Facilitating Peer Review in Large Classes: Comparing peerScholar and Canvas Tools

Dr. Catherine D. Rawn UBC Psychology cdrawn@psych.ubc.ca @cdrawn 1June2018

Conclusions (in case you don't want to scroll to the end)

- 1. At this point, peerScholar beats the Canvas Peer Review tool. Clear superiority on ease of use.
- 2. Quick, personalized responsiveness from excellent tech support folks at peerScholar and in UBC's Arts ISIT department is the only reason either of these options are even passibly acceptable to me at all.

Course and Assignment Context

In 2014 I implemented a series of short writing assignments in my Introductory Psychology courses (PSYC 101 and 102, 250-350 students per section). Each of the **4-5 mini-papers is worth 1%** of the course grade, is only a paragraph or two long, and involves explaining a course concept and applying it (e.g., to understand an experience, a scene in a film). Each student conducts a peer review of 4-6 other students' mini-papers. The score out of 1% is derived from those peer reviews.

Finding a Tool to Facilitate Peer Reviews

Since 2014 I have used peerScholar to facilitate this process, with one exception. One term when I tried the peer review tool on Blackboard (our LMS at the time) – which was disastrous (e.g., if a student didn't peer review others' work, the program automatically assigned a score of zero to those students and included it in grade calculations, which I could not download and fix. Lesson learned: don't use a new system without seeing the output first). Although I have had challenges with peerScholar, they have been fixable (thanks to their excellent support team), and I have been hesitant to try anything else. Students complained about having to go to an external site to do the peer reviews (fair enough), and our campus switched to Canvas LMS which has a peer review tool. Does the Canvas peer review tool work well (enough) to use it instead of peerScholar?

Off the top of my head, here are some pros and cons for each tool.

peerScholar Peer Review Tool	Canvas Peer Review Tool				
Slick, easy to use interface for me to set up assignments and for students to submit, review others' work, and find their reviews Excellent support from peerScholar team Program is reliable and I don't have to explain how to use it to my students (it's that intuitive).	 Reasonably easy to use interface for me Don't have to send my students to a different, external website (reduces hassle for them) Names and Student IDs are kept current with my class list Excellent UBC staff have been able to create the export grades spreadsheet I need using fake test data. 				

Sends my students to yet another website It's fairly untested. Can it handle 300+ I have had difficulty understanding the "export students? Is it reliable? Is it as easy to use for students? grades" spreadsheets, including not finding the numbers I need. To conduct the calculations I want (e.g., compare median, mean, mean dropping highest and lowest scores; check reliability) I need to request a custom datafile per assignment (which they provide, but it's a hassle and means delays for my students). Have to **continually merge student grades** with Cons my class list without student ID #s (an arduous task with 5 assignments x 300+ people)

Output I Seek

This is part of a spreadsheet that I wish I could just download from any peer review system. Please. Why is this so difficult? peerScholar has been able to provide me with this information (with custom requests every assignment), and Arts ISIT has been able to create a script to give this to me from Canvas using fake sample data.

Lastname, Firstname	Student ID	Completed Create Phase (1=yes, 0=no)	Completed Review phase (1=yes, 0=no)	# Peers Assessed	# Peers Assigned	# Assessments Received	Peer 1/1	Peer 2 /1	Peer 3/1	Peer 4/1	Peer 5/1	Peer 6/1
		1	1	6	6	4	0.9	0.85	1	0.9		
		1	0	0	0	5	0.9	0.9	0.55	0.5	0.75	

I use this information to calculate/examine the following values in excel:

- # Assessments received: A quick sort on this column identifies those with 3 or fewer, so I
 evaluate those papers myself. These happen rarely if each person is assigned 5-6 peers to
 review
- % of peer reviews a student does for other people (#assessed/#assigned). I can then use that value for participation to incentivize the process.
- Average (Mean) peer review score
- Median peer review score
- Average (Mean) peer review score after dropping the highest and lowest peer review → this what I typically use to assign scores
- Standard deviation across peer review scores (to examine overall reliability and help spot cases in need of intervention or double-checking, like the 2nd example above)

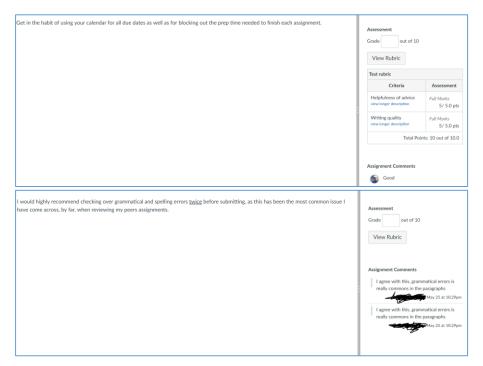
Pilot Test of Canvas

After my most recent section of PSYC 102 was over, I asked my students if they'd be willing to run through a cycle of the peer review tool in Canvas and provide some feedback on their experience (in exchange for a \$5 Starbucks ecard). Out of 308 students, 12 completed it (*thank you!*). It's a small sample size, but their feedback is consistent enough for me to draw a clear conclusion.

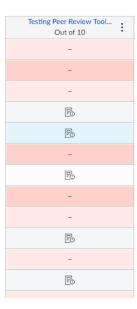
My experience

On my end, setting up the assignment and rubric in Canvas was easy. I had already used those features before, but for TA-graded work (different course). I just had to check a "peer review" box, click a few settings (e.g., number of peer reviews, whether it should be anonymous), create the rubric. Done.

Next step: Assigning grades. Without the help of Arts ISIT, I have absolutely no idea how to actually calculate *or even find* peer review grades. Complete and utter fail. I can "download submissions" – which entails a .html file with students' LastNameFirstName as each filename (why .html? I selected the option so it's always just text! Why not .txt?). Opening Speedgrader means I can click through student by student and see what comments different people have made on that submission (but can't export from there). In Speedgrader, the rubric sometimes shows values (see screenshots below), but I have no idea how those were calculated (averages? First person to rate?) or how to analyze them, or why they're only sometimes there. I can see how many students left comments... how many students graded each? Most problematically, the "grade" area is blank. How do I get a value in there, except to manually enter it one at a time (x 300 x 5 no thank you)?



The Gradebook isn't much help in this regard. I can't even click on those symbols (screenshot to the right) to see a person's work.

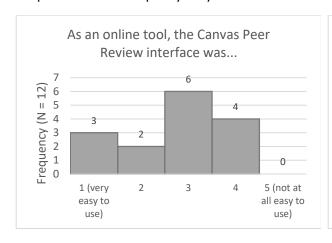


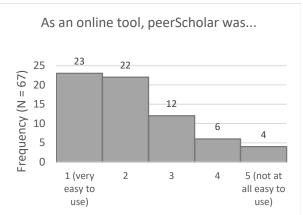
My students' experience

Summary: Canvas is fine, but also a bit confusing. peerScholar interface is mostly better and probably worth the small hassle of going to a different website.

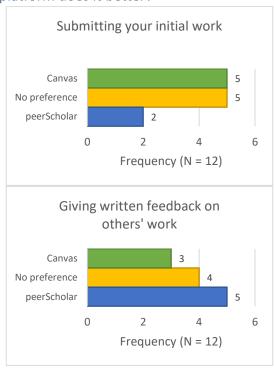
Overall Rating

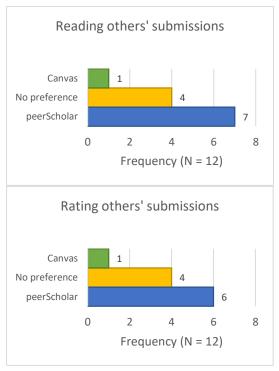
I included the following question for comparison purposes. A team at UBC IT asked my students in PSYC 101 and 102 this past year for feedback about peerScholar (including this question, among others). Out of 332 (in 101) + 308 (in 102) students, 67 responded. Although the samples are small, I think it's clear that peerScholar has a pretty easy interface.

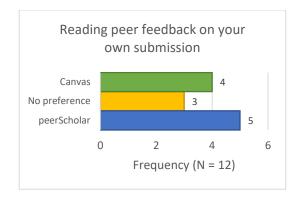


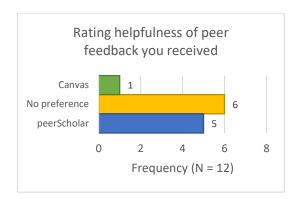


I asked my students: Think back on your experience using peerScholar this past term. Which platform does it better?

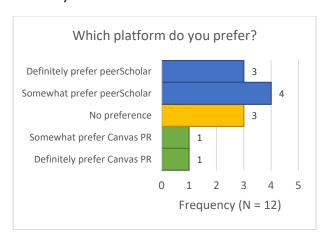








I asked my students:



I asked my students: What did you like (or not like) about using the Canvas Peer Review interface?

One theme emerged from the open-ended feedback: peerScholar clearly has an advantage over Canvas in its user interface for students. More than half of the comments (7/12) specifically mentioned that it was too difficult to find everything (especially the rubrics) in Canvas. On the Canvas side, a quarter of respondents appreciated not having to go to an external website to do the peer reviews. There were numerous specific things that people preferred about one or the other platform—which I will forward in the hopes of improving both platforms. All comments are below.

I asked my students: Is there anything else I should consider in my decision to use peerScholar vs. Canvas next time I teach this course?

Responses to this question reminded me that (some) students are concerned about the time it takes for me to process the grades, and how they are synced with the class list. One comment in particular reminded me that in PSYC 101, many (on the order of ~150-200 people) are brand new to university, and brand new to Canvas. Any interface that isn't Super Duper Easy will cause panic among a sizeable group of students. I've been there before. Not fun for any of us. Point peerScholar. All comments are below.

Conclusions

- 1. At this point, peerScholar beats the Canvas Peer Review tool. Clear superiority on ease of use.
- 2. Quick, personalized responsiveness from excellent tech support folks at peerScholar and in UBC's Arts ISIT department is the only reason either of these options are even passibly acceptable to me at all.

Complete, randomized open-ended responses

What did you like (or not like) about using the Canvas Peer Review interface?

I highlighted/bolded as I was theming (green for pro-Canvas, yellow for anti-Canvas).

Too hard to find everything, peerScholar was very streamlined and easy to use.

I can't say anything much about Canvas Peer Review interface since I'm familiar with Peer Scholar.

Overall, both peer scholar and canvas peer review are equally good.

The Canvas Peer Review interface seemed more difficult to navigate and find exactly where you need to complete the work especially when having to do the peer reviews. Personally, I feel that Peer Scholar had a much more straight forward step by step process.

There was nothing in particular that I did or didn't like about the Canvas Peer Review interface; however, I liked the layout of peer scholar better.

It was a little difficult to find the rubric (you have to click somewhere for it to appear), while on peer scholar, everything was easy to find. Also, I like the fact that peer scholar gives you a little green checkmark once you have completed each step. On canvas it was less obvious to see if your review had actually been submitted or not.

As compared to peerScholar, it could be a little difficult to find things in the Canvas Peer Review interface. For example, I took a while to realize that my Assigned Peer Reviews are actually hidden on the far right of the Stage 1: Submissions page.

On top of having troubles finding things, the Canvas interface does not feel as "smooth" as peerScholar, since every single submission is a new link. In order to access the interface (as far as I have explored), you have to first go to Assignments tab and find the peer review assignment, then in the page there is the new window to load in. The procedure is, in my opinion, quite similar to accessing an external website like peerScholar.

The Canvas interface is not as responsive as peerScholar -- for example, after saving the rubric scores and comments for a peer's work, the "not yet complete" message does not go away until you manually refresh the page.

However, these hassles aside, the Canvas interface does provide its perks as well in efficiency. For example, I love how I could read all of the peer feedbacks to my own work in one single page, and I'm also glad to be able to actually read my peer's work and writing my comment at the same time! In peerScholar, the comment box is at the very bottom of the page while the paper was at the very top, so I had to scroll up and down all the time. The entire page of Q&A-like score rating in peerScholar is also not very pleasant as compared to a single, clickable rubric table in the Canvas interface.

Once I submitted the feedback on Canvas I couldn't go back and change it later which is a feature I liked about PeerScholar

I liked the layout of PeerScholar better. It was easy to use and figure out.

Canvas Peer Review has sections all over the place and is a little confusing to find the different

sections.

Also I am unable to see/rate other's feedback scores.

I found navigation a little less clear re what was needed to complete the assignment. (I guess I liked the colored circles and check marks on peerScholar for clarity.) On the other hand, having one less site to use and keeping it all within Canvas is nice.

It was simple.

Using the Canvas Peer Review was really efficient and everything was under one tab which clearly indicates when you have submitted your assignment. It's a really simple but effective interface. One thing about the Canvas peer review is the rating of peer's work as the rubric for marking is a little hard to find and confusing. You also have to save your rubric mark and save your comment whereas peerscholar just had it all as one submission. Overall I would say the Canvas Peer Review would be more preferable as it was more direct though I thought that peerscholar gave a better interface for the actual rating of peer's work.

Overall, canvas uses a great interface that is super easy to navigate. I found it easier just to use one site, rather than having the students go from one site to another for a minor assignment.

<u>Is there anything else I should consider in my decision to use peerScholar vs. Canvas next time I teach</u> this course?

My coding highlights are in blue.

N/A

How would the writing to learn mini essay grades be processed under canvas peer review? Although it may sound like an easier choice to have everything based and run through canvas, if it were me I would still much rather use the separate Peer Scholar site based on having experience now using the Canvas Peer Review interface and Peer Scholar.

I think either peer scholar or Canvas would be fine as review platforms as both do similar things. I personally prefer peer scholar, but the canvas tool may be more convenient for some since everything can be found on one website.

I thought that the Canvas Peer Review interface is not as intuitive and welcoming as compared to peerScholar (colourful labels, various shapes and buttons, smooth access between different peers' works, etc). I can imagine students that are new to the entire Canvas system may have questions about how to access certain pages.

It was a bit tedious finding the links to get back to PeerScholar when I needed to, so I would have preferred everything to be on Canvas if possible.

peerScholar has a nice, efficient, and easy to figure out layout. It is easy to view, comment on/make annotations, and leave feedback.

Not that I can think of.

No.

The amount of time and work it takes to transfer grads can also be taken into consideration. If using Canvas will eliminate the possibility of more errors that occur with not being able to directly transfer grads from peerscholar to Canvas then I think using the interface provided on Canvas would be a good option.

I think using one site makes things more organized for the students, rather than having us go to more than one for an assignment. The applications used on peer scholar can be found on canvas as well, therefore keeping it to just canvas is much better.