teachers possessed professional knowledge.
 - Friends and group mates of their study groups were also trustworthy
 - Among unfamiliar peers, only some that meet their criteria were seen to be trustworthy; others' peer feedback were likely to be ignored

The Education University of Hong Kong Lifey felt For private study or research only. Not for publication or further reproduction.

- 3. Four criteria for 'qualified' feedback givers were mentioned by students:
 - being knowledgeable, showing interest, having relevant experience, and making effort

 the last criterion being possibly specific to Chinese students' conceptions



- When receiving feedback from the 'qualified' feedback giver or giving positive feedback to others, students felt safe.
- 5. They mostly felt unsafe when receiving feedback from unfamiliar peers and giving critical feedback to peers.
- 6. Finally, Padlet sharing of peer feedback was

The Educatio Considered fast, relaxing, useful, engaging, and For private study or research on Vatively safe.

References

Falchikov, N. (2007). The place of peers in learning and assessment. In D. Boud & N. Falchikov (Eds.), *Rethinking assessment in higher education* (pp. 128-143). London: Routledge.
Harris, L. R., Brown, G. T. L., & Harnett, J. A. (2015). Analysis of New Zealand primary and secondary student peer- and self-assessment comments: Applying Hattie and Timperley's feedback model. *Assessment in Education: Principles, Policy & Practice, 22*(2), 265-281.
Hattie, J. (2012). *Visible learning for teachers: Maximising impact on learning*. London: Routledge.
Kollar, I., & Fischer, F. (2010). Peer assessment as collaborative learning: A cognitive perspective. *Learning and Instruction, 20*(4), 344-348.
Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education:

a peer review perspective. Assessment & Evaluation in Higher Education, 39(1), 102-122.

Panadero, E. (2016). Is it safe? Social, interpersonal, and human effects of peer assessment: A review and future directions. In G. T. L. Brown & L. R. Harris (Eds.), *Handbook of Human and Social Conditions in Assessment* (pp. 247-266)). New York: Routledge.

For private study or research only. Not for publication or further reproduction.

References

van Gennip, N. A. E., Segers, M. S. R., & Tillema, H. H. (2009). Peer Assessment for Learning from a Social Perspective: The Influence of Interpersonal Variables and Structural Features. *Educational Research Review*, *4*(1), 41-54.

Yang, L., Sin, K. F., Li, X. Y., Guo, J. S., & Lui, M. (2014). Understanding the power of feedback in education: A validation study of the Feedback Orientation Scale (FOS) in classrooms. *The International Journal of Educational and Psychological Assessment, 16*(1), 21-46.

Yang, M., & Carless, D. (2013). The feedback triangle and the enhancement of dialogic feedback processes. *Teaching in Higher Education, 18*(3), 285-297.

