

Evaluating the Impacts of Community Engaged Participatory Design Courses on Student Learning

1. Introduction

Emily Carr offers a series of core design courses that engage equity seeking groups in community through co-design. Undergraduate students in the streams of Communication Design, Industrial Design, and Interaction Design are guided through the framework of participatory design research methods with the intended learning outcome of co-design facilitation and the production of a design object. In this study Community partners, Emily Carr Students and Faculty, describe how the incorporation of the lived experience of equity seeking community groups into academic practice has impacted learning outcomes and shifted institutional structures. Finally, participants describe how the community-based design curriculum offers a framework for the authentic inclusion of pluralistic views into academic practice.

2. Background

The Health Design Lab (HDL) is a research and design center at Emily Carr University in Vancouver, BC, that focuses on the use of participatory co-design methods to address challenges in health and healthcare contexts (Raber, C, 2021). The lab engages in a range of community-based research projects, as well as establishes and supports course-based collaborations with local community partners. This paper and research study focus' on evaluating the impact and value of community-based co-design projects on student learning and post-graduation experience through current and past students, faculty, and partner perspectives. Within the study, 3 course-based collaborations which all follow a similar model, were evaluated. This included the following 3 courses:

1. A second-year Industrial Design course involving co-design with elementary school children with learning differences at Kenneth Gordon Maplewood School. This partnership has been ongoing for over 10 years. (Cyca, 2019)
2. A third-year design course (originally a communication design course, and now an interdisciplinary design elective) involving co-design with residents living in long-term care. This partnership with Vancouver Coastal Health has been ongoing for 4 years. (Raber, C, 2020)
3. A third-year communication design course involving co-design with people living with disabilities in collaboration with the Disability Alliance of BC. This partnership has been ongoing for 1 year. (Boulton, 2020)

All of these courses provide undergraduate design students the opportunity to engage with people with lived experiences through co-design processes (McKercher, 2020), with the goal



of creating a shared outcome at the end of the course. Courses begin with preliminary sensitizing activities which provide the academic grounding of associated literature provided by the supporting faculty member and a brief presentation provided by the community partner. Student groups go on to work with co-designers in small groups over the duration of a semester, often meeting an average of 6 times to collaborate over a 12-week semester. Students are introduced to participatory design and community-engaged research methods (Mahoney, 2021) and given the opportunity to work with people who have lived experience, with the support of a partner organization and the course faculty lead.

Participatory design research can be differentiated from other similar community engaged curriculum and participatory action research by its emphasis on using creative methods as a tool to communicate with and or encourage dialog with research participants or in this case, co-designers (McKercher, 2020). This creative dimension allows for a breadth of possible research approaches to facilitate the inclusion of a spectrum of experience and difference within the same classroom.

Courses such as these respond to an increasing acknowledgement of the need to address equity, diversity, and inclusion in both the delivery of education and design. Equity seeking groups as defined by Canada Council:

“...are communities that face significant collective challenges in participating in society. This marginalization could be created by attitudinal, historic, social, and environmental barriers based on age, ethnicity, disability, economic status, gender, nationality, race, sexual orientation, and transgender status, etc. Equity-seeking groups are those that identify barriers to equal access, opportunities, and resources due to disadvantage and discrimination and actively seek social justice and reparation.” (Canada Council for the Arts, n.d.)

This study sought to better understand what impact student engagement with equity-seeking groups in community may have on their learning and how these courses shifted the student’s self-view. As a result of the COVID-19 pandemic students, faculty and community partners also responded to the impacts of shifting this deeply engaged work into an online or virtual format. This work was funded by the BC Campus Fellowship Program (Caldwell, 2021).

3. Method

To understand the impact of this emergent learning model three contributing faculty members described their experiences in an hour-long interview. Community partners were also invited to participate in an interview. A community partner representative was not available to contribute to this study from DABC and thus community reflections include the opinions of a participating Recreation Therapist with VCH and Teacher at KGMS. All students who had previously taken any of the three courses were invited to participate in an online survey. In total, 48 students and alumni contributed their opinions via a survey which allowed for both ranking and long form answers. Due to the COVID-19 Pandemic, several of

these courses had switched to a virtual format during the year of this research study. Therefore, this study captures both the experiences of students who participated in face-to-face and virtual versions of the courses. Data from all sources were sorted using a process of affinity mapping to reveal themes expressed in this paper.

Through the analysis of the research data, three key themes emerged which are described in the sections that follow:

1. Learning Outcomes: Learning participatory design with equity seeking groups in community adds value to the academic experience
2. Expanding Academic Potential: Co-Designing with equity seeking community can disrupt hierarchies and power-structures within Academia
3. Inclusion: The application of participatory methods with equity seeking groups through coursework makes space for a plurality of experience in an institutionalized setting

4. Learning participatory design with equity seeking groups in community brings adds value to the academic experience

As an institution, Emily Carr University of Art + Design is committed to championing design for sustainability, equity, diversity and inclusion in the construction and delivery of their curriculum (Raber, C, 2021; Raber, C, 2021). Theories and processes taught encourage students to think critically about design outcomes while at the same time teaching the technical skills of design production.

The community-based design courses at Emily Carr University of Art + Design facilitate the activation of applied theory, taking it from a controlled, institutionalized environment and into the spectrum of the real-world experience of equity seeking groups. In contrast to standard design curriculum, these courses require students demonstrate relational development (Jordan, 1997) with equity-seeking groups, demonstrating the emergent and co-creative untangling of an area of inquiry. To facilitate the delivery of course outcomes Faculty teach participatory design research methods which emphasizes designing with, not for people and leverage creative tools to draw out a deeper level of personal knowledge from a user, or in this model, co-designer (Sanders, 2012). Notably, most students have already been exposed to participatory design methods through other courses, however this is often their first opportunity to apply their learning outside of a classroom context.

Findings from the study indicate that there are a series of learning outcomes created by way of community engaged participatory design research coursework. Across these three courses participants reported the following:

1. Intrinsic evaluation metrics motivate deeper work: Designing with equity seeking groups and being sensitised to their experiences calls students to want to work more diligently on their projects. Acknowledging the personal impact of a design on co-

designers; receiving critique of design outcomes compels a deeper and more empathic approach to design.

2. Career Insights: Applying design and facilitation skills in a real-world context offers students a window into potential future career directions.
3. Professionalism: Working with community members instead of fellow students simulates a more professional setting and students appreciated pragmatic applications of creative skills and resume building
4. Vulnerability:
 - Students felt that having the opportunity to get to know someone outside of their regular social circle called them to develop empathetic sensitivity, flexibility, and adaptability to navigate their differences. Student's learn how to "use vulnerability as a tool to build relationships; really expose a story."
 - Managing Ambiguity: Much is left undefined when stepping into the complexity of lived experience. Students learned how to overcome their fear of failure, build trust in themselves and others to step out of their comfort zones.
5. Presence: Understanding the value of listening and of other's experiences
6. Zoom used as a participatory method with equity seeking groups can allow for higher participation with some groups and limit participation with others.
7. Participatory design: Research method, facilitation, synthesis, teamwork, project management, and scaling down design to a personal level

Student overwhelmingly reported the unique opportunity to situate themselves and their practice into a broader context than the bounds of what was commonly described as the "academic bubble." Students and Faculty described a more integrated learning wherein they learned "...a new type of cooperation, where I had to initiate more as the maker and thinker" moving from "imagination and aesthetics" and into "reality and minority", and that they felt they could "... make something with someone's input while having that thing connect to the larger picture." Overall impressions of a higher degree of connectedness and meaningfulness were prevalent as a result of moving classroom learning out into a community space that requires the students negotiate difference.

5. Expanding Academic Potential: Co-Designing with equity seeking community can disrupt hierarchies and power-structures within Academia

These courses have been described, by students, as having a de-institutionalizing impact upon the academic system. In this model of education, while critical skill driven learning outcomes are addressed, much of the learning comes by way of a facilitated experience of working with real people on their real-world problems thus shifting academic hierarchies and expanding understanding of who are teachers and what learning can look like. Students

expressed, “learning can happen anywhere at any time with anyone” and that they learned “to see and listen to people as their own persons.”

Engaging people from community who are equity seeking as co-designers shifts the power dynamic of who the student is working for and offers a pluralistic view of what a successful outcome can look like. Students learn to design creative tools to support conversations with people that they described as being outside of anyone they would have shared company with prior to this course. The inclusion of new perspective supports a range of outcomes driven by needs, desires and stories shared by co-designers. In this way, difference is reframed from something that needs to be accommodated, and into a position of opportunity and creative potential, while providing the constraints to inspire innovative design.

In a reformatting of academic hierarchy, the co-designers are positioned as sources of knowledge and as an intrinsic metric of success in their approval of student outputs; a metric that carries enormous weight beyond traditional grading metrics. Students are re-imagined as the curricular developer of their co-creative sessions which are aimed to build trust and create opportunities and other forms of knowledge sharing, namely storytelling. Paramount to this process is the recognition and subsequent integration of different ways of thinking, doing, and expressing into the design process. Faculty and community partner leads in these courses offer the structure and support to allow for relationship development in a safe and trusting manner. In this way Faculty accommodates the flexibility and ambiguity of the process which often does not fit typical class construction. It is in this reorientation of who are the teachers; what success looks like for students; and an emphasis on amplifying the value of difference that academic practice can be functionally transformed.

Both students and Faculty reported a shift in the manner of engagement driven by this reorientation within course work. Students describe wanting to work harder and apply more emphasis to these courses with the understanding that the quality and integrity of their work had the potential to shift external perspectives of equity seeking groups and could also shift the views of the individuals themselves.

Variability in design outcomes, as driven by the emergent process of co-design, also realigns how course deliverable and academic evaluation of a design courses might operate. Students described learning more about how the process of design itself is design, that shifting from being evaluated by a teacher on aesthetics towards understanding a framework for engagement offered significant intrinsic reward but also offered a broadening of utility and purpose to possible future work in the world and in design beyond, as many students described, “making it pretty.”

6. Inclusion: The application of participatory methods with equity seeking groups through coursework makes space for a plurality of experience in an institutionalized setting

Using creativity as a shared language in the three courses described, created the space for knowledge holders from all backgrounds to communicate. While more research is needed to quantify how creative approaches facilitate inclusion (Gattenhof, 2021) these ongoing courses which engage a range of ability, cultures and ages continuously demonstrate how creativity-based qualitative data collection facilitates the inclusion of more voices in the design of their world.

Facilitating storytelling as a method of generating user data made space for more voices to participate in research. In centering the experiences of equity seeking groups students' focus shifted from creating work with the intention of satisfying a professor or their own preferences to that of their co-designer. The benefits of engaging people outside of design, outside of academia and into communities' students would seldom engage with, helped students see their academic experience and the skills they were developing as a mechanism to improve the life of people who are underserved.

Students engaged in these courses reported that participatory design research shifted their narrative of designer as authority or decision maker towards designer as facilitator, listener, and activator of other's voice. In this way students began to understand participatory design research practices to share power, that "there's this underprivileged group that we are supporting through our privilege". In facilitating co-creation, students felt they we're able to uplift and support the agency of co-creators through reciprocal connection and conversation positioning equity seeking people as equal decision makers in the design process. Overall, these courses were described to instill in students the value of non-designer's perspectives into their design practice; that everyone has a unique and important role that adds to the conversation.

Finally, working with equity seeking people challenged students' assumptions of inclusiveness in their personal practice, and around the age, skill, and ability of people outside their social circles. Students became aware of the danger in designing without real people and the impact of working based on assumption or generalization and the value in stepping into the plurality and complexity offered by lived experience. Student teams began to understand how their individual differences supported them through the ambiguous nature of exploring experience; they felt supported by each other *through* their difference. One faculty member summarized a common sentiment shared by their colleagues that "one of the most important factors is actually students having their perceptions checked in terms of reality." In this way these community engaged courses called students to consider their positionality (Coghlan, 2014).

8. Conclusion

Students feel that “community-based curriculum takes out the industrialized feeling of academia” and creates a space for people to “participate in systems that would otherwise not be entirely built for their inclusion.” Where learning happens and where academia situates itself, can re-shape and inform a transformation in learning. While Faculty, Research Centres and Community Based Organizations alike create the capacity for this change within the system itself; it is in the willingness of equity seeking people to make time and effort to engage in a participatory design connected curriculum that Post-Secondary course offerings in design are transformed into a new and valuable structure of what learning can look like for undergraduate students.

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9. References

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