

Evaluation Report: Student Experience During the Reading Circle Collaborative Activity in WRDS 150B

Overview

The purpose of this evaluation was to collect student feedback to better understand their experience with a collaborative activity, the Reading Circles, implemented in WRDS 150B during the 2022W1 and 2022W2 terms by Dr. Laura Baumvol. The Reading Circles activity includes collaborative reading and writing components and provides students with opportunities to critically read and analyze scholarly texts, to share and discuss their ideas orally with their peers, to practice collaborative notetaking and writing on an online platform, and to engage in self and peer-assessment regarding their peers and their individual contributions to the activity. The evaluation results will help assess the activity's effectiveness and provide insights that may be used to enhance its design for future iterations of the course.

Methods

Student feedback was collected via an online survey powered by Qualtrics and through a series of online focus groups conducted over Zoom. Surveys were conducted in 2022W1 (winter 1st semester), and 2022W2 (2022 winter 2nd semester)¹, and were distributed to students toward the midpoint of each semester. The surveys consisted of 19 quantitative questions addressing student experience via a Likert-scale and sentiment-based statement questions, and three qualitative questions that allowed students to directly share their experiences and feedback. The entire survey can be found in Appendix A.

In total, 173 students from six sections (three sections from 2022W1 and three sections from 2022W2) of Dr. Laura Baumvol's WRDS150B course provided answers to the surveys, with around 167 providing quantitative answers, and 155 of them providing qualitative answers.

¹In this report, 2022W1 and 2022W2 will be referred to as T1 and T2 respectively.

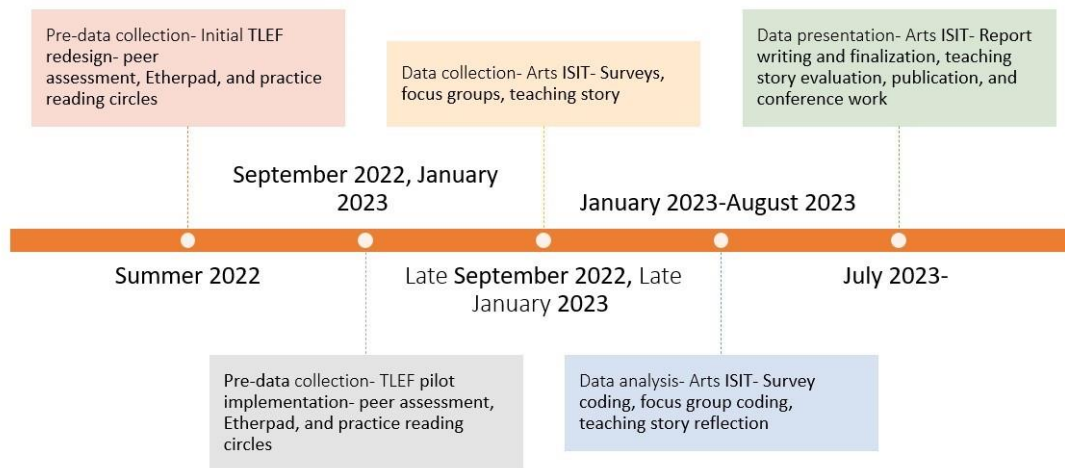
Thus, it was possible to thematically analyze how students perceived the group work process. This analysis was conducted via qualitative coding done using both the Qualtrics Text-IQ feature, and manual correction by several research members.

Students from both T1 and T2 (6 sections) of WRDS150B class were invited to participate in focus groups. Participants received a \$20 gift card for their participation. Focus group sessions were facilitated by Arts ISIT staff Meena Kahlon and Jason Myers and Neve Eilam, Undergraduate Academic Assistant. Results were shared with the instructor for analysis at the end of the term after grades were submitted. Overall, 22 students from different sections joined, with seven students from T1 joining two focus groups (January 12th and 16th 2023, respectively), and fifteen students from T2 joining two focus groups (April 11th and 14th 2023, respectively). All focus group questions can be found in appendix B.

All four focus groups were conducted online, using zoom as recording software, of which the audio was transcribed using Kaltura. All four transcripts were analyzed via qualitative coding by summarizing student comments, clustering these summaries, and noting any emergent themes.

Project Timeline

The following timeline describes the development of the inquiry into the WRDS150B Reading Circles activity across multiple terms, including the planning, investigation, and analysis conducted. While the timeline has a focus on data collected in 2022W1/W2, work on the project began prior to this period.



Survey Results

Student Demographics

To discern student demographics and degree diversity, students were asked to select which statement most accurately describes them.

Question 1- “Which statement applies to you?”

#	Answer	%	Count
1	I am studying for a Science degree.	50.87%	88
2	I am studying for an Engineering degree.	34.10%	59
3	I am undecided.	0.00%	0
4	Other (specify)	9.25%	16
6	I am studying for a Kinesiology degree.	5.78%	10

	Total	100%	173
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Most of the students that completed the survey were science degree students (50.9%). Following this were engineering students (34.1%), kinesiology students (5.8%), students from other programs (9.5%), and unspecified (0%).

Quantitative Evaluation of Student Experience

For the questions that quantitatively evaluated student experience in the Reading Circles activity, participants were asked to rank certain statements according to a Likert scale: Strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, and strongly disagree. For the purpose of data analysis, results were bucketed into positive, neutral, and negative categories, with (1) “strongly disagree” and “somewhat disagree” being grouped as unfavorable; (2) neither agree nor disagree or disagree being grouped as neutral; and (3) agree and strongly agree being defined as positive on the scale.

Question 2- Thinking back to the "Reading Circles," rate how much you agree or disagree with the following statements about your experience learning with peers during this collaborative activity.

Questions Concerning Collaboration-

Question 2.1- Collaborating with other students in this group activity benefited my learning.

Course Term	Positive	Neutral	Negative
2022W1	82.8%	4.6%	12.6%
2022W2	77.5%	17.5%	5.0%

Question 2.2- This activity helped me learn to work collaboratively.

Course Term	Positive	Neutral	Negative
2022W1	78.2%	11.5%	10.3%
2022W2	73.8%	17.5%	8.8%

Question 2.3- Rotating between roles was beneficial for my learning.

Course Term	Positive	Neutral	Negative
2022W1	82.8%	3.4%	13.8%
2022W2	75.0%	18.8%	6.3%

Question 2.4- If I had a choice, I would collaborate on group work online like this again.

Course Term	Positive	Neutral	Negative
2022W1	54.0%	25.3%	20.7%
2022W2	56.3%	28.7%	15.0%

Figure A1

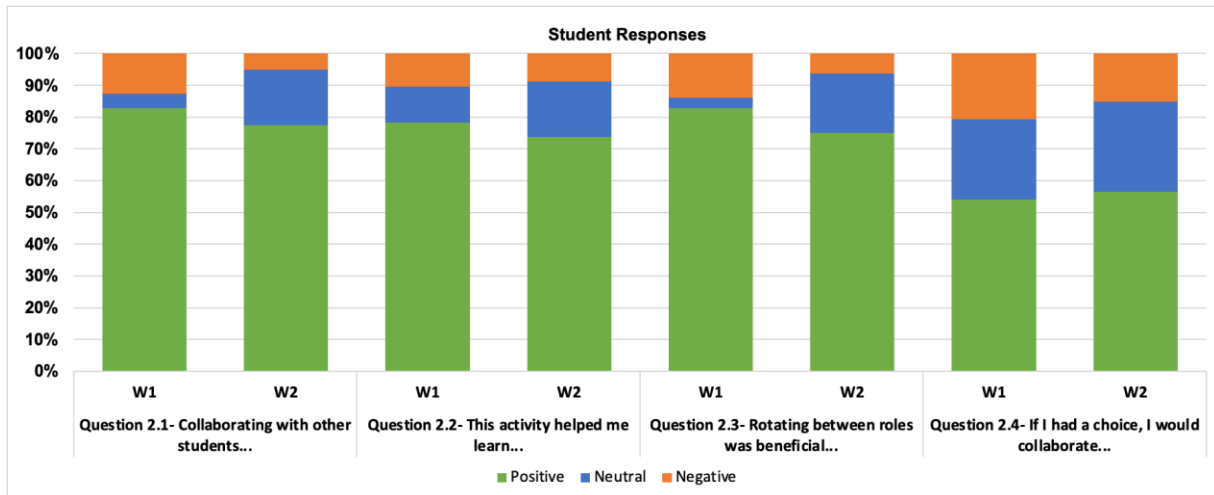


Figure A1: Student Responses are presented below with respect to questions, with each colour showcasing a different sentiment and its respective semester.

Most students had a mostly positive sentiment toward the benefits of learning that arise from collaborating with students (82.8% in T1 and 77.5% in T2). Most students also expressed a positive sentiment regarding the rotation of roles as a learning tool (82.8% in T1 and 75.0% in T2) and the activity’s benefit to collaborative learning (78.2% in T1 and 73.8% in T2). Although the majority of students responded positively regarding whether the activity benefited their learning, when asked if they had a choice whether they would collaborate on group work online like this again there was a more even split between positive (54.0% in T1 and 56.3% in T2), neutral (25.3% in T1 and 28.7% in T2) and negative (20.7% in T1 and 15.0% in T2) student responses. This result stood out as something to explore further to better understand the reasons why the responses were much more positive when asked if the activity benefited than when asked if they would choose to take part in this type of activity again.

Questions Concerning Student/Instructor Interaction

Question 2.5- Communicating with my instructor about the activity was important.

Course Term	Positive	Neutral	Negative
2022W1	57.5%	27.6%	14.9%
2022W2	65.0%	26.3%	8.8%

Question 2.6- Having the instructor's guidance was helpful for our group work process.

Course Term	Positive	Neutral	Negative
2022W1	70.9%	14.0%	15.1%
2022W2	77.5%	17.5%	5.0%

Figure A2

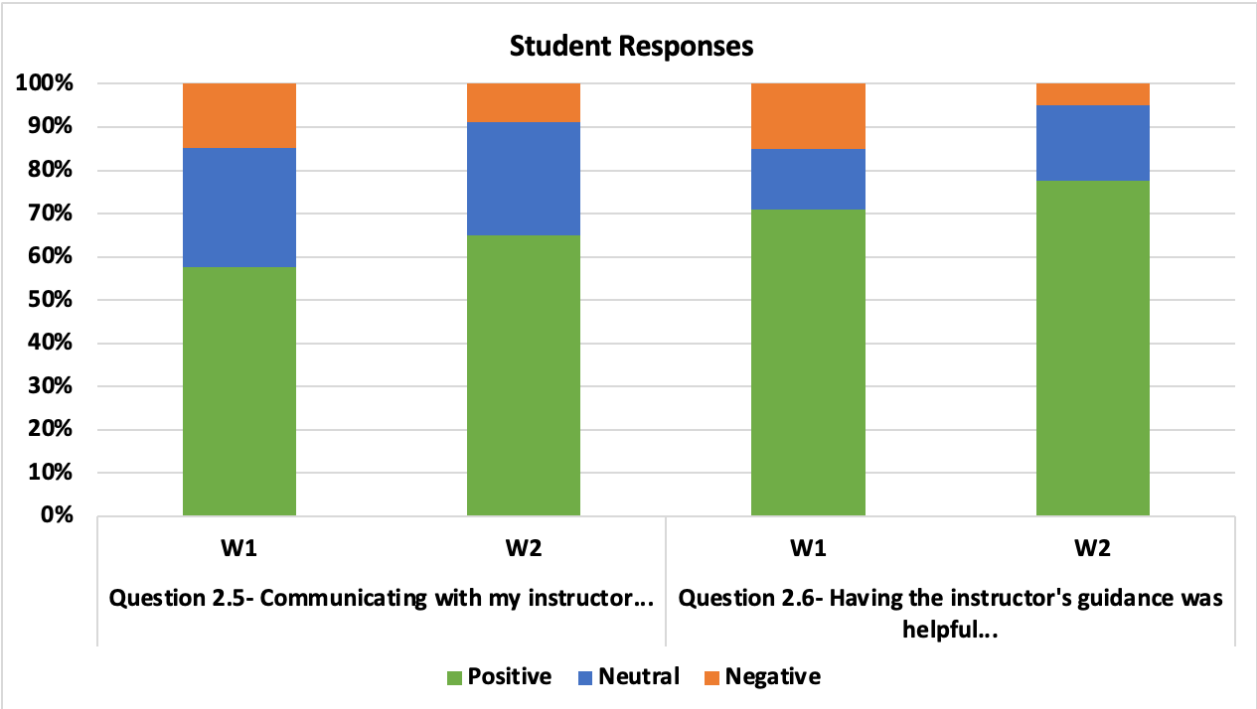


Figure A2: Student Responses are presented below with respect to questions, with each colour showcasing a different sentiment and its respective semester.

Overall, students seem to have a positive view of instructor presence and usefulness during the Reading Circles Activity. The answers to the two questions above demonstrate that most students (70.9% in T1 and 77.5% in T2) positively agreed that having the instructor’s guidance was helpful during the group work process. However, there is a noticeable difference between the two terms; students expressed a more negative sentiment toward the statement in question 2.5 in T1 compared to T2 (15.1% in T1 vs 5.0% in T2). When asked if communicating with the instructor about the activity was important most students (57.5% in T1 and 65.0% in T2) expressed a positive sentiment about importance of instructor communication, while less

students (14.9% in T1 and 8.8% in T2) expressed a negative sentiment. While the results for this question are primarily positive, it is notable that students responded significantly more positively when asked about the helpfulness of instructor guidance compared to the importance of instructor communication.

Questions Concerning Development in Academic Writing

Question 2.7- This activity helped me develop my critical skills.

Course Term	Positive	Neutral	Negative
2022W1	71.3%	13.8%	14.9%
2022W2	82.5%	8.8%	8.8%

Question 2.8- This activity helped me make connections between the articles and real-world ideas and other scholarly work.

Course Term	Positive	Neutral	Negative
2022W1	79.3%	6.9%	13.8%
2022W2	85.0%	10.0%	5.0%

Question 2.9- This activity developed my academic reading skills.

Course Term	Positive	Neutral	Negative
2022W1	75.9%	11.5%	12.6%
2022W2	88.8%	7.5%	3.8%

Figure A3

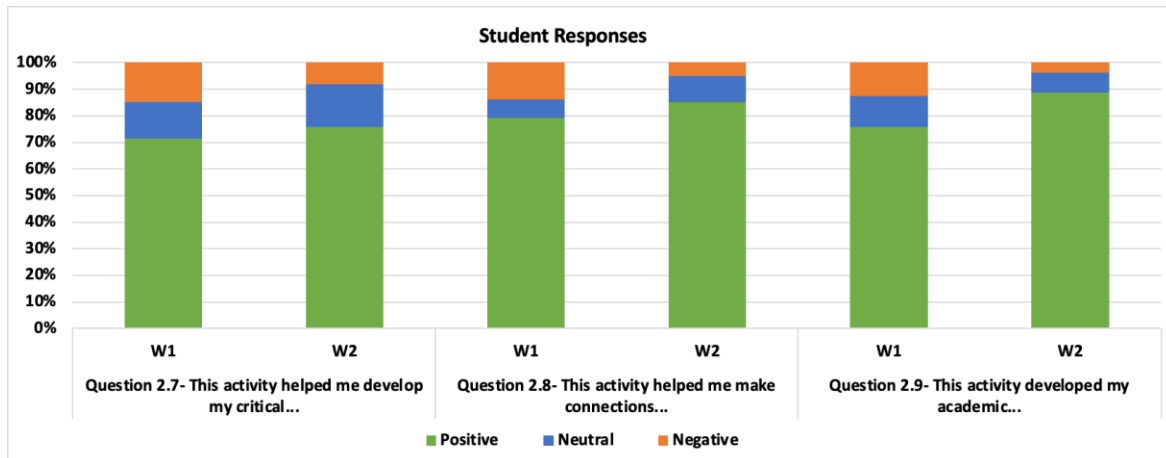


Figure A3: Student Responses are presented below with respect to questions, with each colour showcasing a different sentiment and its respective semester.

For both T1 and T2, most students responded positively to the statements that participating in the Reading Circles activity was beneficial to their critical thinking (71.3% in T1, 82.5% in T2), reading skills (75.9% in T1, 88.8% in T2), and making connections between the articles and real-world ideas (79.3% in T1, 85.0% in T2). Although the students' sentiment for these questions was primarily positive, a small percentage of students in each term responded with negative sentiment. In T1, the percentage of students responding in the negative category remained low overall but was noticeably higher across questions than in T2. We noticed a much higher percentage of responses with negative sentiment in the T1 semester compared to the T2 term. The highest difference in the level of negative sentiment was noticed in the questions that asked whether the activity helped develop their critical thinking skills (14.9% in T1 and 8.8% in T2), helped them make connections between the articles and real-world ideas (13.8% in T1 and 5.0% in T2), and developed their academic reading skills (12.6% in T1 and 3.8% in T2). This difference occurs with connection-making (Q2.8-13.8% in T1 vs. 5.0% in T2) and academic reading skills (Q2.9-12.6% in T1 vs. 3.8% in T2).

The above results indicate that students generally felt that participating in the Reading Circles activity was a positive contributor to their academic skill development.

Questions Concerning Writing Skills

Question 2.10- Notetaking collaboratively helped us write the key takeaways (skip if you did not take notes collaboratively).

Course Term	Positive	Neutral	Negative
2022W1	78.0%	13.4%	8.5%
2022W2	83.6%	15.1%	1.4%

Question 2.11- Writing out the key takeaways was beneficial to my understanding of the articles.

Course Term	Positive	Neutral	Negative
2022W1	74.7%	5.7%	19.5%
2022W2	78.7%	11.3%	10.0%

Figure A4

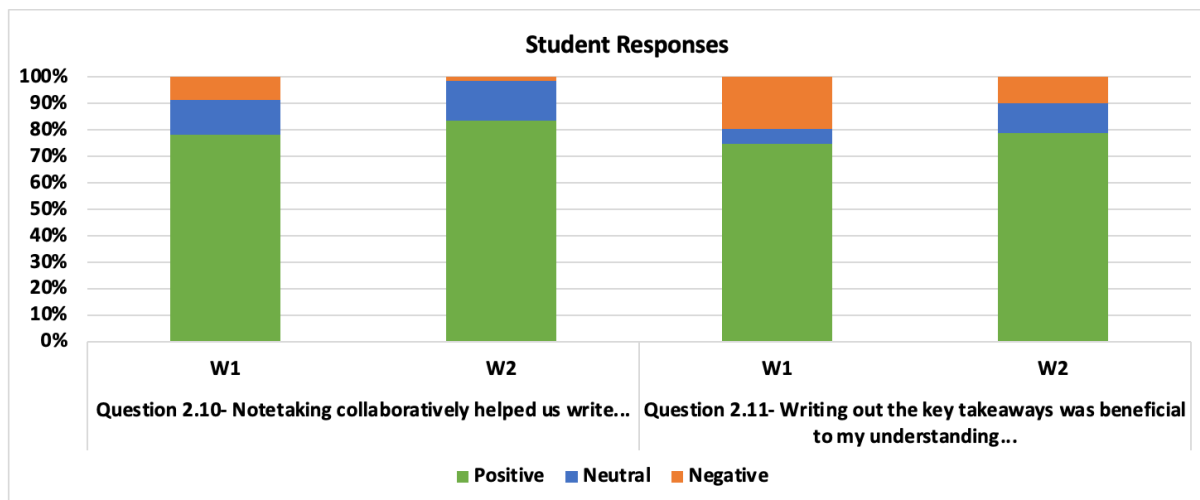


Figure A4: Student Responses are presented below with respect to questions, with each colour showcasing a different sentiment and its respective semester.

Most students agreed that notetaking collaboratively (78.0% in T1 and 83.6% in T2) and writing the key takeaways (74.7% in T1 and 78.8% in T2) was beneficial to the final product and to their understanding of the scholarly articles. A noticeable difference in the negative sentiment

category exists when students responded to Question 2.10 (8.5% in T1 and 1.4% in T2), indicating a change in sentiment over the terms.

Overall, these results indicate that most students, were able to engage in collaborative learning (82.8% from T1 and 77.5% from T2), write collaboratively (78.0% from T1 and 83.6% from T2), engage in academic reading (75.9% from T1 and 88.9% from T2), and use the instructor's guidance as a tool (70.9% from T1 and 77.5% from T2).

Table A1 below provides detailed data of students' responses. To allow for more efficient data analysis, "strongly disagree" and "somewhat disagree" were grouped as negative; neither agree nor disagree or disagree were grouped as neutral; and agree and strongly agree were defined as positive on the scale. P-values were calculated via a chi-square test of independence to discern the effect of a student's course term on their sentiment.

Table A1**Student Answers for Question 2 With Regards to Semester**

Statement	Positive		Neutral		Negative		P-Value
	2022W1	2022W2	2022W1	2022W2	2022W1	2022W2	Statement Response vs. Term
Question 2.1- Collaborating with other students in this group activity benefitted my learning.	82.8%	77.5%	4.6%	17.5%	12.6%	5.0%	0.00960*
Question 2.2- This activity helped me learn to work collaboratively.	78.2%	73.8%	11.5%	17.5%	10.3%	8.8%	0.229
Question 2.3- Rotating between roles was beneficial for my learning.	82.8%	75.0%	3.4%	18.8%	13.8%	6.3%	0.00288*
Question 2.4- If I had a choice, I would collaborate on group work	54.0%	56.3%	25.3%	28.3%	20.7%	15.0%	0.614

online like this again.							
Question 2.5- Communicating with my instructor about the activity was important.	57.5%	65.0%	27.6%	26.3%	14.9%	8.8%	0.417
Question 2.6- Having the instructor's guidance was helpful for our group work process.	70.9%	77.5%	14.0%	17.5%	15.1%	5.0%	0.0946
Question 2.7- This activity helped me develop my critical skills.	71.3%	82.5%	13.8%	8.8%	14.9%	8.8%	0.228
Question 2.8- This activity helped me make connections between the articles and real-world ideas and other scholarly work.	79.3%	85.0%	6.9%	10.0%	13.8%	5.0%	0.135
Question 2.9- This activity developed my	75.9%	88.8%	11.5%	7.5%	12.6%	3.8%	0.0649

academic reading skills.							
Question 2.10- Notetaking collaboratively helped us write the key takeaways (skip if you did not take notes collaboratively)	78.0%	83.6%	13.4%	15.1%	8.5%	1.4%	0.131
Question 2.11- Writing out the key takeaways was beneficial to my understanding of the articles.	74.7%	78.8%	5.7%	11.3%	19.5%	10.0%	0.127

* indicates significant chi-square test of independence result

Question 2 Discussion

Questions 2.1-2.11 of the survey asked students "how much they agreed or disagreed with statements about their experience learning with peers during the Reading Circles collaborative activity". We noticed that the results for Q2.1-2.11 had a higher number of negative responses in T1 when compared to T2. In particular, Questions 2.1 and 2.3 showed a significant difference between terms with p-values of .0096 for Q2.1 and .0029 for Q2.3. One possible explanation for the lower means is that although the respondents to the survey are all first-year students, those from T1 are experiencing their very first term as university students. Meanwhile, those from T2 have already completed their first term.

It is important to mention that students from T1 are entering university and that the Reading Circles activity takes place in the beginning of the term (weeks 2,3, and 4). These students are likely still adjusting to post-secondary education and could be less familiar with scholarly articles and collaborative writing involving critical discussions and in-depth

understanding of these articles. This could explain the noticeably more negative experience T1 students have when compared to T2 students during the Reading Circles activity. On the other hand, the results are different in the second semester (T2), where there was a higher number of positive responses to Q2. This change could be related to the fact that these students might have been exposed to scholarly discourse and collaborative work during their first term in university and, thus, could more easily adjust to the Reading Circles activity. Since the surveys were conducted during two semesters only, further studies are needed to find out if such differences between T1 and T2 persist or are influential in shaping student experiences relative to semester. Future evaluations can explore these issues and inform changes in WRDS150B activities and in other courses to adjust to students' needs and improve their learning experience.

Question 3- Rate how much you agree or disagree with the following statements about peer and self-assessment in the "Reading Circles" activity.

Questions Concerning Peer Assessment

Question 3.1- Doing peer-assessment helped my own learning.

Course Term	Positive	Neutral	Negative
2022W1	54.1%	21.2%	24.7%
2022W2	51.9%	26.6%	21.5%

Question 3.2- I would recommend using peer-assessment in the future.

Course Term	Positive	Neutral	Negative
2022W1	75.3%	16.5%	8.2%
2022W2	78.5%	16.5%	5.1%

Question 3.3- Peer assessments made each student's grade fairer.

Course Term	Positive	Neutral	Negative
2022W1	76.5%	22.4%	1.2%
2022W2	78.5%	15.2%	6.3%

Figure A5

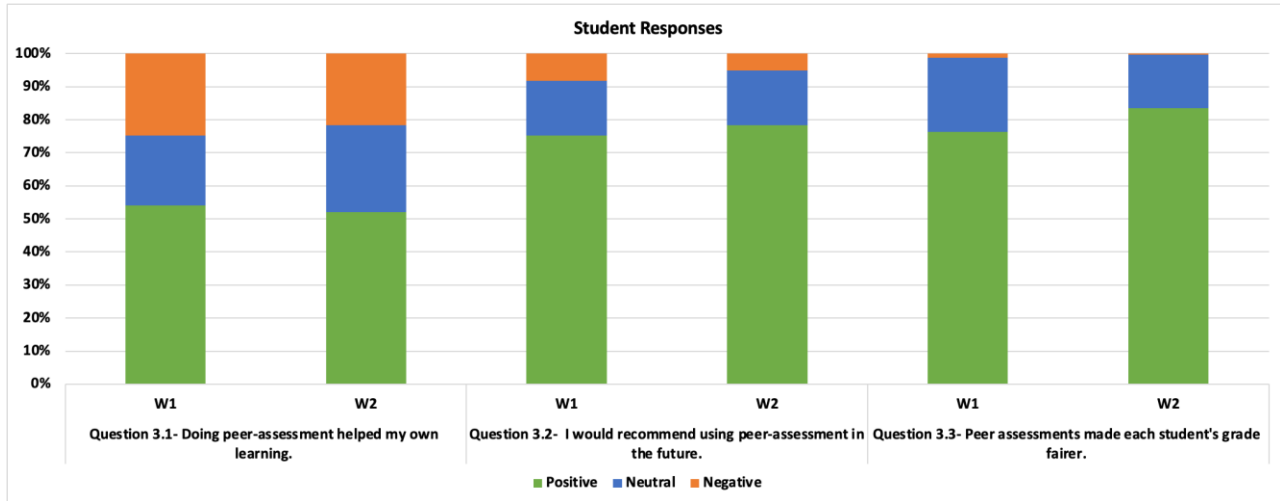


Figure A5: Student Responses are presented below with respect to questions, with each colour showcasing a different sentiment and its respective semester.

The results above indicate that there was no consensus regarding students' perception of how helpful peer assessment is for their own learning, as sentiment is mixed between the positive, neutral, and negative categories (54.1% in T1 and 51.9% in T2). These findings could be attributed to the peer assessment being conducted at the end of the Reading Circles activity where students didn't have future opportunities to integrate the feedback they received.

However, student sentiment findings above show that most students agreed that they would recommend peer assessment in the future (75.3% in T1 and 78.5% in T2), and that they made student grades fairer (76.5% in T1 and 78.5% in T2).

Overall, most students seemed to express a positive sentiment towards peer assessment, particularly in relation to making grading more fair. Implementing peer assessment after each of the Reading Circles may be beneficial to students' learning by providing additional opportunities for feedback.

Questions Concerning Self-Assessment

Question 3.4- Self-assessment is an important part of this activity.

Course	Positive	Neutral	Negative
Term			

2022W1	72.9%	15.3%	11.8%
2022W2	79.7%	11.4%	8.9%

Question 3.5- I would recommend using self-assessment in the future.

Course Term	Positive	Neutral	Negative
2022W1	71.8%	20.0%	8.2%
2022W2	79.7%	13.9%	6.3%

Figure A6

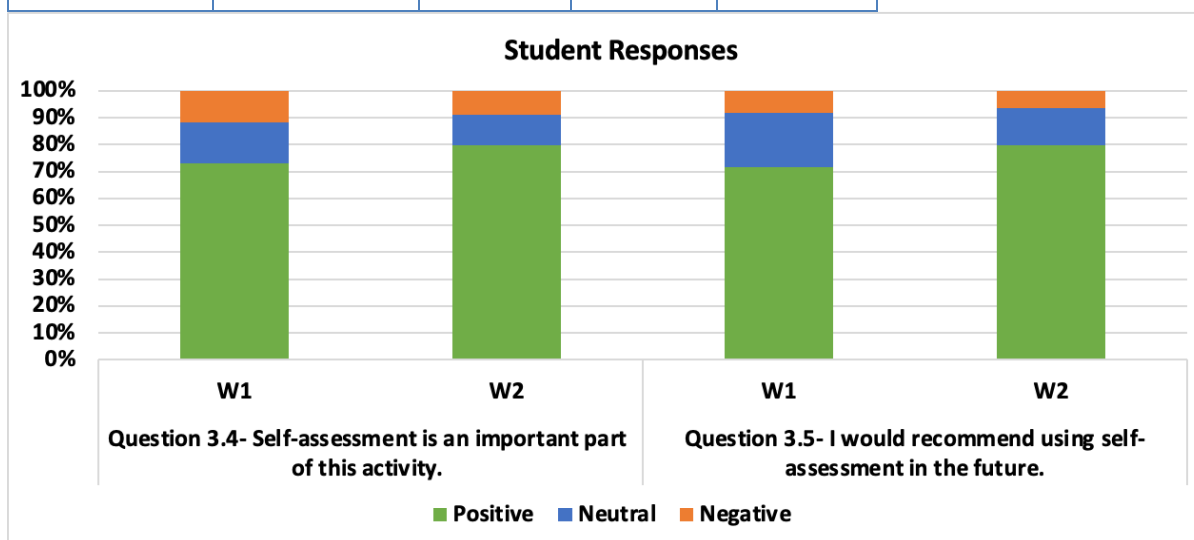


Figure A6: Student Responses are presented below with respect to questions, with each colour showcasing a different sentiment and its respective semester.

Regarding self-assessment, most students expressed a positive sentiment towards the notion that self-assessment is integral to the Reading Circles activity (72.9% in T1 and 79.7% in T2), and that they would recommend it in the future (71.8% in T1 and 79.7% in T2).

Questions Concerning the Use of peerScholar

Question 3.6- peerScholar made it easy to provide feedback on peer contributions.

Course Term	Positive	Neutral	Negative
2022W1	95.3%	4.7%	0.0%
2022W2	91.1%	5.1%	3.8%

Question 3.7- It took a long time to learn how to use peerScholar.

Course Term	Positive	Neutral	Negative
2022W1	7.1%	2.4%	90.6%
2022W2	11.4%	6.3%	82.3%

Question 3.8- I would recommend my instructor continue using PeerScholar in the future.

Course Term	Positive	Neutral	Negative
2022W1	81.2%	15.3%	3.5%
2022W2	82.3%	13.9%	3.8%

Figure A7

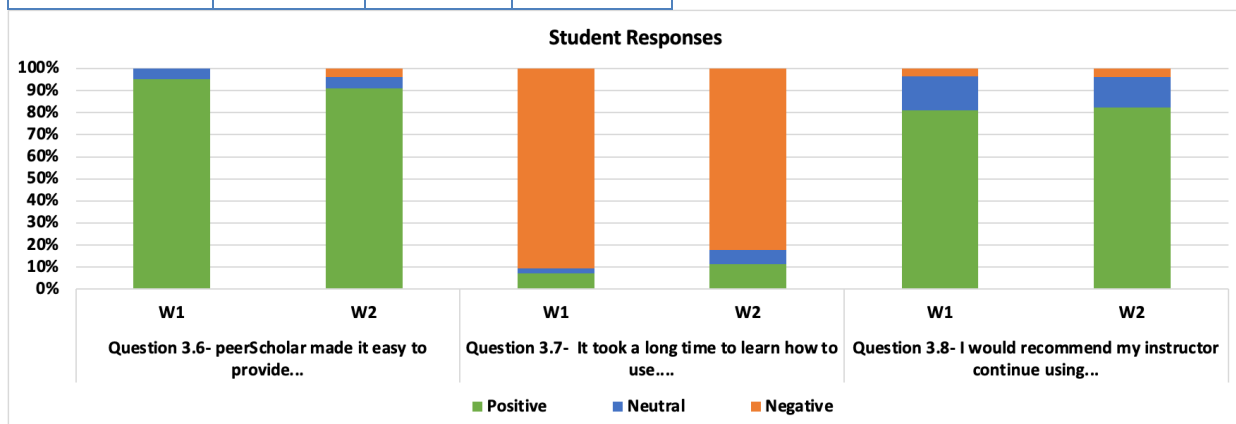


Figure A7: Student Responses are presented below with respect to questions, with each colour showcasing a different sentiment and its respective semester.

Most students (95.3% in T1 and 91.1% in T2) responded positively to the idea that peerScholar allowed for easy feedback writing on peer contributions, and that peerScholar should be reused in the future as a means of peer assessment (81.2% in T1 and 82.3% in T2). Students also found peerScholar easy to adjust to (90.6% in T1 and 82.8% in T2)

Table A2 was prepared using the same bucketing standards as table A1. As such, statements of a 4/5 level are placed in the positive category, 3 level statements are placed in the neutral category, and statements of a 1/2 level are placed in the negative category. P-values calculated by the Qualtrics stats-IQ platform are shown to highlight any statistical significance of course term on sentiment.

Table A2

Student Answers to Question 3 With Regards to Semester

Statement	Positive		Neutral		Negative		P-Value
	2022W1	2022W2	2022W1	2022W2	2022W1	2022W2	Statement Response vs. Term
Question 3.1- Doing peer assessment helped my own learning.	54.1%	51.9%	21.2%	26.2%	24.7%	21.5%	0.453
Question 3.2- I would recommend using peer assessment in the future.	75.3%	78.5%	16.5%	16.5%	8.2%	5.1%	0.716
Question 3.3- Peer assessments made each student's grade fairer.	76.5%	78.5%	22.4%	15.2%	1.2%	0.3%	0.128
Question 3.4- Self-assessment is an important part of this activity.	72.9%	79.7%	15.3%	11.4%	11.8%	8.9%	0.593
Question 3.5- I would	71.8%	79.7%	20.0%	13.9%	8.2%	6.3%	0.488

recommend using self-assessment in the future.							
Question 3.6- peerScholar made it easy to provide feedback on peer contributions.	95.3%	91.1%	4.7%	5.1%	0.0%	3.8%	0.191
Question 3.7- It took a long time to learn how to use peerScholar.	7.1%	11.4%	2.4%	6.3%	90.6%	82.3%	0.261
Question 3.8- I would recommend my instructor continue using peerScholar in the future.	81.2%	82.3%	15.3%	13.9%	3.5%	3.8%	0.967

Effect of Peer Assessment on Student Experience

Regarding peer assessment, P-values show no significant difference in sentiment with respect to the different terms. Although student responses showed mixed sentiment regarding the benefits of peer assessment in relation to their own learning, the majority responded positively when asked if peer assessment made it easy to provide feedback on peer

contributions and if peer assessment made grading fairer. Results of questions 3.4 to 3.8 indicate that most students felt the peer assessment activity helped to increase grade fairness, as it allowed for an accurate representation of peer contribution. This data supports the integration of peer and self-assessment into the activity beginning in T1.

Qualitative Evaluation of Student Experience

The qualitative component of the student experience survey asked students to complete statements regarding the Reading Circles activity and key takeaways.

Objective Completion and Student Findings

Question 4.1- “The main thing I learned working collaboratively in the “Reading Circles” activity was...”

To investigate student findings about group work, students were asked to complete the latter statement. From our analysis of students' answers, three main themes emerged: **(1)** diverse perspectives, **(2)** collaboration/group work, and **(3)** oral discussion skills.

(1) Diverse Perspectives

When approaching collaborative work in the Reading Circles activity, students highlighted the opportunity to learn how to listen to and consider other students' ideas during discussion regardless of whether they were in agreement, and how this helped improve the final written product along with their own understanding.

“How to openly welcome the opinions and standpoints of other individuals, and also how to allow for your own opinions to be critiqued and investigated.”

“To look at the article from multiple viewpoints that it is very important to be able to communicate in a way that leads into discussion through open ended questions/points”.

“Everyone's different writing style can lead to an interesting and engaging paragraph.”

(2) Collaboration/Group work

When addressing work division, students shared that the activity helped them to learn how to communicate with group members, work towards mutual understanding and develop strategies to provide inclusive and constructive feedback. Some student quotes include:

“Time management and commitment required for the group in order for such a group to succeed as a whole.”

“It is easier when roles are divided and due to the roles being divided people are forced to a certain extent to contribute and one person does not have to carry the workload.”

“Working efficiently by splitting the work up based on time we were free was helpful.”

“How to create a collaborative writing piece where we can provide feedback to someone's writing and improve the grammar and flow. It is imperative to treat everyone's writing with respect, but provide constructive feedback on how to improve the writing.”

(3) Oral Discussion Skills

Furthermore, students discussed their personal development which allowed them to better express their own ideas orally, while also improving the efficiency of mutual idea sharing between group members. Some student quotes include:

“How to structure discussions to in a way which allows each person to contribute different ideas.”

“The more voices that participate in small discussions the better the conversation moves along, as long as no one is overpowering or inconsiderate of others ideas”

“Paying attention to important details and ideas that were discussed, and decide which ones would contribute to the discussions better.”

“To integrate a diverse range of content and materials, as well as to connect our new insights resulted from oral discussion to the original article. Throughout the process, we learnt to expand our discussion to a broader field.”

“How to listen to each person’s ideas, integrate them and come to a consensus about what to write down.”

Additionally, some other noticeable themes emerged, including reading and analytical skills, writing skills, note-taking, ideas, and real-life connections, along with a category used for comments that did not relate to any theme. This data suggests students were able to share their personal perspective on information during the Reading Circles activity.

Question 4.2- “4.2 The main thing I learned writing the key takeaways collaboratively was...”

The open-ended question above addresses student experiences and newly acquired skills surrounding work ethics in collaborative writing. From the student’s answers, three main themes emerged; **(1)** writing skills, **(2)** collaboration/ group work, and **(3)** reading and analytical skills.

(1) Writing Skills

Many students associated their experience of writing the key takeaways in their groups with a newfound ability to better synthesize ideas, write succinctly, and form cohesive conclusions as a group. Some student quotes include:

“Summing up the different ideas we all had into one paragraph, and one that wasn’t too short or lengthy at that. It also helped me understand the importance of multiple facets to a reading, not just the key idea. And especially the linker of ideas role helped us gain an insight by relating it to something we knew elsewhere.”

“How to structure different ideas in a group discussion together, and how to filter out extra off topic information from the discussion and only include relevant details. It also helped me with the skill of linking different ideas together to form a cohesive paragraph.”

“How to orchestrate scholarly voice and present each person's ideas clearly and concisely.”

(2) Collaboration/ Group Work

The student consensus concerning group work ethics agreed that writing the key takeaways together allowed them to improve/ examine the efficiency of their collaborative work through mutual feedback sharing and group decision making. Some student quotes include:

“How to create a collaborative writing piece where we can provide feedback to someone's writing and improve the grammar and flow. It is imperative to treat everyone's writing with respect, but provide constructive feedback on how to improve the writing.”

“In order to collaborate fairly in distributing each of our main ideas to the key takeaways, it's important to communicate and discuss verbally what we think is important to add to it.”

(3) Reading and Analytical Skills

Students noted that the key takeaway activity improved the way they analyzed an academic piece of writing critically to extract its main ideas while translating their takeaways from the reading activity into writing. Some student quotes include:

“The ability to evaluate the key features of these studies and dictate which parts are more 'important' than others.”

“Learning to be able to find the main idea in an article and being able to link it to other articles or other ongoing issues in the world.”

Other themes that emerged from student answers include diverse perspectives, oral discussion skills, self-reflection skills, and others. Overall, the emergent codes suggest that students achieved most of the expected objectives while writing the key takeaways.

Challenges and Suggestions

Question 5- “What challenges did you experience in the "Reading Circles" group activity? What suggestions would you give to your course instructor to improve it?”

For this report's purposes, we will present each of the two sub-questions that comprise Q5 separately.

Q5.1-Challenges- “What challenges did you experience in the "Reading Circles" group activity?”

To help improve future students' experiences when partaking in the Reading Circles activity, students were asked to clarify any personal, circumstantial, or logistical challenges that hindered their ability to collaborate successfully with other students to write an ideal final product. Additionally, students could provide their feedback on how the activity can be changed to reduce or eliminate the effect of these challenges on students. After collecting all the answers, the following themes were identified; **(1)** writing contribution, **(2)** collaboration, **(3)** no challenges, **(4)** activity structure, **(5)** academic writing standards, **(6)** Time management, **(7)** peer assessment, and **(8)** discussion.

(1) Writing Contribution

During the Reading Circles activity, many students claimed that dividing up the collaborative writing workload fairly was difficult, leading to disparities in the share of each students' contribution to the final written product. Some notable quotes include:

"In the "Reading Circle" activities, it was very challenging to write a paragraph as a group. If the work is split up and everyone contributes equally, it doesn't flow well and does not end up being cohesive. However, if one person is assigned to write it, which is the only way to create an exceptional paragraph, they are forced to do all the work."

"It was hard when it comes to writing together since we did different roles and had different lines of thoughts, which is just human nature. Although discussing together in and out of class helps a bit, I sometimes struggle to contribute my own ideas since they don't align with what we are currently working on. However, it's fun to learn and understand how others think and to back down sometimes."

(2) Collaboration

Students often expressed that interpersonal or logistic conflicts often arose during collaboration, leading to hardships in work completion. These hardships often seemed to affect discussions, communication, and work ethics. Some notable quotes include:

"Sometimes the group activity doesn't communicate as much and even if you try talking to them, they will not be ready to listen to you."

"I think a challenge I had is just with the participation of other people. It was difficult when people were away during the discussions, as well as limited participation in the discussions. At first, it was hard to collect ideas from each other to incorporate into the key takeaways, and we definitely worked on this for the second discussion."

"It was challenging to ensure everyone actively participated in the activity because I have no control over what other people do. I think the format of it was pretty good, just individual's motivational levels could use some improvements."

(3) No Challenges

Some students claimed they did not experience any noticeable challenges during the activity, suggesting their group work experience was either ideal or non-compromised. Some notable quotes include:

“I didn't find any challenges in the Reading Circles group activity.”

“I don't think our group or I personally faced any challenge, it was a smooth process with a wonderful group dynamic.”

(4) Activity Structure

Whereas some of the challenges students experienced were related to their groupmates, several students claimed their main grievance during the activity was rooted in the structure of the Reading Circles, and how they were assessed by the instructor. These challenges include absence of familiarity with the marking rubric, product expectations, and writing standards regarding various sources. Some notable quotes include:

“I found it difficult to figure out exactly what the instructor was looking for. We thought we had incorporated all of the feedback from the first reading circle, but we ended up going 'too far' and lost what we had done well in the first circle.”

“In our experiences, we found that the requirements of the final discussion paragraph were not adequately outlined in the instructions. For example, it was unclear how formal the document should be, what components from each role were necessary to include, from what perspective the writing should be presented, and what the paragraph's reader can be assumed to know.”

“A challenge was knowing the citation expectations for the first reading circle. Once these were explained during the second reading circle, we did a lot better on the second group component.”

(5) Academic Writing Standards

When addressing logistical challenges, some students expressed that their lack of familiarity with the rigid expectations that come with qualitative academic writing and research paper analysis was an obstacle to efficiently writing the key takeaways collaboratively. Some notable quotes include:

“A challenge we experienced was not knowing how to format the references correctly. We struggled with this for both reading circles, however we may have forgotten to look at the references in the example reading circle, which we could have used as a guide.”

“It was not explicitly mentioned what specific techniques were to be used in writing the key takeaways. For example, the use of reporting expressions.”

“Reading and translating the low level information into actual data is difficult but these articles were probably still easiest to understand.”

“The articles that were required to read were the biggest challenge. I am unfamiliar with reading research papers so it took more than one time to read through each article in order to understand the topic.”

(6) Time management

Although closely related to activity structure, students distinctly mentioned time management in several answers. Time management challenges often affected how students were able to use up their group and individual time during in-class and out-of-class group work, leading to drawbacks in deadline consideration and workload completion. Some notable quotes include:

“I experienced the trouble of finding time to work with others outside of class time to finish the key takeaways.”

“Reading the whole article with other assignments going on top of other courses.”

(7) Peer Assessment

Several students expressed that Peer Scholar's unfamiliar nature and how it was used impaired the credibility of assessment provided to group mates. Some notable quotes include:

“Despite us providing the peer assessments, there may be certain members who were unaware of the increased role others took (given that they were less engaged), and therefore, their peer assessments might be less accurate.”

“It was a little challenging at first figuring out how to use PeerScholar but I managed to figure it out.”

(8) Discussion

A minority of students separated discussion from general challenges in collaboration, noting that challenges involved struggling to participate and facilitating discussion in a fair and efficient manner during class time. Some notable quotes include:

“A challenge I faced was being unable to move our conversation from just talking about the article to discussing what we think about the article.”

Overall, the challenges section highlighted several notable takeaways that help to identify areas where enhancements to the activity design may have benefits, including: grading fairness, effort-based conflict, interpersonal communication, rubric clarity, feedback ambiguity, and peer knowledge and work distribution gaps.

Q5.2- Student Suggestions- “What suggestions would you give to your course instructor to improve it?”

In addition to any student challenges, the question also prompted students to provide any suggestion for how such challenges could be addressed to improve the activity. Students addressed the theme of **(1) writing contribution** and **(8) discussion** by suggesting that roles should be made to allow for fair work distribution between group members during their discussion along with the written final product, while also relieving pressure from students that took a leadership role in the group. Feedback suggested- **(A)** creating an instructor/ peer-based checkpoint during the activity that reviews student knowledge gaps, **(B)** reduction of contribution gaps during discussion via the instructor occasionally checking in to ask group members about their ideas, **(C)** and extending/ changing reading group structure to ensure that all group members have the chance to participate in each role. Some notable quotes include:

“I encountered a slight challenge in each group member's different depth of understanding of the article. I think it could have been valuable to review the article first in class, before starting our individual components.”

“It was difficult at times to ensure everyone received the chance to speak, as some individuals are more quiet and reserved than others. I would suggest that in order to ensure everyone is able to provide insight, that the instructor go around to each group and ask each member to discuss a brief point they believe is essential to the discussion, so that everyone has the chance to give their stance.”

“I thought that the structure of rotating roles could be improved. I think that the roles should be redesigned to provide more structure to how discussions should proceed. For example, if the structure was instead a series of questions, and each person would answer a specific aspect of the question, and then discuss how they are related.”

“I think the main problem was that we had a 5 person group so one of us had to do the same role twice and we didn't get to do each role. I think if you were to do reading circles again I would suggest doing it for 5 readings.”

Additionally, students combined **(2) collaboration** and **(6) time management**, due to their synonymous role in work outside of the classroom. Students suggested **(A)** deadline changes to allow for more group work time, **(B)** introduction of a peer assessment/survey between reading groups to allow for improvements in work ethic, and **(C)** allowing for students to choose their groups as a means of preventing incompatibility-based conflict. Some notable quotes include:

“I think a peer assessment between the first reading circle and the second would give students time to improve their work in the group. I also think the final paragraph shouldn't be due the same day as the discussion.”

“All group members having different schedules, so the best work was done in class during the activity but after that we had to each work on our own to complete and finalize the paragraph, if possible some extra time in class to edit the paragraph together would have been helpful.”

“Let people choose groups based on motivation, working late/early, etc.”

“It would definitely be the 2pm deadline contribution on Sundays. I wished this was extended a little bit longer to maybe 5pm or later but not too late to give individuals more time to elaborate on what we read on are reading circles, on top of the many assignments assigned to us in other classes. Another way to improve this would also be making it due before the weekend like on Friday.”

“I sometimes found it difficult to coordinate with my group members to complete writing our key takeaway paragraph after class as everyone has different schedules. I propose to the instructor to provide just 15 more minutes for students to write so that we have more time to collaborate with each other and put our best foot forwards.”

Regarding **(4) activity structure** and **(5) academic writing standards**, students mentioned that they often have a lack of familiarity with the reading circles activity, as it is the first graded assignment in the WRDS150B course, and they lack the complete knowledge to write academically before entering the class. Thus, students often suggested **(A)** improving the

grading criteria to enhance student understanding of the assignment's goals and requirements, **(B)** providing students with clear and direct feedback on what writing deficiencies can be improved by the next reading circle, and **(C)** reducing activity difficulty during its first iteration to allow for consistent improvement in the following reading circle. Some notable quotes include:

"It was hard to judge if our paragraph was suitable to the instructor since the rubric is a bit unclear. I would have liked to have received feedback on our final draft prior to submission."

"I would suggest providing more opportunities to practice Reading Circles or perhaps grading them on participation because there is a steep learning curve in working collaboratively."

"More comments on actual improvements that could be made would be helpful and providing a marked rubric can help students with understanding the exact points needed to be improved."

"The final paragraph was difficult to write as there was 5 people working on it. It was too many people contributing to one small thing and it resulted in writing that may have been choppy or not well put together. I would recommend everyone writes their own paragraph. This also holds people more accountable to do work."

"I would make the criteria more clear on how the summary paragraph should be written. Maybe an oral reminder of the expectations for the summary during the first reading circle would produce a greater quality of writing."

"I think it may be better if we could have one trial reading circle with our group by instructor going through what she expects."

Additionally, students claimed that **(7) peer assessment** quality can be improved by **(A)** enforcing their completion out of class to reduce the presence of bias. Some notable quotes include:

"Peer Scholar should be done asynchronously so students don't feel like their peers are looking over their shoulders when writing constructive feedback."

Furthermore, some feedback addresses other goal and non-goal-related topics, including student discontent with the collaborative group work software, the connection between student motivation and interest, and order of content introduction prior to graded activity presence.

“Try using a different software other than Etherpad. It's not conducive to group work, and I felt like it slightly hindered our collaboration during the key takeaways write-up.”

“A suggestion for improvement is to get a vote on what type of articles the class would like to read, that way everyone is more interested in the article and the topic.”

“Some articles seemed to be bias with their opinions, and not many were based on statistical analysis.”

“The ‘noting for gist’ strategies could have been presented to the class previous to the first reading being assigned.”

Overall, students seemed to recommend peer scholar use as a tool to mitigate collaborative conflict, that the rubric become more specific, and that deadlines be extended to allow for a lesser time constraint.

Key Findings from Qualitative Student Responses

After analyzing student comments on the qualitative section of the survey, additional takeaways emerged. Generally, students often associated the presence of diverse perspectives, discussion, and collaborative problem-solving as being benefits of collaborative learning with time management, disparities in contribution and communication being some of the challenges that were identified. Students highlighted how participating in the Reading Circles activity as part of a group contributed to producing a more efficient and well-rounded final product, however, it did introduce difficulty within groups based on disagreement and stylistic synthesis. Students noted that they were unfamiliar with the academic writing features required for the activity and that participating in the activity led to an increased ability to apply these features after the Reading Circles activity. Finally, students’ suggestions often highlighted a need for instructor intervention through indirect feedback about internal group conflict or via support during group discussion. Students also suggested that the instructor revise marking criteria to reflect clear

expectations along with more opportunities for earlier feedback and instructor modeling. To address time management and communication challenges, students suggested more in-class time be allocated to allow them to edit the final paragraphs together before submitting.

Focus Group Results

Focus Group Summaries

After student responses were clustered and summarized, summaries with similar themes were merged and new questions formed. Each new question includes the original questions from which it was merged. These findings are presented below.

1. What skills did students generally learn? (QB1, B8 merged)

Regarding which teamwork skills were gained during the Reading Circles activity, students mentioned:

- Skills relevant to group communication and discussion of ideas (I.e., listening, communication, brainstorming);
- Skills that helped learners improve their ability to provide peer feedback;
- Skills that are beneficial to writing both individually and collaboratively (I.e., balancing ideas, summarizing);
- Skills that are used to organize and problem-solve during group work (I.e., division of roles, active coordination);
- Skills essential to optimizing logistical aspects of group work (I.e., time management);
- Personal skills that are critical to culturing a healthy group environment (I.e., respecting, compromising); and
- Skills that are unique to academic work environments requiring orderly and efficient conduct (I.e., presentation skills, citation skills).

Students highlighted several strategies when synthesizing different voices to create a cohesive paragraph. Some chose a designated person to write the paragraph and explained that this ended up eliminating the need for stylistic synthesis and preventing any conflict based on collaborative disagreement during writing. This strategy was done while still incorporating peer ideas, by holding a comprehensive discussion of paragraph goals, and themes prior to it being written. Meanwhile, others prepared a paragraph plan outlining work division and paragraph ideas, then wrote it collaboratively. By being considerate to peer ideas and compromising when needed, classmates were able to synthesize their voices to form a multi-faceted and cohesive paragraph.

2. How transferrable were the skills acquired during the reading circles activity? (QB1b)

Generally, students seemed to agree that the teamwork skills they learned and/or improved upon during the Reading Circles activity apply to various other academic and non-academic work environments. They noted that critical collaborative thinking used during the Reading Circles is inseparable from group work, as it forms a basis for a more efficient and determined collaborative work environment. However, they claimed that skills specific to collaborative writing (e.g., style synthesis, joint editing) are not as transferable due to their highly specific nature.

3. Did the reading circles activity allow for students to learn conflict management skills? (QB1c)

All interviewed reported having experienced a form of conflict that affected their group's ability to collaborate and hand in the final submission efficiently. Participants claimed to have experienced conflicts stemming from personal disagreement over work division, logistics; members' challenges completing their work, difficulty in combining diverse perspectives and writing styles into a cohesive final submission, inability to agree on a group consensus during discussion, and inexperience with academic readings. To resolve such conflicts, students used problem-solving skills (e.g., via conversation, compromise, new work division), contacted with the instructor, or used patience (waiting the conflict out).

During conflict, participants highlighted the instructor's importance in holding students accountable for completion of their respective roles while also remaining approachable, and offering them realistic options to resolve said conflicts. Furthermore, they claimed the instructor should have a minimal role in resolving conflict, so as to not interfere with any internal group learning processes.

4. How effective was the Reading Circles Activity in reinforcing and optimizing collaborative learning? (QB1a, B10)

Most participants claimed they had the individual skills required to partake in a collaborative writing activity (i.e., communication skills, discussion skills). However, they note these skills weren't fully developed/adapted to a collaborative, academic writing environment,

clarifying that partaking in the Reading Circles activity helped them become more familiar with the skills required for collaborative writing, while also developing and strengthening their knowledge. Some claimed that they gained a newfound skill during the Reading Circles activity that allowed them to engage in collaborative writing. Some students mentioned that collaborative writing is a skill subset specific to WRDS150B, highlighting its critical nature to the completion of the reading circles activity.

One student highlighted how their previous secondary school experience with academic reading and analysis (e.g., noting for gist, takeaway and idea synthesis) was insufficient. Thus, participating in the reading circles activity allowed them to explore these skills and develop self-confidence, which transferred onto their WRDS2150B final research paper, allowing for more efficient and meaningful writing.

5. What were identifiable student takeaways about the prospects of collaborative work? (QB2, B2b)

Students seemed to list several advantages and disadvantages to completing writing the key takeaways as a group.

These advantages included:

- Various more perspectives on the same topic which lead to a more multi-faceted final product;
- The ability of several people to provide editing and writing support in the group; and
- The group work learning process allows for newfound familiarity with the guidelines for collaborative writing.

The disadvantages included:

- The workload being unfairly shared, with the role of the final submission writer often being allocated to one person;
- The presence of Individual writing styles increases the difficulty of forming a cohesive final product;
- The difficulty of agreeing about logistic and thematic consensuses, and simultaneous writing collaboration; and

- The act of providing peers with constructive feedback, possibly inducing interpersonal conflict.

Participants acknowledged that it was worthwhile to complete the Reading Circles activity as a group, citing that the collaborative work environment created a shared understanding of class readings that reduced their peers' respective knowledge gaps. Additionally, they claim that over time, the groups' efficiency increases, resulting in a more positive educational experience for students.

6. Did students become accustomed to the habit of collaborating to write a final product? (QB2a, B4a)

Most participants seemed to agree that the final product would be of a higher quality when completed in a group, citing the following reasons:

- A diverse set of ideas provided by peers during discussion helps create a well-rounded final submission;
- By sharing the workload through roles, peers can provide a more discerning analysis on their given role, rather than having to analyze the full scope of information, relieving pressure present during individual work.
- Having other group members who are able to provide feedback, address peer knowledge disparities, and help with editing during the assignment creates a more effective approach to writing the key takeaways.

Additionally, participants also highlighted a distinction between individual and group work. Whereas group work often creates a more insightful final product, individual work tends to be more time efficient, as it eliminates the need for collaborative decision making and stylistic synthesis.

Most students noticed more efficiency at working in a group as they became more familiar with their peers' working styles and the Reading Circles assignment's requirements; and/or with the strategies needed in groupwork. Some seemed to experience decreases in efficiency as peers becoming more familiar during group work might reduce their sense of responsibility within the group, leading to an unprofessional work environment. Additionally, classmates cited the increase in class reading difficulty as a factor in declining efficiency.

7. Were students more involved in the class post-Reading Circles? Were they better suited to less instructor support during collaboration by utilizing mature social and problem-solving habits? (QB3, B3a)

Students valued the presence of continuous peer interaction and group work, claiming that this increased their sense of belonging or community in the classroom. They reasoned this by asserting that having a reliable group provided them a source of academic and personal support when necessary while also reducing social barriers caused by anxiety surrounding conversation with their peers. Furthermore, some participants claimed that improving their sense of belonging, having peers with varied personality types, writing styles, and work ethics ended up educating them about collaborative work and its expectations, thus forming the basis for future decisions they made regarding group/pair assignments. However, it was also noted that, although most students experienced a better sense of community because they worked with the same group in all three Reading Circles, a few felt this familiarity made it difficult to meet other peers outside of that group

One student cited their experience of attending class and sitting with the same people each class, mentioning how this helped them feel closer to other classmates who had a similar experience, while also helping them form a familiar social routine during class. On the other hand, another student alluded that their experience of forming a social bond with the same group members reduced their chances of getting to know and working with other peers, which created a barrier to socialization.

8. Were students placed in a healthy collaborative environment? Was this a deciding factor in the quality of their final submission? (QB12, B11, B4, B7, B13)

Overall, students seemed to have positive experiences about remaining in the same group for the entirety of the Reading Circles. Yet, many of them suggested rotating members during the activity. Some claimed that the rotations of peers should be offered as an option because this could improve the learners experience for those who are in an incompatible group work environment, while others commented that this rotation could be beneficial to the collaborative learning due to a potential introduction to new working and writing styles.

One student claimed that after participating in the Reading Circles, their learning disability made it difficult to find compatible partners. They suggested that, before the activity, the instructor could ask learners to complete a survey to assess their compatibility and traits, thus allowing for formation of more efficient and less conflicted groups.

9. Were students satisfied with the instructor's ability to offer help during the Reading Circles? (QB5, B5a, B5b, B5c, B5d)

During group work, participants claimed that the instructor should solely be a mediator or problem-solver when necessary, acting to help groups undergoing conflicts or roadblocks due to unforeseen circumstances. Additionally, they suggested that the instructor should help groups initiate conversation during any in-class activities.

In relation to conflicting situations, students highlighted the instructor's importance in holding them accountable for completion of their respective roles, while also remaining approachable, and offering realistic options to resolve conflicts. Furthermore, they claimed the instructor should have a minimal role in resolving conflict, so as not to interfere with internal group learning processes.

Furthermore, learners generally agreed the instructor should be minimally involved with group work, highlighting that independent problem-solving of issues is beneficial to collaborative learning. Specifically, they mention the importance of the instructor acting to provide groups with clear expectations of what the final submission should look like.

10. Were Students Given the Appropriate Technology to Efficiently Work and Write in a Collaborative Environment? (QB6)

Whereas some participants were satisfied with the online collaborative tool's (Etherpad) features that allowed instructor supervision and contributor tracking, others experienced some challenges with the platform. Students described that tracking contributions on Etherpad was often difficult and highlighted its' complicated nature. Thus, some felt that this prevented grades based on Etherpad contributions from being fully representative of the individual work. Meanwhile, peers claimed to use various platforms to communicate (e.g. Instagram, Discord, Cellular Texting, and Google Docs) that were collaboratively chosen for ease of reaffirming accountability and personal communication habits and preference.

11. Did Students Feel That Their Individual and Collaborative Efforts Were Reflected in the Grading Scheme? (QB9)

While several students were dissatisfied with the grading's basis on a questionable reliable platform (Etherpad), some thought the assignment was graded fairly, and that it reflected student individual participation.

Discussion and Conclusions

Key Takeaways

Student Perceptions of the Reading Circles Activity

Student feedback substantiated that the Reading Circles activity is perceived as beneficial to student learning and an effective strategy for student collaborative skill development. Students indicated that their collaborative problem-solving, communication, and writing skills clearly improved during the activity. Students often cited that the influence of discussing diverse perspectives on the scholarly readings and writing the final submission led to personal development both in terms of course concepts as well as collaborative skill development. Through the process of peer negotiation about group management conflicts and the use of academic writing features themselves, students reported that they were better able to understand expectations for collaborative learning and academic writing while also gaining experience in navigating conflicts. Due to differences arising from each group member's previous knowledge, unbalanced workload sharing, negotiation disagreements, lack of accountability, contribution disparities, and logistical circumstances, students faced various learning challenges. As such, students highlighted their application of negotiation and collaborative learning skills and the availability of external help when conflicts occurred as integral to the group's management.

Views on Collaborative Writing

While students claimed that the final products they were able to create as part of a group was more multi-faceted and well-rounded than they could create individually, they noted that the complex nature of stylistic synthesis, group consensus formation, and feedback provision were skills they needed to practice. Regardless, learners argued that a submission formed during

collaborative work is distinct from one that is individually produced. They described that, although individual work may be more time efficient as it does not require peer discussion and negotiation, diverse perspectives introduced through peer discussion resulted in a more well-rounded final product.

Student Sense of Belonging

Participants claimed that by forming a group within the classroom that persisted across multiple weeks of the course, they felt more connected to peers which led to a positive impact on the sense of community in the class. A few students indicated a desire for the opportunity to work with different students outside of their group, but overall there was considerable support for having consistent groups across the Reading Circles activities. In an effective group, students reported a mutual understanding of differences in peer knowledge and effective navigation regarding different opinions. However, greater instructor feedback, guidance and role clarity was desired by some students, particularly where there were group challenges with workload distribution and motivation. One student mentioned that for those with learning disabilities, the instructor may need to be proactive to help them find compatible partners. Generally, students asserted that peer feedback using peerScholar was beneficial to address issues of grading fairness, however, a few noted that concern surrounding the possibility of worsening peer relationships because of negative feedback made it somewhat difficult task to complete.

Student Challenges

Although feedback was generally positive, students indicated a number of challenges associated with their experience in the Reading Circles activity. Some of the challenges identified include: a lack of peer compatibility, differences in workload distribution, and motivation or feelings of unfairness during marking. They highlighted that work ethics, gender identity, knowledge discrepancies, and learning barriers might have contributed to compatibility issues. As such, students claimed that completing work with the same peers would only be satisfactory if such factors did not hinder the group. Regarding marking, learners highlighted that the online collaboration platform tracking only allowed the clear identification of individual contributions when students were signed into the program. This made it difficult for both the instructor and group members to distinguish each student's efforts when marking and self-assessing participation using that feature.

Overall Takeaways

Overall, students perceived that the Reading Circles activity helped them acquire transferable skills that will continue to aid them in other academic and non-academic collaborative environments, beyond WRDS150B's unique collaborative writing niche. Thus, the results of both surveys and focus groups demonstrate that students consider the Reading Circles activity helpful to their personal and academic development.

Student Suggestions

Suggestions Regarding Activity Structure

Student feedback surfaced several potential logistical and pedagogical changes that could benefit the student learning process. These suggestions included:

- Within groups, learners recommended that the instructor offer the possibility to switch groups for each Reading Circle, which would reduce hardship caused by group members' incompatibility. Additionally, a few participants suggested offering peer assessment after every Reading Circle activity instead of after completing the entire activity in order to receive earlier feedback about their performance and to make educated choices about who they would like to work with in other assignments.
- Students expressed the desire for more clarity around assignment expectations as well as more explicitly defined workload expectations for each role within the group. Students felt that increased clarity around the extent of the required contributions for each role and accountability could help to mitigate the challenges of differing levels of motivation and group member contributions.
- To address the challenge of time management and group coordination, some students in 2022W1 suggested extending the deadline for the final key takeaway submissions to provide increased time to allow for groups to edit the final paragraph together before submitting. These suggestions were incorporated by Dr. Baumvol in 2022W2.
- Many students indicated a desire to have increased opportunities for both instructor and peer feedback earlier in the process to highlight improvements that could be made and then integrated into subsequent activities. This suggestion supports the design decision that was made prior to 2022W1 to make the first Reading Circle ungraded as an

opportunity for practice, feedback and instructor modeling. Regarding earlier peer feedback, Dr. Baumvol is planning to incorporate this in future terms considering the potential benefit to student learning.

The instructor's Role

Many students indicated a preference for the instructor to hold a more distant position, setting clear guidelines and expectations but not embedding themselves too directly in group processes. If logistical difficulties or disagreements arise, students suggested first allowing groups to manage the situations on their own before intervening. Participants recommended that the instructor should act as a mediator to enforce individual accountability, while offering resources and realistic solutions for challenging issues. Students appreciated having access to examples that clarified any misunderstandings.

Differences Between 2022W1 (T1) and 2022W2 (T2)

While analyzing data gathered from student surveys and focus groups, some differences surfaced between 2022W1 and 2022W2. As previously discussed in the section on quantitative survey results, data from Q2 in T1 and T2 differed in that T1 students' responses tended to be more negative for questions about perceived learning benefits of the activity (Q2.1-2.11) when compared to their T2 counterparts. As WRDS 150B is a first-year course- students in T1 are at the very start of their university studies and the Reading Circles activity takes place in weeks 2, 3 and 4 of the term. This could be attributed to T1 students being in the process of adjusting to post-secondary education and likely have less experience with scholarly literature and university level writing expectations compared to students who are taking WRDS150B in their second term.

These results indicate that increased scaffolding, support, and instructor guidance may be beneficial, especially for T1 students. Further exploration of these tendencies could allow more in-depth understanding of students' needs. In addition, these results suggest an area for further study, potentially through a SoTL project, to better understand student experiences with collaborative learning activities across the two terms of their first year.

Future Considerations

Overall, the student feedback received from this evaluation provides valuable insights that not only help inform the future design of the Reading Circles activity in WRDS 150B, but may be valuable for instructors of other writing courses in the UBC Faculty of Arts looking to implement collaborative learning activities in their own classes. The results from this analysis may be used to enhance the student learning experience for collaborative activities in similar courses while offering instructors a feasible model for continued evaluation of the student learning experience within the WRDS150B classroom environment. The following areas may be particularly relevant to explore:

- The overall positive responses regarding the learning benefits of the Reading Circles activity supports the continued use of the activity in the course. In addition to generally positive sentiment, students highlighted specific benefits such as exposure to diverse perspectives, enhancement of feelings of community and development of both academic reading/writing and collaboration skills that align with instructor motivations for implementing the activity.
- Prior to 2022W1 a number of changes to the activity were made including the introduction of peer and self-assessment components, making the first Reading Circle an ungraded activity and the switch to Etherpad as the tool being used for collaboration. Feedback from the evaluation supported the continued inclusion of these changes, particularly the use of peer and self-assessment and keeping the first Reading Circle activity ungraded. There were still some challenges identified with using Etherpad, although the student feedback included fewer negative comments than previous terms where Microsoft Teams/Office 365 was used. Continued collaboration with Arts ISIT will be important to utilize the most effective tool for the activity as platforms and integrations evolve.
- Students suggestions regarding increased clarity of assignment expectations and roles can be implemented in future terms, which may have a beneficial impact to the overall activity without any significant changes in the overall structure.
- Based on student feedback, an individual component in the activity in the form of a reflection or brainstorming activity could be introduced to address some of the student feedback about grading fairness and to better assess individual student learning. This

feature could increase student trust in peer assessment while increasing students' sense of engagement with their group members.

- There were significant differences for some questions between terms related to the perceived benefits of collaborative learning. This suggests further study may be beneficial to better understand the differences in student experiences with collaborative learning across their first-year experience and whether the activity could be modified or differentiated between terms to better support students in their first term.
- The feedback related to the peer assessment component was largely positive, supporting the decision to introduce this element into the activity. Increasing the number of peer assessments throughout the activity's duration could offer students more reflection opportunities and provide additional feedback earlier in the learning process at a relatively low cost to the instructor.
- The results from this evaluation may provide insights into developing questions for future research into collaborative learning, assessing the effect of student satisfaction, instructor involvement, interpersonal relationships, personal capabilities, and student perceptions.

Appendix A

Survey Questions

The following questions were used in the survey

Question 1

- Which statement applies to you?
 - I am studying for a Science degree.
 - I am studying for an Engineering degree.
 - I am undecided.
 - Other (specify)
 - I am studying for a Kinesiology degree.

Question 2

- Question 2.1- Collaborating with other students in this group activity benefited my learning.
- Question 2.2- This activity helped me learn to work collaboratively.
- Question 2.3- Rotating between roles was beneficial for my learning.
- Question 2.4- If I had a choice, I would collaborate on group work online like this again.
- Question 2.5- Communicating with my instructor about the activity was important.
- Question 2.6- Having the instructor's guidance was helpful for our group work process.
- Question 2.7- This activity helped me develop my critical skills.
- Question 2.8- This activity helped me make connections between the articles and real-world ideas and other scholarly work.
- Question 2.9- This activity developed my academic reading skills.
- Question 2.10- Notetaking collaboratively helped us write the key takeaways (skip if you did not take notes collaboratively)
- Question 2.11- Writing out the key takeaways was beneficial to my understanding of the articles.

Question 3

- Question 3.1- Doing peer assessment helped my own learning.
- Question 3.2- I would recommend using peer assessment in the future.
- Question 3.3- Peer assessments made each student's grade fairer.

- Question 3.4- Self-assessment is an important part of this activity.
- Question 3.5- I would recommend using self-assessment in the future.
- Question 3.6- peerScholar made it easy to provide feedback on peer contributions.
- Question 3.7- It took a long time to learn how to use peerScholar.
- Question 3.8- I would recommend my instructor continue using peerScholar in the future.

Question 4

- Question 4.1- “The main thing I learned working collaboratively in the “reading Circles” activity was...”
- Question 4.2- “The main thing I learned writing the key takeaways collaboratively was...”

Question 5

- Question 5.1- “What challenges did you experience in the "Reading Circles" group activity?”
- Question 5.2- “What suggestions would you give to your course instructor to improve it?”

Copy of Tables A1 and A2 combined.

Statement	Positive		Neutral		Negative		P-Value
	2022W1	2022W2	2022W1	2022W2	2022W1	2022W2	Sentiment Vs. Course Term
Question 2.1- Collaborating with other students in this group activity benefitted my learning.	82.8%	77.5%	4.6%	17.5%	12.6%	5.0%	0.00960
Question 2.2- This activity helped me learn to work collaboratively.	78.2%	73.8%	11.5%	17.5%	10.3%	8.8%	0.229
Question 2.3- Rotating between roles was beneficial for my learning.	82.8%	75.0%	3.4%	18.8%	13.8%	6.3%	0.00288
Question 2.4- If I had a choice, I would collaborate on	54.0%	56.3%	25.3%	28.3%	20.7%	15.0%	0.614

group work online like this again.							
Question 2.5- Communicating with my instructor about the activity was important.	57.5%	65.0%	27.6%	26.3%	14.9%	8.8%	0.417
Question 2.6- Having the instructor's guidance was helpful for our group work process.	70.9%	77.5%	14.0%	17.5%	15.1%	5.0%	0.0946
Question 2.7- This activity helped me develop my critical skills.	71.3%	82.5%	13.8%	8.8%	14.9%	8.8%	0.228
Question 2.8- This activity helped me make connections between the articles and real-world	79.3%	85.0%	6.9%	10.0%	13.8%	5.0%	0.135

ideas and other scholarly work.							
Question 2.9- This activity developed my academic reading skills.	75.9%	88.8%	11.5%	7.5%	12.6%	3.8%	0.0649
Question 2.10- Notetaking collaboratively helped us write the key takeaways (skip if you did not take notes collaboratively)	78.0%	83.6%	13.4%	15.1%	8.5%	1.4%	0.131
Question 2.11- Writing out the key takeaways was beneficial to my understanding of the articles.	74.7%	78.8%	5.7%	11.3%	19.5%	10.0%	0.127
Question 3.1- Doing peer assessment helped my own learning.	54.1%	51.9%	21.2%	26.2%	24.7%	21.5%	0.453
Question 3.2- I would	75.3%	78.5%	16.5%	16.5%	8.2%	5.1%	0.716

recommend using peer assessment in the future.							
Question 3.3- Peer assessments made each student's grade fairer.	76.5%	78.5%	22.4%	15.2%	1.2%	0.3%	0.128
Question 3.4- Self-assessment is an important part of this activity.	72.9%	79.7%	15.3%	11.4%	11.8%	8.9%	0.593
Question 3.5- I would recommend using self-assessment in the future.	71.8%	79.7%	20.0%	13.9%	8.2%	6.3%	0.488
Question 3.6- peerScholar made it easy to provide feedback on peer contributions.	95.3%	91.1%	4.7%	5.1%	0.0%	3.8%	0.191

Question 3.7- It took a long time to learn how to use peerScholar.	7.1%	11.4%	2.4%	6.3%	90.6%	82.3%	0.261
Question 3.8- I would recommend my instructor continue using peerScholar in the future.	81.2%	82.3%	15.3%	13.9%	3.5%	3.8%	0.967

Appendix B

The Following Questions were used during the Focus Group Interviews

Question B1- “Which teamwork skills did this group work activity help you to develop?”

- Question B1a- “Did you have these skills before, or did you develop them during the activity?”
- Question B1b- “Do you think you will use these in your future studies or work/jobs, and if so, how?”
- Question B1c- “Did you experience any conflicts as a team? How did you overcome them?”

Question B2- “What were the advantages to writing the key takeaways as a group? Were there any disadvantages?”

- Question B2a- “Do you think your individual submission would be better than the team’s? In what ways?”
- Question B2b- “Was it worth your time to do the activity as a group?”

Question B3- “How did working with peers impact your sense of belonging in the classroom?”

- Question “B3a- Can you describe or provide examples?”

Question B4- “How did you feel about working with the same peers in all three Reading Circles? Would it have benefitted you to work with different peers in each reading circle?”

- Question B4a- “Did efficiency increase as you became more familiar with your group, or as you developed group work skills?”

Question B5- “Ideally, what would be the instructor’s role in the group work process?”

- Question B5a- “What should be the instructors’ role when it comes to conflict?”
- Question B5b- “Provide examples of when the instructor helped resolve a conflict/ helped you.”
- Question B5c- “Do you think the instructor should be more present with your group work? Should they be less involved in your group work?”
- Question B5d- “What should be the instructor’s role during writing key takeaways?”
(ASKED ONLY DURING 1st Session of 1st Semester Focus Groups)

Extra Questions

Question B6- “What kinds of technologies did you use to support your group work? Were there any issues that you encountered while using them and what were the benefits?”

Question B7- “Have there been any specific accessibility issues you encountered during the group work process?”

Question B8- “Did your group find strategies to make synthesis of voices easier? I.E., to take those different perspectives and turn them into one piece of cohesive writing.”

Question B9- “Do you have any insights on how to make the grading more fair to better reflect individual participation, or to how to improve the peer-assessment process you did? IE- Do you think the grading rubric was fair? And, do you have any suggestion on how to make what is expected of you more clear?”

Question B10- “Do you feel like the work on the reading circles helped contribute to making the final project easier/ paper easier?”

Question B11- “Do you feel that your gender had anything to do with any of the roles you did?”

Question B12- "Were your groups a mix of people from different disciplines?"