PURDUE REPOSITORY FOR ONLINE UNIVERSITY. TEACHING AND LEARNING

Getting your Students Ready for Peer Reviews

1 What is it?

Peer review - also known as peer evaluation, editing, assessment, or critique - is the practice by which individuals share work with peers and constructive feedback is given by one student to another (e.g., projects, essays, articles, presentations, course designs) (Nicol et al., 2014; Odom et al., 2009). As formative growth, peer review helps to offer diverse perspectives, and examine strengths and weaknesses of a given piece of work, ultimately allowing for a higher quality final product. Peer review activities allows for an increased amount of prompt, detailed feedback from a diversity of individual perspectives (Topping et al, 2000).

2 Why is it important?

As an important alternative to instructor feedback (Nicol et al., 2014), effective peer review has been found to increase student learning (Johnson et al. 1998), develop critical thinking and problem solving skills (Topping et al., 2000), and conceptualize the relationships between course topics and their own understanding, while learning from their peers. Additionally, reflection and self-assessment through peer review may enhance student learning (Odom et al., 2009), as students can view how others approached the development of the same assignment (Sweetland Center for Writing, 2020).

Second, knowing the purpose and the intended audience of the assignment is vital; however, identifying audiences can sometimes be confusing to novice researchers (Purdue OWL, n.d.). Peer reviews allow students to consider and experience a broader audience, other than their instructor (i.e. a peer), reaction to their work - gaining additional insights (Teaching & Learning Resource Center, 2020).

Lastly, collaboration, which is different from cooperation (see teamwork PoRTAL document), involves active learning and constructing rather than acquiring knowledge. When working together, students develop knowledge through social interaction with peers. Peer collaboration occurs when two or more students with relatively similar

abilities are able to form a relationship and focus on the acquisition and/or application of knowledge. Therefore, the student-to-student interaction through peer review can positively influence students' motivation and participation, course and instructor satisfaction, and both actual and perceived learning (Richardson et al., 2017).

3 How to do it?

Done correctly, peer review can be a useful tool to incorporate in any classroom. Advice-centered peer review is a product-based process, in which peers review the work and then offer their perspective and advice on how it may be improved. This peer review style is often based in dialogue (verbal or written) between the individual whose work is being reviewed and the reviewer. The Purdue OWL provides a useful outline on how this may be done.

Overview. In the most basic sense. Student A will submit a piece of work they want to have reviewed. The piece of work is submitted to peers (either anonymously or not). Peers will review Student A's work and return back to Student A. Student A will use the reviews they received from their peers to improve the quality of the originally submitted work.

Tips for Success (in suggested order).

- Select an appropriate assignment and timeframe. Make sure peer review activities are conducted at a point in the course where there is enough time for students to incorporate reviewers' comments into their assignments. Do not make the peer reviews due the same time as the final assignment - this can discourage students from implementing their peers' feedback into their final submission of work.
- **Expectations.** In all contexts, it is a good idea to provide structure (e.g., expectations, deadlines, evaluation forms, tones, etc.) to peer review activities. However, it is especially important to do so when introducing peer review to individuals who may not have previous experience with the peer review process. The Purdue OWLs Remote Peer Review Strategies provides strategies that go beyond the online classroom.



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- Discuss the purpose and present the <u>benefits of peer review</u> and peer review activities as opportunities for students to learn how to communicate/explain their ideas to an audience. Make sure to define the role of the peer-reviewer as that of a reader, not an evaluator or a grader.
- Don't assume your students know how to provide constructive feedback – you will need to provide examples and model the behavior. See <u>Teaching</u> <u>Resources for Incorporating Student Peer Review</u> for teaching resources and examples.
- Incorporating a peer review "**practice activity**" into the course to model best practice.
- Make sure peer review is done in a structured environment (e.g., discussion board, GoogleDocs, using a rubric/outline). If using track changes in Word or GoogleDocs, be cautious of students accepting all changes without reading or reviewing the suggestions. Instead, have students use the comment tool rather than track changes, so the author can determine which suggestions to address.
- Grading the peer review. Ungraded assignments typically are assumed to be of low value to students. By assigning a grade, students are more likely to see value in the peer review process and apply changes based on peers' critiques.

4 Technology Tips & Tools

- <u>CATME</u> (free account): Comprehensive Assessment of Team Member Effectiveness (CATME) is a free tools set available to instructors to implement best practices in managing group work and team assignments.
- <u>Circuit</u> (free for Purdue faculty and students):
 Peer-review tool that enables instructors to conduct
 peer review activities in an online, anonymous, and
 asynchronous manner.
- GoogleDocs (free): Can be used to track changes and retain previous versions of documents.
- <u>Kaizena</u> (free): Kaizena is a Google Doc add-on, allowing the instructor and peers to provide feedback through embedded video comments.
- Flipgrid (free): Allows students to create written and video responses to the author.

- Peergrade (free 30 day trial): With a library of rubrics and range of features, Peergrade is an online platform to help facilitate peer feedback.
- Turnitin PeerMark: PeerMark is a peer review tool (within Turnitin) where students can read, review, and evaluate other's papers after being assigned by the instructor.

5 Additional Resources

- Purdue OWL <u>Remote Peer Review Strategies</u>
- The Eli Review Blog: <u>Describe-Evaluate-Suggest</u>
- Planning and Guiding In-class Peer Review
- <u>Teaching Resources for Incorporating Student Peer Review</u> (includes instructional materials)
- 43 Great Peer Evaluation Forms

6 References

- Johnson, D. W., Johnson, R.T., Smith, K. A. (1998). Active learning: Cooperation in the college classroom (2nd ed). Edina (MN): Interaction Book Company.
- 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.
- Odom, S., Glenn, B., & Sanner, S. (2009). Group peer review as an active learning strategy in a research course. *International Journal of Teaching and Learning in Higher Education*, 21(1), 108-117. https://files.eric.ed.gov/fulltext/EJ896250.pdf
- Purdue OWL. (n.d.). Peer review presentation. Retrieved from https://owl.purdue.edu/owl/teacher_and_tutor_resources/teaching_resources/peer_review_presentation.html
- Richardson, J.C., Maeda, Y., Lv, J. & Caskurlu, S. (2017). A meta-analysis of social presence in relation to students' satisfaction and learning. *Computers and Human Behavior*, 71, 402-417. http://dx.doi.org/10.1016/j.chb.2017.02.001
- Studentpeer review. (2021, January 20). The University of Melbourne.

 *Teaching resources.**

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 - $\underline{http://peerreview.cis.unimelb.edu.au/resources-3/teaching-resources-2/2}$
- Sweetland Center for Writing. (2021, February 9). The University of Michigan. *Using peer review to improve student writing*. https://lsa.umich.edu/sweetland/instructors/teaching-resources/using-peer-review-to-improve-student-writing.html
- Teaching & Learning Resource Center. (2021, February 9). The Ohio State University. *Student interaction online*. https://teaching.resources.osu.edu/teaching-topics/student-interaction-online
- Topping, K. J., Smith, E. F., Swanson, I., & Elliot, A. (2000). Formative peer assessment of academic writing between postgraduate students. *Assessment & evaluation in higher education*, 25(2), 149-169.