From Smart Cities to Wise Cities: Studying Abroad in Digital Urban Space

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Abstract

This article analyzes the impact of experiential and inquiry-based learning exercises in a 2019 Toronto study abroad course on smart cities for first-year students. The course treated the city as a text to be read, analyzed, and unpacked. Students engaged with the disciplines of urban studies, critical race and ethnic studies, and surveillance studies in order to assess Toronto's smart city initiative while exploring firsthand how technology and urban planning currently structure the lived experiences of Toronto's inhabitants. Ultimately, students came to understand how data analytics order, pattern, and structure the complexity of urban life in ways that can be inclusionary and exclusionary, democratic and autocratic. They gained an appreciation for why a range of stakeholders with disparate social and economic power perceive smart city initiatives differently, and they theorized what it might mean to live in a wise city that accounts for history, ethics, and power.

Keywords:

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Introduction

In 2017, Alphabet INC., the parent company of Google, acquired the rights to construct a smart city in Toronto, Ontario, Canada. The city would be developed by their urban innovation organization, Sidewalk Labs. This development plan promised to use technology to create a sustainable and data-managed urban neighborhood, raising excitement about the possibilities of a greener city, and concerns over privacy, gentrification, and the privatization of public space. Over the last two decades, the concept of a "smart city" has become increasingly popular in scientific literature and international policies to name a range of integrated urban development measures (see Table 1 in Albino et al., 2015). While there is no universally agreed upon definition of a smart city (Albino et al., 2015), I understand the smart city as a city that uses knowledge acquired through the diffusion of information and communications technology (ICT) for urban governance, often for the espoused purposes of increased sustainability, resource efficiency, innovative commerce, and a higher quality of life for city dwellers. In order to understand the emergence of smart city initiatives, one needs to be able to map the complex system of interconnecting technical interventions, power relations, and perspectives that give shape to its design. I decided to take 40 primarily first-year students enrolled in the honors college of the Midwest public research university where I teach to explore the following questions while on site in Toronto for two weeks in May 2019. 82% of these students were registered STEM majors and 18% humanities and social sciences majors, with varying degrees of prior knowledge about smart cities:

- What is Sidewalk Labs and what plans does it have for developing Toronto? How has this project been received by Toronto community members?
- Should Toronto's past as a city inform its future? If so, how?
- What makes a smart city "smart"?
- What role do surveillance and data collection play within smart cities?
- How does the Toronto smart city initiative compare to other smart city projects globally?
- How do smart homes fit into the larger project of smart cities, and what visions of family life do smart homes construct and promote?
- Are smart cities the same thing as wise cities? How should urban designs account for ethics and power?

Using these guiding questions, my first aim was for students to develop critical and interdisciplinary thinking skills by analyzing how scholars from a range of disciplines assess smart city initiatives, and to use these scholars' concepts, frameworks, and insights to analyze, unpack, and situate their lived experiences in Toronto. My second aim was for students to develop their

problem-solving abilities by working together to imagine ethical smart city initiatives after speaking with smart city design experts and local community members. My third and final learning goal for students was to help them develop intercultural awareness through immersion in Toronto, one of the most multicultural and multiracial cities in the world and the largest city in Canada by population, with over 2 million residents. In terms of participating students' racial demographics, according to university data, they identified as 2.5% International, 2.5% Black, 5.0% Hispanic/Latino, 17.5% Two or More Races, 20% Asian, and 52.5% White. Additionally, three of these students self-reported first-generation status. This program was fortunate to receive an internal grant that fully covered the program fees for students from low- and middle-income families. 12.5% of students were considered low-income and 17.5% middle-income, according to expected family contributions. Many of the participating students shared with me that this was their first time outside of the United States.

I was supported by two colleagues from my college's advising team, Dani Parsons and Ethan Johnson, who worked to ensure that there were sufficient resources for helping students acclimate to their new surroundings while navigating the course's expectations. In terms of our respective positionalities, Ethan identifies as a cisgender white gay male and student affairs professional with an educational background in the liberal arts. Dani identifies as a white, queer, transgender person. While they currently work in student affairs as advisors, their educational background is in social psychology. I identify as a cisgender white woman and faculty member with a background in science and technology studies, media studies, and feminist studies. Together, we worked to remain attentive to the ways our respective positionalities impacted our interactions with students and our different experiences in the city through frequent debriefing sessions. These sessions were premised on shared commitments to prioritizing student safety and to maximizing students' learning across their range of backgrounds and experiences. This article provides an assessment of the efficacy of the experiential and inquiry-based learning exercises used in this course for meeting the course's specified learning goals, based on students' written reflections and course evaluations.

Place-based Experiential and Intercultural Learning

Teaching "Smart Cities" on site in Toronto engaged students through immersion, which made it possible for them to directly implement insights from our course material into how they came to understand the construction of urban

space. I deployed experiential learning, a pedagogy that is grounded in students gaining experience firsthand and reflecting on those experiences in order to acquire new knowledge and skills (McDonald, 2020), through excursions to places like the Sidewalk Labs office in Toronto, the Royal Ontario Museum, Kensington Market, St. Lawrence Market, the Village (led by Johnson), and the Distillery District. Each excursion was paired with a reflection prompt in order to promote the development of new ways of thinking about and understanding the smart city initiative, as well as its potential social and ethical impacts. As Victor Savicki and Michele V. Price (2017) explain, "experiences gain significance to the degree that students can ascribe meaning to them. Unexamined experiences do not rise to the level of learning that will result in meaningful outcomes...Reflection emerges as a vital component of study abroad student development" (p. 51). Following the work of Savicki and Price (2017), I understand successful student reflections as reflections that demonstrate perspective shifts and are contextual, descriptive, well differentiated, and integrate the students' emotions, behavior, and/or cognition. For instance, during the visit to the Sidewalk Labs office, students were asked to pick a particular demonstration and describe how it illustrates Sidewalk Labs' understanding of what it means for a city to be "smart." They were encouraged to make connections to the day's reading, which offered an overview of smart city definitions and the ways that different disciplinary orientations and priorities impact how the term "smart city" gets defined (Albino et al., 2015). Every student was required to post their reflection on a shared course blog so that they were able to see one another's reflections. In this way, students were responsible for managing their own learning, and engaged in ongoing reflection in order to develop deeper levels of understanding regarding not only the Sidewalk Labs smart city initiative, but also the existing history, politics, culture, and social dynamics of Toronto.

To help students understand Sidewalk Labs as operating on and within an existing urban context, I drew from place-based experiential learning approaches grounded in urban history, wherein "place-based learning is a process in which students learn... about the histories, power arrangements, values, and decisions that have created a specific place" (Henthorn, 2014, p. 452). To make sense of the controversy surrounding the Sidewalk Labs initiative and thus the future direction of Toronto, students would first need to understand the role of power in shaping Toronto's past and present as an urban space. Social relationships, institutional arrangements, and urban design in Toronto are impacted by its social and historical context. I thus challenged students to test their ways of seeing the city by reconciling Toronto's present with its past. For

instance, during our visit to Kensington Market, a walking and bike-friendly market filled with trendy bars, stores, and cafés, the students were taught beforehand Kensington Market's early history as a 19th century British and Irish immigrant community, later joined by Jewish immigrants from Eastern Europe. Property owners prohibited Jews from trading or selling to the business community, and the Jewish community responded by creating outdoor stalls, leading to the popularization of outdoor markets at Kensington. While the Kensington Market area was diversified in the 1960s to include immigrants from Portugal, Italy, China, East India, and the Caribbean, many of these communities have since been priced out due to gentrification. Most recently, in 2002, Nike attempted to open a store at Kensington Market. The community pushed back through a street party and public art demonstration using red-painted running shoes to symbolize Nike's exploitative labor practices. I was thus able to situate the controversial Sidewalk Labs initiative, and concerns over its potential role in spreading gentrification and corporate control, within these longer historical contestations over urban space.

Intercultural learning, or the "acquisition of knowledge and skills that support the ability of learners to both understand culture and interact with people from cultures different from their own" (Lane, 2012), was also central to the course's aims and structure, grounded in an analysis of the ways that sociopolitical context and uneven power dynamics shape intercultural zones. In particular, drawing from the Purdue Intercultural Knowledge and Effectiveness Rubric (Purdue, 2021), my goals were to support students in developing intercultural competencies in self-awareness, openness, empathy, and knowledge of cultural worldview frameworks, including: developing new perspectives about their own cultural rules and biases; beginning to initiate and develop interactions with culturally different others; interpreting their intercultural experiences through more than one worldview; and developing a sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, and economy. This process involved challenging students' initial assumptions about Canadian politics and culture that they shared during our pre-departure meeting, which often included an assumption that Toronto would be a harmonious, peaceful, multicultural city, unburdened by the wealth, health, and racial inequalities of U.S. cities.

In order to help students interrogate their own assumptions and develop their intercultural competencies, I assigned an interview assignment in addition to our daily excursions. In the interview assignment, pairs of students had to

interview someone who has lived in Toronto for at least one year to better understand how they experience the city and what views, if any, they have on how Toronto city life could be improved. They were then asked to reflect in writing on how their interviewee's experience of the city compared and contrasted with their own observations of Toronto so far. In their interview write-ups, some students described finding their interview subjects and their own views on Toronto being similarly positive in terms of its multiculturalism and accessibility, while others found that their interview subjects were struggling with finding employment, affordable housing, and reliable transportation. We discussed their findings as a class, which helped students consider the ways that their interview subjects might have very different experiences, and that there is no one universal city experience within Toronto due to a range of social and economic disparities that differentially impact city dwellers' lives. Students were also surprised by how many of their interview subjects knew little to nothing about Sidewalk Labs' plans for developing a smart city initiative in Toronto, which encouraged them to think critically about the dominant narrative offered by Sidewalk Labs: that their initiative was grounded in a highly democratic, participatory model of urban design (Trilling, 2019).

However, while intercultural dialogue can result in short-term changes to individual attitudes and cross-group relationships, there is no evidence that dialogue mitigates systemic inequalities (Gorski, 2008, p. 520). This is why I also had students grapple with the history of colonialism in Toronto in an effort to ground their intercultural learning in a decolonial framework. Our first excursion was to the First Peoples Art and Culture Exhibit in the Royal Ontario Museum, where students responded to a reflection prompt where they were asked to pick an artifact and describe in what ways the artifact, and the museum's representation of it, participate in the construction of Toronto's history, drawing from the work of Victoria Freeman (2010). This reading, which we read and discussed before the excursion, highlighted how a week-long commemoration of Toronto's 1834 incorporation in 1884 erased the area's Indigenous past, lauded its European future, and romanticized the dispossession of the indigenous Mississaugas (Freeman, 2010). In our discussion, we considered the importance of how the framing of a city's history makes possible the imagining of certain futures while inhibiting alternative visions, often in ways that erase the rights and experiences of colonized people. This was an effort to mitigate the ways that dominant U.S. intercultural education often reproduces, despite good intentions, systems of inequity and injustice under the "guise of interculturalism" (Gorski, 2008, p. 517). In students' reflection blog

posts from the museum trip, several remarked on artifacts that they felt participated in the romanticization of Toronto's settler past, while others found artifacts that they felt highlighted Indigenous knowledge and perspectives in an effort to correct settler erasure.

Power and Urban Design

In order to further stress the ways that power dynamics inform the urban design of Toronto, students were taught the design concepts of universal design, restrictive design, and inclusive design. They considered what assumptions, values, goals, and ideas inform these different methods through direct observation of these design approaches in the city. For instance, when we walked on the flat, expansive sidewalks along the Toronto waterfront, we considered how these sidewalks were an example of universal design, meaning "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Mace, 1985, p. 147). To provide social, historical, and political context for universal design, students were given a short lecture before the city walk on the history of the disability rights movement in Ontario so that students were able to understand the transformation of public space as linked to Canadian civil rights struggles.

For restrictive design, the students and I first discussed the ideas of restriction by design and hostile architecture, such as spikes on park benches to make sleeping uncomfortable. Hostile architecture was first popularized in the 1970s as a way to "design-out" crime and "anti-social behavior" as environmental theories for crime became increasingly popular in a range of fields (Chellew, 2016, p. 18). Our assigned reading focused specifically on the ways that automated public toilets (APTs) in cities, including Toronto, are embedded with normative values and surveillance techniques that prescribe certain patterns of use while restricting others, and that must be analyzed within wider trends of privatization underpinning what often look like re-democratizing city initiatives (Braverman, 2010). While at first glance, the increase of public toilets would suggest an increase in the accessibility of public space, ATPs are highly restrictive in their design, including physical features that deliberately render sleeping, laundering, showering, and sexual activities difficult to perform. Furthermore, ATPs allow for the proliferation of private advertisement in urban space (Braverman, 2010). The students and I then conducted a walking excursion where they were asked to evaluate public street furniture, meaning objects installed along streets and roads for public purposes,

including benches, streetlamps, traffic signs, advertising amenities, fountains, bike racks, sculptures, waste bins, and of course, public restrooms, and determine in what ways, if any, these objects illustrated restrictive design through written reflection. Upon completion of this walking excursion, the students were then presented with Sidewalk Labs' proposed signs for indicating what data is being collected in a given location in the smart city, as well as illustrations of street furniture from the Sidewalk Labs proposal, including benches and overhead protectors. They were asked again to reflect on whether these proposed public furniture examples were examples of inclusive, restrictive, and/or universal design and why. Thus, the excursion in Toronto's present urban space helped students develop the tools to conduct close readings of the embedded values, politics, and goals of public furniture, which they were then able to apply to think through the implications of Sidewalk Labs' proposed public furniture.

For inclusive design, which involves the direct participation of excluded communities in the design process and centers the diversity of people's needs and experiences (Treviraus, 2018), students met with two representatives from the Inclusive Design Research Center at the Ontario College of Art and Design University, who had partnered with Sidewalk Labs. These representatives described the eight co-design sessions they held with community groups across Toronto, as well as Sidewalk Labs' three daylong sessions with people who identify as part of the accessibility community. These efforts culminated in proposed ideas for accessible autonomous vehicles for transporting people to non-emergency medical appointments, audio wayfinding beacons and tactile path signs, rumble pavement to alert pedestrians, and an app where floor plans can be uploaded and turned into audio alerts. After this guest speaker visit, the students and I discussed key principles of inclusive smart city design, including privacy by design, open data, participatory design, empowerment for marginalized groups, and gender balance in design and implementation (Sangiuliano, 2014). Students then visited the Distillery District and were asked to reflect through direct observation and then in writing on the ways they see accessibility and inclusivity being, or not being, taken into consideration in the layout, design, and/or amenities of the Distillery District. Furthermore, they were asked to consider how taking stock of these qualities impacts the way they think about the future of smart cities. Student reflections included insights on the inaccessibility of the cobblestones for wheelchair uses, the lack of braille or audio on signs, and the expensiveness of the shops, while other students noted the presence of ramps and wide walkways. One student shared: "before our class discussion today I wouldn't have paid any attention to how inaccessible

the Distillery District was. However, when I think about accessibility in a smart city I realized that there are not many places that are currently 'smart' in terms of their accessibility. A smart city must be accessible to all who live there." Another student explicitly connected their reflection on the inaccessibility of the Distillery District to the guest lecture, writing, "I liked how our guest speakers talked about how a disability is a mismatch between a person's need and the environment...this is why the team designing the space needs to be diverse not only in discipline and background, but also in needs." This excursion reflection thus brought to life the key design concepts from the guest speakers' visit, and helped students better imagine what a smart city project that centers inclusivity and accessibility might look like.

These excursion exercises on urban design ultimately helped prepare the students for one of the major assignments in the course: the City Exploratory Write-Up. In pairs, students were asked to develop a list of observations detailing what they noticed while walking together, including how the city is organized spatially, its aesthetic design, the ways people move through city space, technologies for surveillance, art/cultural observations, street furniture, accessibility considerations, and transportation. Together, they were then asked to write a two-page reflection analyzing what these observations tell us about how the city and its people are organized, governed, controlled, and/or managed, as well as aspects of city life that do not appear to be managed or controlled. This assignment helped the students put into practice their knowledge of how power relations and embedded values, goals, ideas, and assumptions about urban life shape urban design through the critical evaluation of their direct observations in Toronto. For instance, one pair of students wrote that, "public message centers are another example of influencing street furniture...it asks citizens to be engaged and participate in civic action. However, the message centers are a form of management by the city, as it requests that people share information at a selected spot, rather than placing graffiti on post boxes or taping flyers to electric poles." In this example, the students demonstrate their ability to think critically about the ways that street furniture can help influence, order, and manage civic life. Many student pairs chose to remark on the function of street furniture for enabling and disabling certain behaviors as an expression of power. Other students took note of the function of transportation in organizing city life, and the disparate impacts of this organization. For instance, one pair wrote, "Bus, subway, and train scheduling generally caters to people with typical business hours and locations, thus negatively impacting people with 'irregular' schedules or homes far from the busier parts of the city... The public transportation system further asserts control over those who use it

with the fares it requires." These examples are demonstrative of the ways that students were developing their abilities to read the city as a text that can tell them something about the relationship between urban space, power, inclusion, and socioeconomic inequality.

The Value of Interdisciplinary Scholarship and Guest Speakers

The efficacy of these experiential learning exercises hinged on the students' robust engagement in critical interdisciplinary scholarship. Students were exposed to readings across the fields of history, critical race and ethnic studies, urban studies, feminist studies, and surveillance studies, as well as readings from popular culture, and engaged with arguments that took both critical and celebratory approaches to smart cities. I provided students with a corresponding reading guide, which offered two guiding questions for each reading so that students could anticipate what we would be focusing on during our class discussions. These readings helped students develop their awareness of how data analytics participate in the ordering, patterning, and structuring of the complexity of urban life in ways that can be exclusionary or inclusionary, democratic or autocratic. Furthermore, several of our readings helped students to engage with smart city projects in Brazil and Spain, and to take a comparative approach to the smart city initiative in Toronto, further developing their awareness of larger sociopolitical realities outside the U.S. For example, through a close reading and discussion of Christopher Gaffney and Cerianne Robertson's (2018) "Smarter than Smart: Rio de Janeiro's Flawed Emergence as a Smart City," students were able to consider the political and economic interests that informed the development of smart cities in tandem with Olympic planning agendas in Rio de Janeiro, and considered Gaffney and Robertson's (2018) critique that smart-city technologies "are not being used to solve problems of radical inequality, or systemic poor governance, or compromised urban planning agendas" (p. 60). We also discussed Adrian Smith's evaluation of Plaça del Sol in "Smart Cities Need Think Data, Not Big Data" (2018), and particularly, how neighborhood activists and community members repurposed pollution sensors provided by the city council for the purposes of noise control. As Smith (2018) explains, "residents were learning that data is rarely neutral. The kinds of data gathered, the methods used, how it gets interpreted, what gets overlooked, the context in which it is generated, and by whom, and what to do as a result, are all choices that shape the facts of a matter." These readings ultimately led us to a class debate concerning whether apolitical urban data

collection is possible, if politics is understood as a set of beliefs, assumptions, or principles that impact how communities are structured and how power in society gets distributed.

Additionally, students' engagement with a range of guest speakers, including an urban designer and consultant with Sidewalk Labs on the Toronto project, a leading surveillance studies expert and smart cities critic, and a housing justice representative from the Association of Community Organizations for Reform Now (ACORN) Canada, helped them develop their awareness of the range of possibilities and pressing concerns surrounding the Toronto smart city initiative. The intention here was to help students understand how and why urban space is contested terrain, particularly concerning issues of data collection, privacy, gentrification, the privatization of public space, and corporate control over civic processes in the context of Toronto. For instance, the representative from ACORN shared with students their experiences advocating for the Sidewalk Labs initiative to include affordable housing, and the challenges, barriers, and successes ACORN had in doing so. This perspective helped students develop a deeper appreciation of why stakeholders with disparate social and economic power often perceive smart city initiatives differently. Furthermore, this guest lecture helped students consider smart homes beyond the presence of technological gadgetry—the underpinning gendered and racialized fantasies of which we analyzed as a group by close reading smart home advertisements together in class—but also in terms of the politics of urban housing.

Impact Assessment

In order to assess the impact of this course, I have turned to the final reflection essays and course evaluations (60% response rate). In students' final reflection essays, they were asked to detail their prior knowledge and assumptions about Toronto and about smart cities, and then describe how the readings and course activities impacted their thinking using concrete evidence from texts, excursions, guest speaker visits, and course assignments. In almost all but a few cases, students described having a prior utopian, techno-centric understanding of smart cities, based on limited knowledge from past courses, their interactions with smart technology like virtual assistants, smart phones, and smart watches, and representations in the media. The majority of students also reported initially believing that most Torontonians were likely in support of the development of the smart city. Some students insightfully identified how their disciplinary training produced epistemic biases, be it the aspects of smart

cities they privileged in their original definitions, or the uncritical orientation they had towards smart city initiatives.

In terms of how students' perspectives shifted over the course of the class, there were many moments in the final reflection essays where students described how the course pushed them to think about the relationship between smart cities and issues of power, inequality, inclusion, and injustice. For instance, one student wrote, "the readings from class have primarily caused me to think about who benefits most from the creation of a smart city and who are going to be the people that are present within a smart city." This students' perspective shifted from a tech-centric approach to smart cities, to a socially oriented perspective that centered questions of power and inclusion. Another student remarked that "smart technologies also have the potential to exclude certain groups from public space; one of my most startling realizations during this course was that something as simple as an automated public toilet can prevent those with disabilities or those from certain cultures from using that space." This student was struck by the ways that smart designs have embedded values, goals, and assumptions that can produce discriminatory outcomes for marginalized groups. Another student focused more on how their awareness of how a smart city can be developed shifted: "I previously did not realize how much effort is spent on searching for different groups in the city and conducting intensive workshops to find how to best shape the smart city around those needs." In many reflections, co-designing with city dwellers from a range of backgrounds and experiences was central to their expanded understanding of what can make a smart city "smart." Others focused on the intersections of smart cities with socioeconomic inequality, and what it would mean for a smart city to be focused on helping citizens in need through housing and transportation reforms focused on affordability.

Additionally, many students remarked on how the course helped them better understand concerns surrounding data collection in urban space, drawing from course readings and discussions about surveillance, smart policing, and the possibilities and challenges of "seamless" technological design. For example, one student, drawing from one of our course readings by Adam Greenfield (2013), remarked that, "danger is introduced when we allow technology to do everything for us behind the scenes. Although it is extremely convenient for us as humans, it can also introduce problems when we are unaware of what is going on... while convenience is a major goal of smart cities, it is necessary to know what goes on behind the scenes." For this student, questions concerning what data is being collected, who uses it, who has access,

where is it going, and are there ways to opt out, helped them to think more critically about the promises of convenience in the smart city. Another student shared that their new knowledge of discrimination, segregation, and racism in Toronto's history and present made them consider how "the magnitude of technology that a smart city would include could unintentionally or intentionally amplify already existing biases. Housing cost is an example. Access to education is an example. Policing using data is an example. These examples have a high likelihood of becoming issues in a smart city." Thus, many students documented experiencing a move from a technocentric approach to smart cities, to an approach that centers the relationship between smart cities and history, belonging, ethics, and power, or what we came to call "wise" cities.

Of the 24 submitted course evaluations, all but one student strongly agreed with the statements, "I learned new ways to think about the issues dealt with in this course," "this course encourages me to think critically," and "my instructor takes into consideration ethnic and cultural differences in teaching this material." 20 of 24 respondents either strongly agreed or agreed with the statements, "my technical skills were improved as a result of this course" and "the local cultural context was integrated into the academic content of this program." Additionally, 22 of 24 respondents either strongly agreed or agreed that "learning was more meaningful in this class than other classes I have taken." What these results speak to are the degree to which the course enhanced students' critical thinking skills and technical understandings of smart cities, as well as their intercultural understanding and awareness. Additionally, in their evaluations, many students described that the most important thing they felt they had learned in the course was the importance of considering smart cities from different disciplines and perspectives. For example, one student wrote that "considering smart cities from a new perspective (i.e. privacy, accessibility, technology, culture, etc.) every day allowed me to see the importance of all the issues we discussed and how they depend on one another." Another student noted that, "the most important thing I learned was to not only bring your own background to the conversation, but try to think across other disciplines, or collaborate with those who have different experiences. This allows for problems to be more fully explored and gives everyone a well-rounded view." Comments such as these speak to the ways that students found value in the interdisciplinary structure of the course for looking at the issues raised by smart city initiatives.

Other students stressed the ways that the course helped them think critically about the embedded power dynamics in urban space. For instance, one

student shared, "the most important thing I learned in this course is that a lot of the ways that institutions and cities are constructed helps contribute to greater societal inequalities." Another student shared that "I can never walk into an urban center again and be ignorant to the carefully constructed world around me." This emphasis on the constructedness of cities speaks to the course's focus on the denaturalization of urban space in ways that raise questions of power and inequality in terms of how urban space is designed and whom it serves. However, in terms of how the course could be improved, 3 of the 24 respondents wanted more structure and direction in the walking excursion exercises. One student suggested that discussing the excursion reflections as a group the following class period would have been beneficial in solidifying their ideas. Doing so might have significantly improved outcomes for those three students struggling to see the purpose behind the walking excursions.

Conclusion

This short-term study abroad course speaks to the efficacy of place-based experiential learning for helping students develop their critical and interdisciplinary thinking skills for interrogating the power dynamics that impact the design of urban space. Learning on site in Toronto provided students with opportunities to connect with leading experts on smart cities in Canada as well as with opportunities to develop decolonial intercultural awareness. This approach to intercultural awareness helped students interrogate not only their prior assumptions about Canadian history and culture, but also about the present and future of smart city initiatives, particularly for marginalized groups. This study thus has practical implications for ways to combine interdisciplinary scholarship, excursions, and reflections structured around the critical interrogation of cities' histories and present-day conditions in order to move towards critical and decolonial intercultural learning frameworks. Furthermore, our consistent, shared proximity through meals and time spent in common spaces in our lodging challenged the spatial and temporal boundaries that typically separate students, as well as students from instructors, under the circumstances of a traditional class. These moments of collaborative study and nourishment helped us in developing our sense of community in a short period of time. This proved crucial for exploring a controversial smart city initiative without shying away from difficult and necessary conversations about social differences, power, and urban space. Areas for future inquiry could include: the formal assessment of how collective "down time" impacts intercultural learning in study abroad courses; how post-walking excursion discussions might impact study abroad learning outcomes in urban space; and finally, to what degree

students learning outcomes based on examining and living in urban space are shaped by the extent to which their programs are both socioeconomically and ethnoracially diverse.

Acknowledgements

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