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ABSTRACT

Urban universities with a predominantly commuting student population face distinct challenges in fostering social connections. Commuting students spend less time on campus and have fewer opportunities for organized and spontaneous social interactions with other students. The campus experience for commuter students tends to center around the classroom. Social connection is vital to various outcomes, such as persistence and well-being, and thus instructors need to find ways to promote different forms of interaction. This study uses focus groups and a survey instrument to examine student perceptions of the social benefits of collaborative active learning activities in a first-year introductory political science course. The data indicate that students positively assess their experiences with collaborative learning, highlighting its benefits on social connection and well-being.

KEYWORDS

Collaborative learning;
commuter campus;
large lecture course;
well-being

Introduction

The idealized vision of the university campus as a hub of social interaction differs from the lived experience of many modern postsecondary students. More students today, especially those attending a postsecondary institution in a large urban center, commute long distances and juggle obligations to work and family, which limits their time to make social investments in their postsecondary experience (Bean and Metzner 1985; Jacoby 2000). A 2019 study of over 43,000 Canadian undergraduate students reported that a majority felt “very lonely” (American College Health Association 2019). Potential consequences of student loneliness include attrition, stress, disengagement from classroom conversations, alienation from the institution, and harm to one’s well-being (Astin 2001; Newbold, Mehta, and Forbus 2011; Stanton et al. 2016; Tokke 2020). The importance of social connection to desirable educational outcomes, such as persistence, academic engagement, and overall well-being, has been established in previous research (Schuetz 2008; Bers and Smith 1991; Stanton et al. 2016). Social connections do not have to be “deep” to foster these benefits; even “loose” social bonds among students can improve well-being and academic performance (Sandstrom and Dunn 2014).

A common assumption persists that social connection occurs through extracurricular activities; however, social integration for many commuter students primarily occurs in the classroom (Jacoby 2000; Newbold, Mehta, and Forbus 2011). In addition, many students spend their first year in “stadium-style” lecture courses in larger institutions. The physical layout of traditional lecture halls and the expectation of observant comportment mitigates social engagement in large courses. Supplementary graduate student-led small-group tutorials—when available—present an extra opportunity for interactions, but social connections are much more likely when a cohesive strategy incentivizes collaboration in all components of the course (Ferreri and O’Connor 2013; Lyon and Lagowski 2008). To this end, I utilize three related activities influenced by the pedagogical method of collaborative learning to provide the context for increased social connection in a large ($n=209$) first-year introduction to political science (i.e., POL 100) course. The research aims not to test specific hypotheses but to explore how students perceive the links between their experiences with group learning activities and social connections. Results indicate that group activities positively affected student perceptions of social connection and well-being.

Collaborative, cooperative, team-based learning and social connection: What do we know?

Active learning garners significant attention among scholars and practitioners of postsecondary education. In contrast to traditional passive learning (i.e., lecturing), active learning promotes student engagement in the learning process and knowledge creation, which has various benefits for postsecondary students (Prince 2004; LaCosse et al. 2017; Campisi and Finn 2011).

A common means of applying active learning is through peer groups. Research under several headings with much in common, collaborative learning, cooperative learning, and team-based learning (TBL), touts the benefits of group work in postsecondary settings (e.g., Haidet, Kubitz, and McCormack 2014; Barkley, Major, and Cross 2014).

The categories of group-based learning mentioned above fall along a continuum from the casual use of group activities on one end to wholesale transformative approaches on the other. Collaborative and cooperative learning lean closer toward the “casual” end of the spectrum. In general, collaborative and cooperative learning are umbrella terms for “students working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product” (Barkley, Major, and Cross 2014, 4). Moreover, common to collaborative and cooperative learning is the intentional design of group work to meet specific learning or developmental goals. However, cooperative learning values group work for its efficiency when a defined solution or endpoint is set out in advance (e.g., solving a math problem, building a model bridge). In contrast, collaborative learning has a constructivist epistemology, emphasizing the benefits that come from the *process* of group interaction, such as accountability, conflict resolution, creativity, and social development (Bruffee 1995). Finally, TBL takes “group learning even further by implementing whole-course structural change,” which puts it at the transformative end of the spectrum (Bulanda and Frye 2020, 275).

For the practical purposes of most educators, the approaches share the core purpose of engaging students actively in their learning through group work (Barkley, Major, and Cross 2014, 12–13). Nevertheless, I adopt collaborative learning as the most appropriate label to characterize the strategies attempting to promote social connection in the present study for a few reasons. First, to meet the threshold for TBL, a course must center on small-group learning rather than periodically applying group activities for distinct course

components. The version of POL 100 under study remains a lecture-dominant course with group-based features “sprinkled over” it (Sibley and Ostafichuk 2014, 6). Second, TBL advocates a specific process whereby students learn content outside of class (e.g., readings, recordings) and then take a readiness assessment test (RAT) before the instructor speaks about that content in class (Huggins and Stamatel 2015; Michaelsen, Davidson, and Major 2014). In this course, students attend a traditional lecture on each module *before* participating in the group learning component.

Cooperative learning is well suited for K-12 classrooms and STEM post-secondary courses where groups aim to pursue pre-determined solutions and maintain traditional lines of classroom authority (Major 2020, 21). However, the interventions for this course prioritize open-ended and reflexive collaboration without dependence on a template for interaction from the instructor, which may stifle spontaneous social connections. Therefore, the collaborative learning moniker makes the most sense for the present study. Still, insights from the research on other approaches inform and inspire the execution of the group activities.

An impressive volume of research demonstrates the positive effects collaborative learning has on students measured by outcomes such as grades, persistence, factual knowledge, and higher-order thinking skills (see Barkley, Major, and Cross 2014, 20–22). However, the relationship between collaborative learning and social connection has received less attention. Nevertheless, several important studies suggest that collaborative learning improves the quality of student-to-student relationships and strengthens feelings of belonging among students (Johnson, Johnson, and Smith 2014; Astin 2001). Moreover, a recent meta-analysis of forty-seven peer-reviewed research papers found that collaborative learning provides social benefits for students and promotes “good interpersonal relationships” that may provide joy and a sense of purpose (Butarbutar and Nur 2022, 390–391). Also of note is the research proposing that levels of loneliness are high among students in online courses (e.g., Lyall and McNamara 2000). While factors unique to online learning, such as interacting through technology, physical distance, and participating from different time zones, may exacerbate feelings of isolation, commuting from a long distance and attending large lectures can be equally isolating. Consequently, research suggesting that collaborative learning enhances socialization in online courses buoys the starting premise of this study that increasing opportunities for students to interact in person will improve

their sense of connection to their peers (Blackmon and Major 2012; Motteram and Forrester 2005).

Implementation of collaborative learning activities

The implementation of stable *study groups* is the first intervention for this study. Building on previous research suggesting that students prefer working in teams (e.g., Ferreri and O'Connor 2013), the project began from the premise that group learning has the potential to build social connections. My institution offers graduate teaching assistant-led tutorials with approximately twenty undergraduate students for most large lecture courses. The one-hour weekly tutorial complements the two-hour lecture by reinforcing content and honing students' oral communication skills (Murphy 2017, 346). During the first tutorial sessions, the teaching assistants (TAs) randomly assign students to a study group of three to four peers for the term. I chose to sort students randomly to prevent groups of preexisting friends and hopefully produce within-group diversity concerning academic records and gender. Following group formation, the TA explains to students that we expect them to share their initial reactions to the week's reading and lecture content at the beginning of each tutorial for approximately fifteen minutes. I post framing questions for each week on the course's web-based learning management system. However, I instruct students that engaging with them is unnecessary unless they find them useful. We did not explicitly instruct study groups to meet outside of class, but the postulation is that this would happen spontaneously, contributing to social connection.

The *two-stage exam* is the second intervention in the study aiming to foster social connection. Two-stage exams are widely used across many disciplines because research shows they can increase student performance and engagement while decreasing test anxiety (Hollis Gilley and Clarkston 2014). The typical application of a two-stage exam involves students completing an exam individually followed by a second writing of the exam in small collaborative groups. Questions with limited answer ranges (e.g., multiple choice, true or false) are the most suitable, but applying two-stage exams to other question types is possible. Generally, group membership is assigned at random before the exam, potentially exposing students to diverse approaches to the question (Sandahl 2010; Wieman, Rieger, and Heiner 2014).

Nevertheless, in the present study, students wrote the cooperative portion of their exam in their stable study groups for two reasons. First, providing study

groups with a common objective could increase the social connection between group members; the fact that group work has the potential to improve their mid-term score should encourage members to work together and, ideally, build camaraderie through that process. Second, taking the exam with their stable group may reduce the anxiety potentially caused by working with strangers in a stressful exam situation. From this, I deduce that working with friendly faces during a high-stakes exam may create social bonding opportunities. The group stage of the exam includes only multiple-choice questions, constituting fifty percent of the individual version of the exam. If a student receives a higher score on the group version of the exam, they receive the average of their individual and group scores for the multiple-choice portion. Those who score higher on the individual part are unaffected by the group score.

This study's third and final intervention is *social breaks* during the lecture. Having casual friendships in a class can start a virtuous cycle of attendance leading to more interest and success in the course (Davis 1993). Typically, a two-hour lecture has a ten-minute break in the middle to allow students to use the washroom, grab a snack, and re-focus. Standard lecture breaks can facilitate spontaneous social interactions among students. However, "digital distraction"—students using their devices for purposes other than note-taking—tends to carry over into the break and keeps students from engaging in conversations (Flanigan and Titsworth 2020).

To combat this, breaks begin with a social prompt every second lecture and last twenty minutes. For example, the first social break started with the question: "where have you travelled in the past, and where are you most excited to go?" I ask students to find someone in the class they do not already know to share their answers with. Then, to encourage students to feel comfortable participating, I briefly share my answer to the question to kick off each social break.

Methodology and analysis

The present study adopts a mixed-methods approach but primarily analyzes qualitative data collected from focus group conversations. The goal of the qualitative analysis is to "interpret and render understandable" students' perceptions and experiences of social connection and well-being "as they express them in their own words" (McGill 2012, 492; Silverman 2017).

Closed-ended survey questions were administered to the entire class ($n=209$) to complement the qualitative analysis.

Focus groups rather than in-depth interviews were chosen as the primary data collection method for two main reasons. First, focus groups allow students to discuss complex phenomena, such as social connection, isolation, and intragroup relationships, in a less intimidating setting than an individual interview. To mitigate the potential for an uneven power dynamic between the interviewer and subjects, two senior undergraduate students—who previously took the course—served as research assistants and facilitated the focus groups. Second, focus groups are “social events” that yield data through interactions, group dynamics, and individual opinions. Focus groups are helpful when investigating “thick” concepts, such as social connection, that may have different meanings to the subjects; listening to dynamic conversations enables researchers to “ascertain the level of agreement [and disagreement] on the meaning and presence of those phenomena” (Cyr 2016, 235).

The focus group sessions took place after students had been in the course for eight weeks and completed the two-stage mid-term exam. They also had eight tutorial sessions with their study groups and the chance to participate in five social breaks during lectures. On 6 March 2020, four one-hour focus group sessions with four volunteer subjects in each took place mere days before the initial COVID-19 shutdown of in-person learning. Fortunately, the twenty-dollar compensation yielded many volunteers that far exceeded capacity, allowing for a combination of purposive and convenience sampling. Two females and two males were selected for each group, which roughly aligns with the university’s 54% female student population. We chose two “high” achievers with a midterm score above 80% for each group and two “average” achievers who scored 70% or less. No student sat in the same focus group as their study group members to encourage participants to speak freely about their experiences.

The focus group facilitators were given a set of broad questions to prompt discussion and instructed to encourage exchanges between participants related to the general themes of the study. Four core questions frame the conversations for each focus group:

1. Is loneliness a problem worth addressing at the university? If so, what should the university and course instructors do about it?
2. What is your experience with the “social breaks”?
3. What is your experience with your study group up to this point?

4. Was working with your group on the two-stage exam a positive experience? If so, how? If not, why not?

The research assistants recorded and transcribed the focus group discussions verbatim with consent from all participants. The groups are numbered from one to four, and each participant corresponds to a letter from A-D to preserve their anonymity during the analysis and reporting stages. The three-person coding team used an inductive approach to develop the coding frame rather than *a priori* theory (Glaser and Strauss 1967). During the open coding stage, the two research assistants and the principal investigator independently assigned codes to “chunks” of transcript data that had meaning for the project. During the second stage, the research team met to discuss the overlaps and divergences in their respective coding, grouping together similar categories. The team agreed upon three themes to encapsulate the bulk of the conversations: *isolation*, *social connection*, and *well-being*.¹ In the final stage, I—the principal researcher—prepared analytic statements to organize the data around the three themes. In the statements, I attend to trends and patterns of consensus, dissent, and resonance among the series of focus groups (Berg and Lune 2012, 187–188). The subsequent quotations support and illustrate these assessments.

Findings—focus groups

Causes and consequences of loneliness and isolation

Recurrent themes in the discussions are the participants’ experiences of isolation at the university and their perceptions of the causes and consequences of it. For many students, loneliness on campus is not overwhelming because they have strong family and friend networks locally. Nevertheless, nearly all participants perceive social isolation as a problem among students and that the issue is particularly acute at their university for several reasons. Simon Fraser University (SFU) is situated in the sprawling Greater Vancouver area, covering over one thousand square miles and is home to more than two million residents.

¹A fourth prominent theme that emerged from the focus group conversations is *learning*. In particular, most participants feel that the group activities contributed directly to their academic success in the course. Since there is already a great volume of literature on collaborative learning and academic outcomes, I omit it from this paper.

Moreover, the main campus sits atop a mountain, eliminating the possibility of walking to campus from nearby residential areas. Less than one percent of undergraduate students live on campus. 88% of students regularly use public transit, and the average commute time is forty-seven minutes compared to the Canadian national average of twenty-five minutes. Several students noted the “commuter campus” phenomenon as contributing to isolation.

Well, I feel like, for starters, if you live on [residence], you probably have a higher chance of acquiring friends and being more social because you're on campus all the time and everything. However, for example, I commute from North Vancouver, so it is quite far, so if you live closer, I feel it would be a lot easier because you could just be like, ‘hey, do you want to hang out after class?’ But if you come from North Van or a place further away, you must put more thought into it and travel an hour or so. (3-B)

I feel since SFU is a commuter school, I don't think there is enough school spirit amongst the students. (4-D)

And I mean the campus is quite literally isolated on top of a mountain, especially when it snows. (1-D)

On the other hand, several participants pointed out that the university offers many clubs and social opportunities. However, they perceive the clubs as inaccessible to the average student because they require already overwhelmed commuters to find extra time to socialize through issue-specific (e.g., environmental awareness, singing) groups. This evidence supports the proposition that in-class experiences—rather than extracurriculars—are essential opportunities for social connection, especially on a commuter campus.

Oh, I agree with students [A] and [B] there are many social opportunities offered, but people have jobs, family commitments, and commute from far. At least for me, I go home and hang out with my friends or family.... (1-C)

I feel that how the extracurriculars are structured causes stress. It is outside of class, you have all these other things, and then at school, you're just focused on the class and trying to get the grades. (1-D)

... I talk to my one friend from high school and nobody else from the university. But I've always put that on me, that it's my fault because there's so much stuff around the school, and I've just been too nervous about committing more time to anything, especially intense extracurriculars. (4-C)

Many participants agree that social isolation has hurt their educational progress and mental health. The same participants believe that loneliness on campus is a broad problem that negatively affects their peers. Some students suggest that specific faculties

and courses contribute to the problem by emphasizing competitiveness and individualism rather than collaboration.

I think feeling isolated can have serious repercussions for the students—not just your grades and mental health but physical health as well. (2-A)

When you don't talk to anybody, you feel lonely, especially in a hard class. (1-B)

Some courses are designed to instill a feeling of competitiveness, and most students work individually and end up feeling isolated. (4-A)

The strong consensus among participants is that student isolation is a problem, and many believe the issue is particularly acute at their university for similar reasons (i.e., commuter campus, geography). However, the participants varied in their assessments of how isolationism affects them. For example, some argue that they have a support system in their personal lives that attenuate the effects of feeling alone while on campus. Nevertheless, virtually all participants agree that more social connections would benefit the student body and that in-class programming could be helpful toward that end. The following sections highlight the participants' positive (and negative) experiences with the interventions implemented for the present study.

Social connection

Most participants talked at length about one or more ways that the activities in the course helped them connect to their classmates. Enthusiasm for their study group stood out among all focus groups. Participants use a range of concepts to explain the benefits of having a stable study group for the academic term, such as “connection,” “familiarity,” and “excitement” about attending lectures and tutorials.

I agree it's beneficial to have the study groups because otherwise, you can't make those connections. (1-C)

I'm not that interested in political science, but my group members make me excited to come to class. (2-A)

[My study group] has made me look forward to this course because of that familiarity ... I laugh more in tutorials. (2-A)

An unexpected positive finding is that several participants found something in common with a group member unrelated to the course facilitating a more profound social connection. Because many participants said that getting “over the hump” with acquaintances to make a deeper social connection can be

difficult, it is promising that several students suggest that the study group helped them overcome this social plateau.

One girl is living in residence, and she's in the same tower as me, and she lives on the same floor, so sometimes I see her in the washroom. If we were not in the same tutorial, I probably would never have said hello to her, but because we're in the same study group, we are friends now. (3-C)

... There was this one boy, and I didn't know him until we started the study groups, but later, he told me that I'm in three of his classes and two of his tutorials. So, I was like: 'oh, hi, nice to meet you; let's study together!' If it weren't for the study group, I wouldn't have known that he was even in my class, especially in a 100 level; you're all over the place, but if you find that one person with who your schedule aligns, that helps a lot to study together and build up the friendship. (4-B)

... it's kind of an interesting opportunity to get to know people in my group; I found out one of my group members is my neighbor, and so like it just worked out well. (1-D)

Participants are more ambivalent about the benefits of social breaks. Several students had positive experiences with them, remarking that one or more breaks sparked a social connection, and others appreciated that it kept them off their phones. Other participants support social breaks during lectures in theory but contend that insufficient time and disinterest on the part of some inhibit their capacity to vitalize social connection.

I think talking in lectures with other people provides a good small, meaningful connection with someone. (3-C)

It's just hard to approach people if they're on their phone. You're not going to interrupt them and be like 'hi' or something like that. (1-B)

I tried, but it was hard ... some people go grab a coffee and put their headphones in ... some people text. (D-3)

Well-being and mental health

Several participants across focus groups feel strongly that there is a relationship between social connectedness and overall well-being. The facilitators did not dictate the meaning of well-being; instead, they encouraged the participants to flesh out what it meant to them.

Once on the topic of well-being, most students express that their coursework is a significant source of stress, negatively affecting their mental health and well-being. Some chalk up this stress to the heavy

workload of university, while others believe their stress is due to their ambitious goals (e.g., earning straight As). Students perceive that group activities mitigate some of this stress and positively impact their overall well-being.

Speaking in tutorial stresses me out, and I generally don't talk, but with them [my group], I feel like they have my back. (1-B)

I enjoyed the [group portion of the] midterm because the exam was stressful, especially the short answer portion. But when we went to the group thing, and I got to see my group and go over it, it brought me some comfort knowing, 'hey, other people got this answer. I'm going to feel good when I go home,' so I liked it. (4-A)

My group made it less stressful studying for the exam. I did study as hard as I could, but it was good knowing that in case I missed something, someone else in the group might know it. (2-B)

Participants also agree that some of their professors fuel the perception that university is a "competition" between students, a source of stress. Fortunately, the emphasis on well-being and human interaction made many students feel more positive about this course than others.

During the first lecture, the professor made an impression on me by discussing his struggles with mental health and loneliness. It humanized him and made it easier to feel comfortable in my skin in the class. (1-A)

[This course] is different because of the concentrated effort on the social aspects of the course. Even on the first day, the professor said that making friends is fundamental to the university experience, which came across in the course structure. It made you feel good about being in the course. (1-C)

[The professor] made this course about more than grades; he wanted students to learn and focus on their feelings and mental health. I think that is big and outside the norm. (3-B)

Findings—survey

Students completed the survey through the learning management system for the course ($n=209$). Question development took into account the focus group results. The six Likert scale questions ask students to express their perceptions of how the interventions affected social connection and well-being. Unfortunately, the survey became available to students after the university had ended in-person classes due to the COVID-19 pandemic. Therefore, we asked students to answer based on their experiences in the course up until the closure. The results are displayed below in [Figure 1](#).

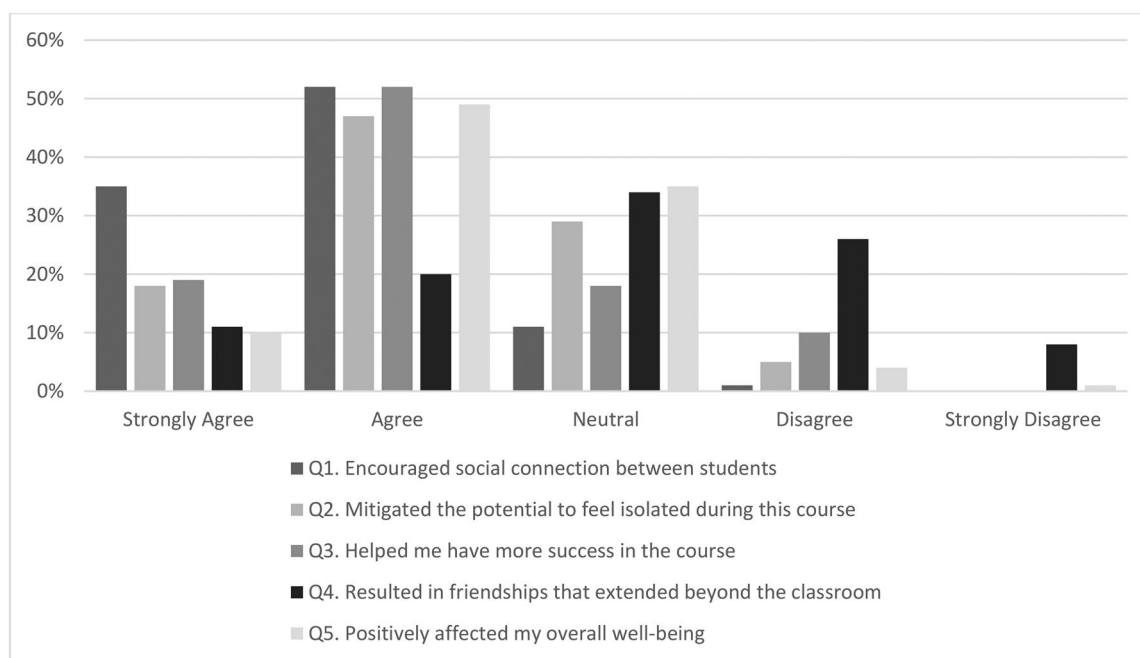


Figure 1. To what extent do you agree that the collaborative learning strategies in POL 100...?

The survey reveals that, for the most part, students strongly agree (35%) or agree (52%) that the group activities “encouraged social connection between students in the course.” Interestingly, fewer students agree, and more feel neutral that the group activities “mitigated the potential to feel isolated during the course.” A possible interpretation is that although the group activities had a net positive effect on social connection, students still felt isolated at times during the term. Moreover, what happens in the classroom is not the only factor shaping one’s experience of isolation; external factors, such as the strength of a student’s family and social network, also matter. Also of note is that about a third of students (31%) report that connections made through the activities led to “friendships that extend beyond the classroom.” This is a complex result to interpret because we do not have data to estimate how many lasting friendships are made in the average large lecture course. Nevertheless, it appears promising in light of the specific barriers to social connection on the campus mentioned in this paper (e.g., commuter campus).

Finally, over half (59%) agree that the activities “positively affected my overall well-being.” This result is encouraging and aligns with the focus group data. Approximately half of the focus group participants perceive a positive effect of group learning on their well-being. In contrast, the other half enjoy the activities but do not perceive any improvement in their sense of well-being on account of them.

Strategies for improvement

Feedback from the focus group participants, other students in the course, and the TAs provide suggestions for improvements to the activity structure and implementation. For example, many students mention that social breaks should occur at the beginning of the lecture or close to the end rather than at the initiation of the break. This is because a two-hour class can feel long, and many students sometimes want the full twenty minutes to use the washroom and refocus rather than socialize. Also, several students suggest that the instructor provide three or four topics for the social break rather than one because not everyone will be engaged by a single prompt, such as “where do you want to travel most and why?” Creative implementation of this suggestion might involve asking students to move to a section of the lecture hall according to the topic option that is most appealing to them. Doing so may result in casual group conversations rather than one-on-one exchanges, perhaps making the activity less intimidating for some.

While most students support the formation of stable study groups, some are keen to have the opportunity to switch groups one or more times throughout the term. Those preferring to switch up group membership state that their group discussions stagnated after a few weeks. They believe interactions with different students would expose them to varying points of view and renew enthusiasm for the course. On the other hand, changing group members frequently may undermine

the potential for groups to build trust, accountability, and camaraderie. Findings from the TBL literature suggest that writing “team charters” and formalizing peer assessments generate accountability and commitment among group members, which can maximize the potential benefits of teamwork (Hunsaker, Pavett, and Hunsaker 2011; Stein, Colyer, and Manning 2016). I plan to implement the team charter concept in the next iteration of this course. Once in a group, students will write a simple “constitution” to lay out their group’s values and organizing principles.

There were some valuable recommendations about the two-stage exam as well. Many students felt uncomfortable transitioning from the individual to the group exam because the lecture hall was chaotic. Thus, settling in with their group took up too much of their allotted time. For large courses, using pre-designated seating areas for each group may be worthwhile. Hence, everyone knows where to go after submitting their exam papers.

Conclusion

Universities and colleges in Canada (and elsewhere) are shifting back to in-person classes and emphasizing the value of the campus experience as the pandemic winds down. More than a few pundits have questioned the pedagogical value of in-person lectures, yet, for the most part, universities continue to push for a return to in-person courses. Consequently, instructors who teach large classes must approach the return to the lecture hall with vigor as students—and the wider community—are eager to see the demonstrable benefits of in-person learning. The current study suggests that collaborative learning in large courses can improve students’ perception of social connection and overall well-being, which are good reasons to be optimistic about the value of in-person lecture courses. This finding builds on previous research, which concludes that collaborative learning improves peer relationships and the sense of belonging among students (Johnson, Johnson, and Smith 2014; Astin 2001). However, the reliance on self-reported outcomes is a potential limitation of this finding. Future research should combine self-reported data with objective measures of social connection and well-being (e.g., the number of social interactions and behaviors associated with well-being). Moreover, the academic and broader communities need more research in the post-pandemic era that explores the emotional and social benefits of in-person learning. It will help instructors design courses that take full advantage of returning students to the classroom.

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References

- American College Health Association. 2019. National College Health Assessment II: Canadian Consortium. https://www.acha.org/documents/ncha/NCHA-II_SPRING_2019_CANADIAN_REFERENCE_NCE_GROUP_DATA_REPORT.pdf II%20SPRING%202019%20CANADIAN%20REFERENCE%20GROUP%20EXECUTIVE%20SUMMARY.pdf.
- Astin, Alexander W. 2001. *What Matters in College? Four Critical Years Revisited*. San Francisco, CA: Jossey-Bass.
- Barkley, Elizabeth, Claire Major, and K. Patricia Cross. 2014. *Collaborative Learning Techniques: A Handbook for College Faculty*. San Francisco, CA: Jossey-Bass.
- Bean, John P., and Barbara S. Metzner. 1985. “A Conceptual Model of Nontraditional Undergraduate Student Attrition.” *Review of Educational Research* 55 (4): 485–540. <https://doi.org/10.3102/00346543055004485>
- Berg, Bruce L., and Howard Lune. 2012. *Qualitative Methods for the Social Sciences*. New York, NY: Pearson
- Bers, Trudy H., and Kerry E. Smith. 1991. “Persistence of Community College Students: The Influence of Student Intent and Academic and Social Integration.” *Research in Higher Education* 32 (5): 539–556. <https://doi.org/10.1007/BF00992627>
- Blackmon, Stephanie J., and Claire Major. 2012. “Student Experiences in Online Courses: A Qualitative Research Synthesis.” *Quarterly Review of Distance Education* 13 (2): 77–85.
- Bruffee, Kenneth A. 1995. “Sharing Our Toys: Cooperative Learning versus Collaborative Learning.” *Change: The Magazine of Higher Learning* 27 (1): 12–18. <https://doi.org/10.1080/00091383.1995.9937722>
- Bulanda, Jennifer Roebuck, and Shelby Frye. 2020. “Transforming Introductory Sociology with Team-Based Learning: Sufficient Value and Surmountable Challenge?” *Teaching Sociology* 48 (4): 272–282. <https://doi.org/10.1177/0092055X20947175>
- Butarbutar, Ranta, and Sahril Nur. 2022. “Insights of Collaborative Learning Approach in Teaching English from Social-Psychology Perspective: A Systematic Review.” *Journal of English Education and Teaching* 6 (3): 379–397. <https://doi.org/10.35542/osf.io/v5h3d>
- Campisi, Jay, and Kevin E. Finn. 2011. “Does Active Learning Improve Students’ Knowledge of and Attitudes toward Research Methods?” *Journal of College Science Teaching* 40 (4): 38–45. https://doi.org/10.2505/3/jcst11_04_04
- Cyr, Jennifer. 2016. “The Pitfalls and Promise of Focus Groups as a Data Collection Method.” *Sociological*

- Methods & Research* 45 (2): 231–259. <https://doi.org/10.1177/0049124115570065>
- Davis, Barbara Gross. 1993. *Tools for Teaching*. San Francisco, CA: Jossey-Bass.
- Ferreri, Stefanie P., and Shanna K. O'Connor. 2013. "Redesign of a Large Lecture Course into a Small-Group Learning Course." *American Journal of Pharmaceutical Education* 77 (1): 13. <https://doi.org/10.5688/ajpe77113>
- Flanigan, Abraham E., and Scott Titsworth. 2020. "The Impact of Digital Distraction on Lecture Note Taking and Student Learning." *Instructional Science* 48 (5): 495–524. <https://doi.org/10.1007/s11251-020-09517-2>
- Glaser, Barney, and Anselm Strauss. 1967. *The Discovery of Grounded Theory*. New Brunswick, NJ: Aldine.
- Haidet, Paul, Karla Kubitz, and Wayne T. McCormack. 2014. "Analysis of the Team-Based Learning Literature: TBL Comes of Age." *Journal on Excellence in College Teaching* 25 (3–4): 303–333.
- Hollis Gilley, Brett, and Bridgette Clarkston. 2014. "Collaborative Testing: Evidence of Learning in a Controlled in-Class Study of Undergraduate Students." *Journal of College Science Teaching* 43 (03): 83–91. https://doi.org/10.2505/4/jcst14_043_03_83
- Huggins, Christopher M., and Janet P. Stamatel. 2015. "An Exploratory Study Comparing the Effectiveness of Lecturing versus Team-Based Learning." *Teaching Sociology* 43 (3): 227–235. <https://doi.org/10.1177/0092055X15581929>
- Hunsaker, Phillip, Cynthia Pavett, and Johanna Hunsaker. 2011. "Increasing Student-Learning Team Effectiveness with Team Charters." *Journal of Education for Business* 86 (3): 127–139. <https://doi.org/10.1080/08832323.2010.489588>
- Jacoby, Barbara. 2000. "Why Involve Commuter Students in Learning?" *New Directions for Higher Education* 2000 (109): 3–12. <https://doi.org/10.1002/he.10901>
- Johnson, David W., Roger T. Johnson, and Karl A. Smith. 2014. "Cooperative Learning: Improving University Instruction by Basing Practice on Validated Theory." *Journal on Excellence in College Teaching* 25 (3–4): 85–118.
- LaCrosse, Jennifer, Sarah E. Ainsworth, Melissa A. Shepherd, Michael Ent, Kelly M. Klein, Lauren A. Holland-Carter, Justin H. Moss, Mark Licht, and Barbara Licht. 2017. "An Active-Learning Approach to Fostering Understanding of Research Methods in Large Classes." *Teaching of Psychology* 44 (2): 117–123. <https://doi.org/10.1177/0098628317692614>
- Lyll, Robert, and Suzanne McNamara. 2000. "Influences on the Orientations to Learning of Distance Education Students in Australia." *Open Learning: The Journal of Open, Distance and e-Learning* 15 (2): 107–121. <https://doi.org/10.1080/713688396>
- Lyon, D. C., and J. J. Lagowski. 2008. "Effectiveness of Facilitating Small-Group Learning in Large Lecture Classes." *Journal of Chemical Education* 85 (11): 1571–1576. <https://doi.org/10.1021/ed085p1571>
- Major, Claire. 2020. "Collaborative Learning: A Tried-and-True Active Learning Method for the College Classroom." *New Directions for Teaching and Learning* 2020 (164): 19–28. <https://doi.org/10.1002/tl.20420>
- McGill, Patsy Tinsley. 2012. "Understanding the Capstone Experience through the Voices of Students." *The Journal of General Education* 61 (4): 488–504. <https://doi.org/10.5325/jgeneduc.61.4.0488>
- Michaelsen, Larry K., Neil Davidson, and Claire Major. 2014. "Team-Based Learning Practices and Principles in Comparison with Cooperative Learning and Problem-Based Learning." *Journal on Excellence in College Teaching* 25 (3 & 4): 57–84.
- Motteram, Gary, and Gillian Forrester. 2005. "Becoming an Online Distance Learner: What Can Be Learned from Students' Experiences of Induction to Distance Programmes?" *Distance Education* 26 (3): 281–298. <https://doi.org/10.1080/01587910500291330>
- Murphy, Michael P. A. 2017. "Using Active-Learning Pedagogy to Develop Essay-Writing Skills in Introductory Political Theory Tutorials." *Journal of Political Science Education* 13 (3): 346–354. <https://doi.org/10.1080/15512169.2017.1328683>
- Newbold, John J., Sanjay S. Mehta, and Patricia Forbus. 2011. "Community Students: Involvement and Identification." *Academy of Educational Leadership Journal* 15 (2): 141–153.
- Prince, Michael. 2004. "Does Active Learning Work? A Review of the Research." *Journal of Engineering Education* 93 (3): 223–231. <https://doi.org/10.1002/j.2168-9830.2004.tb00809.x>
- Sandahl, Sheryl S. 2010. "Collaborative Testing as a Learning Strategy in Nursing Education." *Nursing Education Perspectives* 31 (3): 142–147.
- Sandstrom, Gillian M., and Elizabeth W. Dunn. 2014. "Social Interactions and Well-Being: The Surprising Power of Weak Ties." *Personality & Social Psychology Bulletin* 40 (7): 910–922. <https://doi.org/10.1177/0146167214529799>
- Schuetz, Pam. 2008. "A Theory-Driven Model of Community College Student Engagement." *Community College Journal of Research and Practice* 32 (4–6): 305–324. <https://doi.org/10.1080/10668920701884349>
- Sibley, Jim, and Peter Ostafichuk. 2014. *Getting Started with Team-Based Learning*. Sterling, VA: Stylus.
- Silverman, David. 2017. *Doing Qualitative Research*. 5th ed. Thousand Oaks, CA: Sage Publishing.
- Stanton, Alisa, David Zandvliet, Rosie Dhaliwal, and Tara Black. 2016. "Understanding Students' Experiences of Well-Being in Learning Environments." *Higher Education Studies* 6 (3): 90–99. <https://doi.org/10.5539/hes.v6n3p90>
- Stein, Rachel E., Corey J. Colyer, and Jason Manning. 2016. "Student Accountability in Team-Based Learning Classes." *Teaching Sociology* 44 (1): 28–38. <https://doi.org/10.1177/0092055X15603429>
- Tokke, Cheryl. 2020. "Creating Social Connections in the Community College Classroom: A Pedagogy Using Groups That Build into Neo-Tribes to Counter Public College Alienation and Traditional Tribalism in Urban Diversity." *The Community College Enterprise* 26 (2): 68–100.
- Wieman, Carl E., Georg W. Rieger, and Cynthia E. Heiner. 2014. "Physics Exams That Promote Collaborative Learning." *The Physics Teacher* 52 (1): 51–53. <https://doi.org/10.1119/1.4849159>