REFLECTIVE ESSAY

Reflections during a global pandemic: Co-creation of research with student partners in a digital environment

*Linda Carozza, Department of Philosophy, York University, Canada.

Alice S. N. Kim, Teaching and Learning Research in Action, Canada.

Justeena Zaki-Azat, Teaching and Learning Research in Action, Canada.

Shayla Pham, Department of Psychology, University of Guelph-Humber, Canada.

Katherine Liczner, Department of Psychology, University of Guelph-Humber, Canada.

Contact: Lcarozza@yorku.ca

This reflective paper documents the experiences of two students completing a psychology placement for course credit as well as that of staff from the organization they worked at. The students worked together at the same organization during their semester-long placement, which took place during the Winter 2020 term and overlapped with the onset of the COVID-19 pandemic in Ontario, Canada. The partner organization, Teaching and Learning Research in Action (TLR), is a not-for-profit corporation that focuses on effective pedagogy, and the students worked on a study about student wellness and critical reflection. While meetings between the students and staff were initially held in person, approximately midway through the placement all meetings were held via teleconference.

This paper includes autoethnographic reflections from the team. Its purpose is to shine a critical lens on whether and how student partnerships can be fostered in a virtual research lab. The virtual classroom can produce effective and enjoyable learning experiences for students (Darby & Lang, 2019), but it can also serve as a barrier to their learning (Bayne et al., 2020). This could analogously extend to learning that takes place in a research lab. Given the scope of this reflective paper, we focus on the following themes: co-creation of research in a digital environment and perceived power dynamics in student-faculty relationships. Through these reflections, we demonstrate the value of learning from each other—through our different roles, our lived experiences in these roles, and our openness to seeking value from all the voices in our project.

STUDENT PARTNER REFLECTIONS

After the placement was completed, the students responded to the following questions:

1. What type of degree are you pursuing and from which department?
2. What, if anything, did you find most engaging, affirming, surprising about your experiences that came about through your placement?
3. What, if anything, did you find most challenging, distancing, problematic about your experiences that came about through your placement?
4. Is there anything else about your placement experiences that you would like to comment on?

Katherine

I am a student working on my Honours Bachelor of Applied Science in psychology at the University of Guelph-Humber (UGH). My program includes a mandatory field placement, which I fulfilled working at TLR. This was my first time working on a research project outside of school, so I was unsure of what to expect.

Before coming into this project, most of my knowledge about research came from textbooks and in-class assignments, which is different than working outside of school. I knew because I was a student intern, my team was not expecting a professional. However, I was still nervous that my lack of knowledge would be detrimental to the team and that they would have an expectation of working with someone who had more skills than I did. Nonetheless, everyone was very supportive and understanding, taking the time to explain to me what I did not understand and encouraging me when I was doing things well. Having that sort of support system made me feel more confident in what I was doing and encouraged me to want to keep working. The openness and approachableness of my team is something that I greatly appreciated.

Through this experience, I learned about the importance of some soft skills that I had previously considered to be minor. For instance, time management and organization are important for a project to progress smoothly. Additionally, I found that I was much more involved in the research process than I expected. I was anticipating learning things passively through observation, but the team gave me hands-on tasks to complete. This gave me the opportunity to work independently, which I am also fond of, since I believe that I learn more through these types of tasks than watching someone else do them.

One aspect I found difficult to come to terms with was the mentality that everyone's ideas and opinions had equal validity, despite differences in power. After being told all my life that teachers and other professionals knew best, I found it difficult to stand my ground if I had any opposing ideas. Although it was not a frequent occurrence, I found that I would have to remind myself to think critically about what was being said and to challenge ideas I did not agree with. This was a point that was brought up by my team, as they wanted to encourage discussion to reach better conclusions or cover ideas that they might not have considered. Despite the initial difficulty, over time I became more accustomed to this process of sharing ideas and objections.

Most of the meetings we participated in were video calls, in which we worked together and updated each other on how things were progressing. Online meetings were helpful, but I found that the occasional in-person meeting was more productive. The conversations feel more natural in person and connections feel more interpersonal; communication is much easier when facial expressions and body language are easier to see and there is no computer lag

disrupting anyone's speech. While online meetings worked well and were much more convenient, I think that in-person meetings had a value that could not be reproduced through video.

　　　The type of people one works with can change one's whole experience. I was lucky to be able to work in a supportive environment, which helped me focus on the work I was doing as opposed to worrying that I was doing something wrong. Overall, I really enjoyed my experience and am very grateful for having the opportunity to work with such an excellent team.

Shayla

　　　I am a student pursuing an honours bachelor's degree in psychology and a certificate in research skills and analysis from UGH.

　　　During my placement with TLR, I found the group meetings and calls to be the most engaging. This provided an opportunity for me to not only interact more with the group but also be able to receive any comments, feedback, and answers in real time. One thing I found surprising was how the assigned tasks were more qualitative than quantitative. This was a surprise to me because of how much focus my courses have placed on quantitative analysis compared to qualitative analysis during the first 2.5–3 years of my program.

　　　During my time at TLR, I found talking to Linda, who had an administrative role in this project, to be a small challenge. Although she is a lovely person who made it clear that she was there to support and guide Katherine and me throughout our placements at TLR, we didn't interact with her as often as we did with the researchers, Justeena or Alice. Compared to how I talked with Justeena, Alice, and Katherine, I spoke in a more formal tone with Linda, which brought a small feeling of distance between the two of us. I have had other challenges during my time at TLR but mainly due to a family emergency.

　　　My placement experience was positive overall. Not only was I able to meet new people from TLR, but I will also continue my relationship with Katherine and Alice. My experience was positive also due to how consistently the group communicated with each other and how open everyone was to any questions and feedback.

STAFF REFLECTIONS

　　　The staff also reflected on their experiences with the following questions:

1. In what capacity did you interact with the students?
2. What, if anything, did you find most engaging, affirming, surprising about your experiences that came about from working with the placement students?
3. What, if anything, did you find most challenging, distancing, problematic about your experiences that came about from working with the placement students?
4. Is there anything else about your experiences with the placement students that you would like to comment on?

Justeena

　　　I was broadly supervising the students' research activities from the beginning of the project, and I was mentoring them throughout the semester.

It was surprising that the students came in with general knowledge about the research process, but no real experience or application. They were extremely receptive to my mentorship and very eager to learn. The most engaging part of our interactions was being able to mold them as research assistants. I was able to describe the process and walk them through it, supporting them each step of the way during our weekly online meetings.

It was very challenging to develop a solid sense of community online. Normal in-person group settings allow for simple things like side conversations, collegial interactions, and speech interruptions (to provide input). As a result, our meetings seemed a bit robotic or systematic rather than conversational. Furthermore, not having or working in a physical space together created a lot of distance between us. This, unfortunately, limits the learning opportunities to a timed window of goal-focused meetings, instead of untimed informal conversations where students could receive quick and frequent feedback.

Working with a group of students is much more productive than having many one-on-one interactions, not only because it saves my time, but also because they begin to learn together. There was a lot of peer-learning behind the scenes which seemed most beneficial since the advisors were more distanced.

Alice

I instructed and guided the students through the analyses that they conducted for their placement. From the time that I started working with the students, we had weekly working meetings; during these sessions, I provided instructions about data analyses for the students, and then all three of us worked on analyzing the data in each others' presence. Working independently while in a group session allowed the students to ask any questions as they came up, and it also allowed for their questions to be addressed immediately through a live conversation (as opposed to, for example, an email thread). This setup also allowed the students to benefit by hearing each other's questions and being present and/or participating in the following discussion.

I was most engaged by the students' enthusiasm and desire to learn about the research process, and, more specifically, about how to conduct qualitative analyses. It was very apparent to me through my conversations with the students that they were putting a lot of thought into how they were coding the data and that they were interested in the phenomena reflected by the data. The students' interests in the data analysis process, as well as the enthusiasm and the effort they put into the entire project, was most affirming for me.

Although I didn't experience any significant challenges related to working with the students, I did find it challenging to carve out time for our weekly working meetings, for any work I needed to do on my end to prepare for the next meeting, and to pick up from where we left off the last time we met. Although building rapport with the students can sometimes take a bit of time, I think it was established rather quickly in our case. This is probably related to our pre-existing relationships; the two students were classmates and friends before the placement started, and I had previously been a course instructor for both students. In these ways, we were already familiar with each other in a generally positive way.

Hindrances to meeting with both students at the same time were challenging for me, because it was a break in the flow of the work we were doing collaboratively as a team, as well as our communication. Along with the COVID-19 pandemic that prevented us from meeting in

person at the tail end of the placement, other causes included busy schedules leading up to the end of the school term, as well as one instance where one of the students missed a meeting—without being able to give prior notice—for personal reasons. Nonetheless, I don't think these hindrances significantly impacted our work or relationships as we were still able to meet virtually and continue moving forward with the project.

I'm grateful to have had the opportunity to work with Katherine and Shayla during their placement with our organization. They are both talented, conscientious, and eager to learn, and they both contributed meaningfully to the research project they worked on for their placement. These are the types of experiences with student partners that generally motivate me to engage in the co-creation of teaching and learning.

Linda

I assumed an administrative position, and, as such, my contact with the placement students was limited. As part of the organization's team working with the placement students, I met with them before the placement began. We introduced them to the organization, the team members they would be working with, and their responsibilities as placement students. That meeting was at the beginning of the term—everyone seemed excited and eager. I met with the students independently of the team on two other occasions: in the middle of their placements to conduct a formative interview and at the end of their placements to conduct exit interviews. All these meetings were conducted online. For the duration of the placements, I was the contact person if the students had any administrative issues, and I was the contact for their placement co-ordinator. The amount of correspondence that was administratively oriented was minimal.

While it was positive that the students did not contact me regarding any issues or emergencies that were hindering their experience or that required much of my time (it was smooth sailing!), it follows from this that I also had minimal contact with the students throughout their placement. There were weeks when I did not even think about the research project. Upon reflection, I can say I felt distanced from the team and the project. I did not know the details of the study or its results either. While I was happy to aid in the facilitation of the process, I felt no investment in the project itself.

At mid-term, I met with the students independently. The purpose of this meeting was to ensure that the students had a voice (i.e., that they were being heard as they worked on the project), that they were not being overworked, and to determine if there were any ways in which I could better work with and/or support the students.

It was during these interviews that I was the most engaged that I have been throughout this experience. In particular, I introduced a logging chart that was more detailed than the one required by the students' placement co-ordinator. In addition to the days and hours, the log the students worked on was organized to also include a description of the tasks completed, as well as space for notes, observations, questions, or reflections. This was provided to the students to hone their skills as reflective practitioners (see Mezirow 1998; Rigano & Edwards, 1998). Part of being a good teacher, researcher, learner, and investigator is reflecting on the experience—to learn from it, to advance your learnings, to prompt (new) interests, to question ideas or biases, and so on. In our discussions we talked about this process—of taking note of more than just the specific project task and the date. For me, this was the most engaging experience, likely

because I was involved in a capacity that could have been meaningful to the students. Or, at least it felt like I was engaging more meaningfully than my role allowed. Being a reflective practitioner is a skill that the placement students can take with them—use it, adapt it, and grow from it.

DISCUSSION

Co-creation of research in a digital environment

There were different facets of co-creating research that were necessary for the placement: modeling empirical research, providing feedback, having open discussions about analyzing data, engaging in (administrative) meetings throughout the term, debriefing on the process, and reflecting and revising as necessary. Our reactions to communicating and working on the study, and its administration, virtually (mainly using Zoom) were inconsistent. On the one hand, most of the team acknowledged that we were at least able to continue the empirical study, and the student partners were able to complete their placements on time with the modification to the virtual research lab. On the other hand, the virtual research lab hindered real-time, and what were perceived as more productive, co-experiences. Virtual meetings resulted in occasional awkwardness (e.g., missing conversational implicatures in a Zoom meeting). They resulted in missed opportunities to watch each other learn and grow. Ironically, it was Linda who felt distanced from the project and team *except* during the instances of one-on-one sessions conducted on Zoom with each student partner. These challenges, it seems, could have been related to a sense of community among us. Could we have created a stronger community, such that the shift to the virtual research lab would not have created such perceived challenges at all? This is a question that needs further exploration, beyond the scope of this paper. For now, we will say that literature about teaching online confirms that it is possible (and really important) to build relationships (between teacher and learners and between learners themselves) in the online class environment (Darby & Lang, 2019). One way to do this is to be active and present as instructors—we demonstrate the level of communication and involvement and the expectations. In other words, we model for student partners how to learn online (Carozza & Gennaro, 2021). This sense of involvement can cultivate community and foster motivation and engagement from learners. It seems reasonable to apply this theory to student partnerships in the context of empirical virtual research labs. If anything, a virtual research lab brings with it more opportunities than challenges. However, pedagogical design is necessary.

Power dynamics in student-staff relationships

TLR is an organization that already embeds an inclusive environment. Its members are made up of faculty and staff and student partners. While students are mentored, they are also gaining experiential education in pedagogical research. In entering the relationship with Katherine and Shayla, all three staff at TLR had already experienced working in teams, working with student partners in the co-creation of research, and even co-authoring articles in the past with student partners. This project highlighted the perceived power dynamics that students had (this was highlighted by the student partners' reflections, e.g., "After being told all my life that teachers and other professionals know best, I found it difficult to stand my ground if I had any

opposing ideas" and "I spoke in a more formal tone with Linda, which brought a small feeling of distance between the two of us"). As much as the staff were receptive and interested in working with student partners, there existed other influences in academia (and in society at large) that promoted hierarchical structures. Both students confirmed this. The staff consciously aimed to foster autonomous, inclusive, and critical thinking. This was noted by Katherine as foreign to her, that she had to remind herself to think critically and share her thoughts.

A value of teaching in the post-secondary sector is to help the development of students into competent lay people, where a competent layperson is an individual who has the confidence and transferable skills to handle situations, issues, information, and so on—even if they do not fall into their expertise. Methodologies associated with qualitative research are discipline specific, but encouraging independent thinking and being receptive to students' ideas in the context of the study could help mold students into confident and competent researchers and citizens. The process Justeena and Alice embarked on with the students, Katherine and Shayla, modelled how to think critically—a method Brookfield (2020) explains is important as critical thinking is experienced socially. We take this a step further and argue that this methodological approach can lead to transformative learning experiences. The staff in this case hope that the purposeful methodologies of the research placements left the student partners feeling empowered in their abilities and possibilities. We note that this fluid, open-minded dialectic between students and faculty is an ingredient of socially just pedagogy (see Carrim, 2017). It prioritized student agency, and it functioned to empower those whose voices—for whatever reason—may be minimized, questioned, or excluded.

CONCLUSION

A socially just pedagogical approach has many facets. For us, at TLR, it needs to be conscious of social agents and issues and how they impact teaching and learning in support of the telos of impacting student partners to be confident and competent social agents of change. The literature states that socially just pedagogies grant all students equitable access to knowledge and success (Walker & Wilson-Strydom, 2017). Socially just pedagogies are practical, rather than theoretical, and they can foster a reciprocal, or interdependent, relationship between teachers and learners (Leibowitz & Bozalek, 2016). We can say with confidence that we experienced this reciprocal learning journey. For such a reciprocal relationship to be successful, there needs to be awareness of all agents involved (the intersections of gender, race, age, class, ability, etc.), and how they impact each other. Focusing on building community and softening institutional hierarchies by engaging, modelling, and working alongside students has this effect.

ACKNOWLEDGEMENTS

NOTE ON CONTRIBUTORS

Linda Carozza *is a course instructor in the Department of Philosophy at York University, Canada. Her research and teaching focus on argumentation theory, critical reasoning, and the scholarship of teaching and learning. She is a member of Teaching and Learning Research in Action.*

Alice S. N. Kim *is a researcher and course instructor with a background in experimental psychology, cognitive neuroscience of memory and learning, and the scholarship of teaching and learning. She founded Teaching and Learning Research in Action.*

Justeena Zaki-Azat *is a Ph.D. candidate in the Department of Psychology at York University, Canada. She is a member of Teaching and Learning Research in Action.*

Shayla Pham *is an undergraduate student studying psychology at Guelph-Humber University, Canada.*

Katherine Liczner *is an undergraduate student studying psychology at Guelph-Humber University, Canada.*

REFERENCES

Bayne, S., Evans, P., Ewins, R., Knox, J., & Lamb, J. (2020). *The manifesto for teaching online*. MIT Press.

Brookfield, S. (2020). Teaching for critical thinking. *International Journal of Adult Education and Technology*, *11*(3), 1–21. https://doi.org/10.4018/IJAET.2020070101

Carozza, L., & Gennaro, S. (2021). Post-pandemic pedagogy: Compassionate and caring course curriculum in the digital university. In J. M. Valenzano III (Ed.), *Post-pandemic pedagogy: A paradigm shift* (pp. 57–72). Lexington Books.

Carrim, N. (2017). Stuart Hall and education: Being critical of critical pedagogy. In R. Osman and D. J. Hornsby (Eds.), *Transforming teaching and learning in higher education: Towards a socially just pedagogy in a global context* (pp. 15–36.). Palgrave MacMillan.

Darby, F., & Lang, J. M. (2019). *Small teaching online: Applying learning science in online classes*. John Wiley & Sons.

Leibowitz, B., & Bozalek, V. (2016). The scholarship of teaching and learning from a social justice perspective. *Teaching in Higher Education, 21*(2),1–14. https://doi.org/10.1080/13562517.2015.1115971

Mezirow, J. (1998). On critical reflection. *Adult education quarterly*, *48*(3), 185–198. https://doi.org/10.1177/074171369804800305

Rigano, D., & Edwards, J. (1998). Incorporating reflection into work practice: A case study. *Management Learning*, *29*(4), 431–446. https://doi.org/10.1177/1350507698294003

Walker, M., & Wilson-Strydom, M. (Eds.). (2017) *Socially just pedagogies, capabilities and quality in higher education: Global perspectives.* Palgrave Macmillan.