

"At the Cost of my Well-being": Exploring Trans, Non-binary, and Gender-Diverse Students' Experiences of Online Learning

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This project emerged as a response to the unique experiences of online learning expressed by trans, non-binary, and gender-diverse students during the 2020-2021 academic year. By saying “trans” throughout this chapter, we recognize all transgender, non-binary, gender-diverse, Two-Spirit, and questioning folks. We also recognize that some who identify with labels mentioned above may not personally identify as trans and encourage readers to consult with individuals one-on-one to determine what labels best meet their preferences.

Like many academic institutions, the 2020-2021 academic year at McMaster University was the institution's first-ever predominantly online educational experience for the majority of students and instructors, due to mass shutdowns facilitated by the COVID-19 pandemic. While the widespread implementation of this form of education has generated significant discussion on pedagogical efficacy, largely missing from the conversation has been how online attendance and participation in the classroom affect trans students specifically. Throughout the year, many students shared reflections on both positive and negative aspects of their educational experience with undergraduate peer support volunteers at the Women and Gender Equity Network (WGEN) and the Pride Community Centre (PCC). These conversations frequently discussed the challenges of feeling unsafe in online learning spaces. As online learning continues to be of significance at McMaster University and in higher education more broadly, this area of research is a timely response to an emerging issue. Additionally, it maintains transferable links to and implications for blended and in-person learning as well.

In 2021, our team published the findings of our study in a short report for instructional purposes. The original abridged report served as a tangible, albeit introductory, resource for teaching teams and university administration regarding facilitating safe(r) spaces for gender-diverse students in online, blended, and in-person learning spaces. The resource is informed by students' experiences and narratives expressed during their participation in the study regarding their educational experience over the past year. As a main value held by the co-investigators, the resource sought to reflect and attend to concerns identified specifically by trans, non-binary, and gender-diverse students at McMaster University.

This chapter aims to provide a deeper analysis into the experiences and recommendations posed by trans students around remote learning and the eventual transition into in-person or blended instruction. The structure of this chapter is as follows: (1) we begin with reviewing relevant literature and its gaps in articulating trans students' experiences in the postsecondary context; (2) we then draw on minority stress theory, qualitative data collection procedures, and thematic analysis in generating and analyzing our data; (3) we outline central themes identified by our team about trans students' experiences of course instruction, policy, and practice; (4) we link these findings to the larger themes articulated in burgeoning literature; (5) we pose point-form recommendations for educational stakeholders regarding building trans-inclusive classrooms; and (6) we conclude with a recognition of limitations and a brief discussion to implications for future work in this area.

Literature Review

Emerging literature has begun to explore the experiences of trans and non-binary students in a postsecondary context,

specifically in examining the unique barriers these students face that impact their ability to fully engage in their education (Beemyn, 2005; Goldberg, 2018; Goldberg & Kuvalanka, 2019; McLemore, 2018; Rankin, 2006; Schneider, 2010; Seelman, 2014; Siegel, 2019; Swanbrow Becker et al., 2017; Whitley et al., 2022). In particular, research has indicated that trans students experience specific barriers to safety, inclusion, and representation in the academy, which then shape their feelings of safety and belonging both in the classroom and on campus. For example, Goldberg's (2018) report documenting the experiences of trans and non-binary postsecondary students indicates that they are subjected to significant levels of discrimination and harassment from their peers, instructors, and administrators, thus influencing their perceptions of hostile campus and classrooms climates. Further studies build on these findings to demonstrate the ways in which hostile campus climates facilitate trans students' concerns regarding physical and mental health, distress levels, sense of community, and academic performance during their postsecondary education (Beemyn, 2005; Goldberg, 2018; Rankin, 2006; Swanbrow Becker et al., 2017).

While marginalized students in general have been shown to experience discrimination that shapes their postsecondary engagement, trans and non-binary students report specific instances of harm that are unique to trans people (Goldberg, 2018; Goldberg & Kuvalanka, 2019; Seelman, 2014; Siegel, 2019; Whitley et al., 2022). Namely, misgendering, deadnaming, and outing have been identified by trans students as some of the most significant forms of interpersonal or microlevel transphobia that they experience during their education (Faris, 2019; Goldberg, 2018; McLemore, 2018; Sinclair-Palm & Chokly, 2019; Whitley et al., 2022). *Misgendering* is a term used to describe interactions where a trans student is referred to in a way that misaligns with or contradicts their gender identity (McLemore, 2018; Whitley et al., 2022), such as by using "he/him" pronouns for someone who uses "she/her" pronouns. Misgendering can occur intentionally or unintentionally and is often linked to the preconceived notions of how a person of a certain gender "should" look (e.g. facial hair, vocal register, body shape, clothing). *Deadnaming* refers to the act of calling a trans person by their birth name or other former name, either intentionally or unintentionally, which invalidates a person's identity (Goldberg, 2018; Sinclair-Palm & Chokly, 2019). *Outing* is a practice of revealing someone's sex assigned at birth, gender, or sexual orientation without their consent (Pryor, 2015).

While many of these instances of harm appear on an interpersonal level, they point to the systemic, institutional, and structural nature of marginalization and violence, whereby cisheterosexism and transphobia are foundational to Western academia and built into the very practices of postsecondary education (Formby, 2017; Fraser, 2020; Maughan et al., 2022; Siegel, 2019). For example, Western education is still largely dictated by binary perspectives of gender that rely on alleged biological and sex-based differences (Eldridge, 2020; McPhail et al., 2016). Further, it is significant to understand the relationship between transphobia and other systems that facilitate marginalization and violence, including racism, colonialism, and ableism. Expanding on the work of Lugones (2016), who wrote about the colonial origins of the gender binary, emerging work has explored the relationship between ongoing practices of colonization, eugenics, and imperialism and how they reify and perpetuate dichotomous, Westernized constructs of gender, sex, and identity (Ballestín, 2018; Kravitz, 2020; Omowale, 2021). A failure to apply a historiographical analysis to curriculum that discusses gender can facilitate the dynamics mentioned above, thus (re)entrenching cisheterosexist discourse shaping how people understand trans people and their experiences.

Massive shifts in postsecondary education facilitated by the COVID-19 pandemic have exposed a gap in understanding the experiences of trans students in remote learning. Prior to and since the large-scale shutdowns of in-person learning and, consequently, the rather abrupt shift to remote course instruction, burgeoning literature has begun articulating the unique experiences of marginalized students in online education (James, 2021; Kimble-Hill et al., 2020; Phirangee & Malec, 2017). However, despite some newer literature (e.g. Gonzales et al., 2020; Mavhandu-Mudzusi et al., 2021; Whitley et al., 2022), there continues to be a limited understanding of how the pandemic specifically impacted trans students' ability to engage in their learning.

Theory/Methodology/Methods

This study incorporates the minority stress theory framework to conceptualize how the experiences of trans students translate to the health disparities observed within this population (Hendricks & Testa, 2012; Meyer, 2003). Minority stress, which exists within the realm of social stress theory, refers to the excess stress experienced by marginalized populations because of their social position (Meyer, 2003). Minority stress theory posits that social conditions, such as prejudice, stigma, and discrimination, foster a hostile and stressful social environment, which amounts to mental and physical health challenges. We draw on minority stress theory to illustrate the role of stigma, discrimination, and prejudice in the amplification of challenges that affect the physical, mental, and social health of trans students who have already experienced a variety of obstacles throughout the COVID-19 pandemic.

In June 2021, we received ethics clearance to conduct an online qualitative survey and online follow-up interviews, which were advertised predominantly through social media. We provided students with a letter of information prior to taking the survey and/or participating in the follow-up interview. Students who participated in the follow-up interviews were assigned pseudonyms to identify them. Since the surveys were submitted anonymously, no pseudonyms were assigned; however, we draw on different survey responses throughout this findings section to represent the responses of all those who participated in the study.

The questions on both the survey and in the interview focused on participants' experiences of transitioning to online learning, the benefits and drawbacks of remote learning, and tangible recommendations for how online learning could be improved to better support trans students. A total of 15 questions were included in the survey (see appendix A) that explored students' experiences of online learning. The follow-up interview guide included six prepared questions (see appendix B) and were semi-structured in nature to provide students with the opportunity to further elaborate on their responses to the survey questions. Our online survey garnered 22 full responses from trans students, while seven participated in follow-up interviews on Zoom.

Following data collection, our team engaged in thematic analysis of the interview transcripts and written survey responses. Thematic analysis (TA) is "a [descriptive] method of identifying, analyzing, and reporting patterns (themes) within data" (Castleberry & Nolen, 2018, p. 808), which we drew upon due to its wide applicability and flexibility in creating space for literal, interpretive, and reflexive readings of the data. TA seeks to identify themes related to the research question(s) and (re)articulate the purpose of the study (Braun & Clarke, 2014; Castleberry & Nolen, 2018). We followed Castleberry and Nolen's (2018) steps for thematic analysis, which include compiling (transcribing and organizing the data), disassembling (coding the data), reassembling (identifying themes within the codes), interpreting (making analytical conclusions about the themes identified), and concluding (positioning these themes in relation to the research question).

Findings

Our team developed the following themes in a shared thematic analysis. After identifying these themes, we sent our preliminary analysis to participants who indicated their interest in reviewing them for feedback before proceeding with writing the report. These themes are situated broadly within educational, administrative, physical, and institutional barriers that trans students identified as impacting their education. However, we have broken these broader categories into a brief series of themes that capture the essence of the harms that trans students in our study identified as most salient.

Expectations of Pronoun Disclosure

Depending on the remote learning platform used, participants on a video call can add or change their name and pronouns to be visible on the screen. For example, while Zoom has the function to change your screen name, Microsoft Teams does not; rather, Microsoft Teams uses the name attached to a student's account (e.g. usually a legal name) and requires administrative permission to edit. Many participants in our study identified the challenges of these platforms, where the online learning technology itself might facilitate deadnaming and misgendering.

Further, participants identified common practices that instructors viewed as fostering inclusivity as facilitators for experiences of transphobia, including outing, deadnaming, and misgendering. As one participant summarized in a survey response:

“There is an increased pressure to display pronouns by professors—even though it is not safe for me to do so as I am not out publicly yet. While I think it is important for professors to make it a suggestion, I have had a few professors call people out by name and almost force them into doing it. Forcing me to lie and display pronouns that do not fit me in order to feel safe in the class setting.”

Here, instructors' attempts to normalize pronoun disclosure led to feelings of discomfort among students who continue to navigate and negotiate their identity personally and publicly. In a follow-up interview, Alex added:

“People really push the whole ‘pronouns in their name,’ they really push that on Zoom or they really push it in, like, when you introduce yourself, or whatever. And I really value that, and I think that it creates a really important space of a safer, braver kind of space for people. But as someone who would rather just not address that and as someone who would rather not talk about pronouns because I don't know what the answer is and I'm okay with not having a concrete answer.”

These experiences were observed across both interview and survey responses in our data set. While these practices can certainly build opportunities for safer spaces that value respecting pronouns, they risk presenting pronouns as a static practice (e.g. a singular set of pronouns). Through this process, trans students who might have multiple pronouns, whose pronouns change temporally or contextually, and/or who do not feel safe giving their pronouns risk being outed or called upon by their instructors for not following this informal course policy.

Demanding “Cameras On”

In the transition to online learning, many instructors developed informal course policies around evaluating students' participation, which may have included requiring that students keep their cameras on during class so that they are visible on the screen. Some students spoke positively of class policies that did not require cameras on. For example, as one student wrote in response to a question about the benefits of online learning included in the survey:

“I feel I have more control over how I express my gender. For example, I can turn my camera off if I’m feeling dysphoric, I can include my pronouns in my Zoom name, etc. Behind a screen, I have less worry about how I present myself on camera and have the option to keep my camera off entirely.”

The ability to selectively and intentionally present or make themselves visible was viewed largely positively by students in our study. When many trans people experience gender dysphoria, which here refers to significant distress regarding the expression and perception of one’s gender, creating opportunities for them to exercise agency in how they engage physically in a space can facilitate safety. Further, when someone might be participating in remote learning in a location that is not safe for them to express their gender (e.g. unsafe or transphobic home or public environment), having the option to participate without cameras on might mitigate experiences of dysphoria.

However, students in our study also spoke about how many of their classes required cameras on for participation grades. As one student notes in their survey response,

“Some of my classes, professors, TAs did not require students to have their cameras on during lectures/tutorials. However, some of them did have this requirement, which was tied to a portion of one’s grade in the course, and as a non-binary student with very strong experiences of dysphoria, it made me feel really awful and prevented me from fully participating in a course’s lectures when I was forced to have my camera on. Seeing myself on a screen in a way over which I have little to no control was very triggering to my dysphoria and, as a result, my mental health. Some professors didn’t seem to understand that seeing yourself on a Zoom call is different than seeing yourself in a selfie you post online—in the latter, I am in control of how I look and who sees me. In the former, that control is taken away from me and I am forced to comply for the sake of a grade, at the cost of my wellbeing.”

Here, this participant articulated a shared theme among responses and interviews: that mandatory “cameras on” policies do not consider the discomfort, distress, and fear that many trans students experience due to feeling a loss of control over how they present themselves and are perceived by others. As a result, students reported a disengagement from their learning (e.g. not feeling like they could fully or actively participate in their classes) and significant experiences of distress (e.g. mental health concerns).

This dynamic is exacerbated by expectations of how a student should participate in a remote class, including raising their hand, unmuting their microphone, and speaking during a video call (some of which are recorded and uploaded to course sites). Students in our study spoke of dysphoria extending beyond visual presentation/perception to vocal registers and how their voice might be received as incongruent with their gender expression.

Different Disciplines

While experiences of transphobia were significant across faculties and departments in the university, as indicated by participants’ survey responses and the myriad of disciplines represented in our data, there were distinctions between and among disciplines. Namely, students in our study indicated that certain departments were seen as more

accepting, welcoming, and committed to trans-inclusivity than others, which they suggested was an unspoken yet shared understanding among trans students at McMaster University. As Devon stated during a follow-up interview:

“Cultural studies is where you get queer studies, where you get trans studies, mad studies, all that stuff that is going to potentially draw the people who are affected by those issues and who live those issues, who are the ones who are studying them. And then when I think about other departments – I mean, I haven’t taken a ton outside of the Humanities, but I’ve taken a little bit in Social Sciences and Economics, and those are, again, I think you’re seeing less representation of these different marginalized groups in the faculty level.”

Devon’s comment was further reflected in other survey and interview responses, which focuses on the ways in which disciplines emphasizing the significance of lived experience in their curriculum and in faculty representation tend to be more equipped to discuss issues specific to trans communities. Many students indicated that their department had no out trans or gender-diverse faculty, which made it difficult to connect with instructors and teaching teams about their concerns. Other participants spoke of the differences between Humanities and Social Sciences as compared to Health and Life Sciences, where the latter faculties were perceived as heavily reliant on binary constructs of gender that facilitated transphobic discourse in the classroom.

Intersectionality

A particularly salient theme emerging from our conversations with trans students highlighted the importance of applying an intersectional analysis to discussions of gender and understanding trans students’ experiences. As Sam stated in a follow-up interview:

“I think more of a conversation about intersectionality is important [...] if they are going to make it a space to show up for trans and gender-diverse people, I think it’s particularly important for them to make space for other people’s identities as well, like disabled people, people of colour, things like that. Because I know from personal experience and I know from listening to friends that you can’t just show up for one part of your students’ lives, and not any others.”

Sam’s comment reflected some shared concerns that students participating in our study emphasized in both survey and interview data. Here, students emphasized the need for instructors and courses to recognize and attend to the diverse experiences of their students along the axes of gender, race, and disability, among other identities, more readily. Another student spoke of this in specific relation to the need for a historiographical analysis of concepts taught in courses that point to their often white supremacist, cisheterosexist, and colonial origins, such as “IQ testing,” eugenics, “sex-based or biological differences,” and how many health interventions (particularly in the medical and psychological fields) universalize a White, cisgender, living without a disability, heterosexual man’s experience. Applying an intersectional lens to these discussions would also make space for trans students who are not White or living without a disability to better understand their experiences as they are historically situated in broader projects of colonialism, imperialism, and ableism. As one student emphasized, understanding trans students’ experiences cannot be done through a White, Western lens that only examines gender; rather, the confluence of these systems of oppression must be examined as mere cogs operating in a broader machine.

Discussion

Our study addressed a gap in current literature on the topic of trans students' unique experiences in remote learning. Particularly, by narrativizing students' experiences and situating it within the broader context of both (1) transitioning back into in-person learning and (2) posing action-oriented recommendations that are informed by trans students themselves, we recognize the depth and complexity of the topic, while also centering tangible solutions that educators can prioritize when designing their courses moving forward. Many students in our study commented on how much they appreciated being given the space to share their experiences, and they emphasized their sincere hope that these conversations resulted in positive changes for themselves and for generations of students to come.

Our first two themes, which discussed the drawbacks of newly created course policies that outline expectations for participation and engagement in remote learning, contextualize our use of minority stress theory, whereby many of our participants reported adverse mental health outcomes associated with distress experienced in online learning environments (Hendricks & Testa, 2012; Meyer, 2003; Whitley et al., 2022). These experiences also mirror what has been reported previously in literature on this subject, particularly as it relates to trans students' unique experiences of discrimination and their impact on distress levels, sense of belonging, and perceived safety in the postsecondary context (Beemyn, 2005; Goldberg, 2018; Rankin, 2006; Swanbrow Becker et al., 2017). While our survey only garnered 22 responses and, therefore, cannot be generalized, participants tended to report feelings of distress, discomfort, and fear on scaled questions when comparing their experiences on different online learning platforms to their experiences of in-person learning. These were further discussed via long-answer responses.

Participants' distress around pronouns disclosure and "cameras on" policies was further complicated by the complex contexts that many were also navigating while accessing remote learning. Specifically, many students engaging in remote learning may be doing so in home environments or public spaces where they are not out or are not respected by those in their physical proximity (e.g. family, friends, roommates, peers in a public space). It is also important to note that some students in our study discussed how campus policies demanding or requesting pronoun disclosure did not actually facilitate safer spaces; in reality, many students in our study discussed how their pronouns were not used by peers, regardless of how students identified. For example, one student spoke about sharing their pronouns and then consistently being misgendered, without correction, throughout the term as people relied on aesthetic assumptions/cues about the student's gender. One participant aptly summarized that pronoun disclosure often seemed like a perfunctory "checkbox," whereby facilitators or instructors asked for pronouns without considering the broader practices that are necessary for building trans-inclusive classroom spaces.

Further, framing specific kinds of engagement as "mandatory" for evaluative purposes risk exacerbating the very stressors that instructors might be trying to alleviate. For example, when students fear being penalized for not contributing to class discussions, policies around visual (cameras on) and verbal (microphones on) expectations of participation can facilitate discomfort for trans students and practices of misgendering, deadnaming, and outing (e.g. if someone's voice/Zoom image is used to deduce gender/pronouns rather than what the student indicates their gender/pronouns are). These experiences mirror those identified in the literature around the unique barriers that trans students are subjected to when engaging in postsecondary study, whereby course structure might be built in a way that puts students at risk of hypervisibility, hostility, violence, and marginalization (Formby, 2017; Goldberg, 2018; Whitley et al., 2022).

The latter themes, discipline-specific experience and intersectionality, shift away from hyperfocus on interpersonal harm to reveal the institutional and systemic nature of many of the concerns discussed. For example, some disciplines are seen to be fundamentally cisheterosexist in nature based on their foundational assumptions/concepts about gender, "sex," biology, and identity. Further, those courses that do discuss gender often do so through a White, Eurocentric lens that reifies monolithic perspectives of gender and (re)centres White trans peoples' experiences. The concerns identified by participants in our study demonstrated significant critical analysis introduced by Lugones (2016) and others, who

have written about the coloniality of the gender binary and the ways in which it has facilitated, sanitized, and justified other violent practices of transphobia, colonization, racism, and ableism (Ballestín, 2018; Kravitz, 2020; Omowale, 2021). Here, we see that many of these issues are embedded in the very fabric of Western academia, which demands mass upheaval of Western education as we know it.

Recommendations

Based on the experience of the students who participated in this study, we have drafted the following recommendations to create more trans-inclusive learning spaces. While these suggestions may assist educators in shifting classroom spaces toward safety, we acknowledge that many of these recommendations require institutional support and structural changes, some of which we briefly discuss in the final section of this report. Additionally, as mentioned in the previous section, we also know that many structural changes would require significant upheaval. With that in mind, we situate these recommendations in the broader awareness that they require institutional support and larger advocacy efforts on the part of educational stakeholders.

We have organized the following five recommendations in point form for readability and accessibility purposes. In our experience, educators are compelled to engage in bite-sized, straight-forward, and tangible recommendations that are situated in broader analyses.

Self-Education

- Familiarize yourself with resources for trans students at your school and in your community
 - Is gender-affirming counselling or healthcare available?
 - What gender-affirming peer support services exist?
 - Which department oversees name change processes for students, and are the staff there gender-affirming?
 - Is there local legal support for name change and gender marker change on government ID?
- Seek out workshops run by trans and gender-diverse people who discuss the nuances of trans identity, pronouns, and trans-specific issues; ensure those running the workshop are fully compensated for their labour
- Learn about the ways trans identities intersect with other identities (e.g., disability, race)
- Listen to how trans and gender-diverse students ask to be supported

Pronouns

- Normalize introducing pronouns by including your own where relevant
 - Introductions (e.g., “Hello class, my name is Dr. Malik, I use he/him pronouns”)
 - On screen name (e.g., “Dr. Malik (he/him)”)
 - Some virtual platforms have created pronouns sections so they are automatically included where your name appear
 - If a pronouns section is not available, you can add your pronouns to your last name on your profile
 - In email signature (e.g., “Dr. Malik, PhD (he/him)”)

- Create space for students to introduce their pronouns without making it mandatory
 - E.g., if going around and asking students to introduce themselves, you could let them know that they can do so by including “one or all of the following: name, pronouns, year, program”
- Create space for students to share their preferred name; make sure you use this name, even if the online platform does not allow changes to be made or if it does not match the name listed on the class list
 - For smaller classes, you could create a “get to know you” form that includes preferred name and pronouns to be used in front of the class
- Use gender-neutral language when referring to the class and normalize this language when talking about issues, populations, topics, etc.
 - “Students,” “scholars,” “everyone,” and “y’all” are preferred over “ladies and gentlemen”
 - Use “they” in writing rather than “he/she”
 - Encourage students to use gender-neutral (i.e., they/them) pronouns or the student’s name when referring to classmates unless their pronouns were otherwise specified

Facilitating Synchronous Sessions

- Avoid mandating that students keep their cameras on
 - If you would prefer students have their cameras to foster a sense of connection, especially for smaller classes, use language such as “Cameras on is encouraged, though not mandatory”
 - Tell students they can turn their cameras on or off through the session as needed
- Provide multiple format options for students to engage sessions to accommodate those uncomfortable using the microphone
 - E.g., “In the chat box, or by raising your hand, what are your thoughts?”
 - Consider the physical barriers that students may be experiencing, including where they are while attending virtual classes (e.g., they might be in a home environment where they are not out), and accommodate these experiences as you learn about them

Administrative Considerations

- Include a section in your syllabus about equity and inclusion, informing students that discrimination and harassment based on gender identity and gender expression is prohibited
 - Include links to relevant school policies and offices
- Review course, department, faculty, and school-wide administrative documents to ensure trans-inclusive language is used, gender diversity is recognized, and students are given options to disclose

- Where possible, avoid the use of platforms that do not allow for changes to names or the inclusion of pronouns
 - If this is not possible, ensure that you make space for students to share their preferred names and pronouns (if they wish) and ensure you use these despite what is displayed on-screen
- Advocate to your department, faculty, and/or the school to ensure administrative tools and documents are more inclusive and respectful of trans identities

Institutional Considerations

- Offer students opportunities to shape how they can engage in the classroom
- Listen and compensate trans individuals for sharing ideas on how to make classroom spaces more trans-inclusive
- Hire more trans and gender-diverse instructors and staff
- Implement training for instructors on how to build more trans-inclusive spaces and create opportunities to practice implementing them
- Hold the institution accountable for the safety of trans students by making accountability measures for all instructors clearer

Limitations and Implications

This study was limited by a small sample size, where 22 students fully completed the survey and only seven participated in follow-up interviews. At one point during our study, we were forced to comb through our survey data when several hundred responses were submitted by ‘bots’ (fake survey responses). We also acknowledge that the study was impacted by COVID-19 and Zoom interviews; some participants had to reschedule interviews or adapt their participation due to being in unsafe home environments and fearing being overheard. Lastly, McMaster University has since articulated a commitment, like many other academic institutions, to return to primarily in-person learning, which renders some of what we have written irrelevant to in-person learning.

However, despite recognizing these limitations, our team firmly believes in the merit of our recommendations and their implications for online, blended, and in-person learning at postsecondary institutions across Canada and beyond. Education must be adapted to recognize the complex experiences of trans and other marginalized students in order to mitigate the barriers that shape their (in)ability to fully participate in their learning. As more is being written about building trans-inclusive classrooms (see De Pedro et al., 2016; Formby, 2017; Goldberg et al., 2018; Lawrence & McKendry, 2019; Seelman, 2014; Selander & Tidball, 2020), educational stakeholders must invest intentionally in creating safer and more accountable classroom and campus spaces.

References

- Ballestín, L. (2018, July 26). *Gender as Colonial Object: The spread of Western gender categories through European colonization*. Public Seminar. <https://publicseminar.org/2018/07/gender-as-colonial-object/>
- Beemyn, B. G. (2005). Making campuses more inclusive of transgender students. *Journal of Gay & Lesbian Issues in Education*, 3(1), 77–87. https://doi.org/10.1300/J367v03n01_08

- Braun, V., & Clarke, V. (2014). What can “thematic analysis” offer health and wellbeing researchers?. *International Journal of Qualitative Studies on Health and Well-being*, 9(1), 26152. <https://doi.org/10.3402%2Fqhw.v9.26152>
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815. <https://doi.org/10.1016/j.cptl.2018.03.019>
- De Pedro, K. T., Jackson, C., Campbell, E., Gilley, J., & Ciarelli, B. (2016). Creating trans-inclusive schools: Introductory activities that enhance the critical consciousness of future educators. *International Journal of Teaching and Learning in Higher Education*, 28(2), 293–301.
- Eldridge, J. J. (2020). Moving academia beyond the gender binary. *Research and Development in Higher Education: Next Generation, Higher Education: Challenges, Changes and Opportunities Volume 42*. Higher Education Research and Development Society of Australasia, Inc.
- Faris, M. J. (2019). On trans dignity, deadnaming, and misgendering: What queer theory rhetorics might teach us about sensitivity, pedagogy, and rhetoricity [PowerPoint slides]. <https://hdl.handle.net/2346/84247>
- Formby, E. (2017). How should we ‘care’ for LGBT+ students within higher education? *Pastoral Care in Education*, 35(3), 203–220. <https://doi.org/10.1080/02643944.2017.1363811>
- Fraser, J. (2020). The struggle to imagine higher education otherwise: The transformative potential of diverse gender knowledges. *feminists@law*, 10(2). <https://journals.kent.ac.uk/index.php/feministsatlaw/article/view/943/1815>
- Goldberg, A. E. (2018). *Transgender students in higher education*. The Williams Institute, UCLA School of Law. <https://escholarship.org/uc/item/4p22m3kx>
- Goldberg, A. E., Beemyn, G., & Smith, J. Z. (2019). What is needed, what is valued: Trans students’ perspectives on trans-inclusive policies and practices in higher education. *Journal of Educational and Psychological Consultation*, 29(1), 27–67. <https://doi.org/10.1080/10474412.2018.1480376>
- Goldberg, A. E., & Kuvalanka, K. (2019). Transgender graduate students’ experiences in higher education: A mixed-methods exploratory study. *Journal of Diversity in Higher Education*, 12(1), 38–51. <https://psycnet.apa.org/doi/10.1037/dhe0000074>
- Goldberg, A. E., Smith, J. Z., & Beemyn, G. (2020). Trans activism and advocacy among transgender students in higher education: A mixed methods study. *Journal of Diversity in Higher Education*, 13(1), 66–84. <https://psycnet.apa.org/doi/10.1037/dhe0000125>
- Gonzales, G., de Mola, E. L., Gavulic, K. A., McKay, T., & Purcell, C. (2020). Mental health needs among lesbian, gay, bisexual, and transgender college students during the COVID-19 pandemic. *Journal of Adolescent Health*, 67(5), 645–648. <https://doi.org/10.1016/j.jadohealth.2020.08.006>
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460–467. <https://psycnet.apa.org/doi/10.1037/a0029597>
- James, C. E. (2021). Racial inequity, COVID-19 and the education of Black and other marginalized students. In *Impacts of COVID-19 in Racialized Communities* (pp. 36–44). Royal Society of Canada.
- Kimble-Hill, A. C., Rivera-Figueroa, A., Chan, B. C., Lawal, W. A., Gonzalez, S., Adams, M. R., Heard, G. L., Gazley, J. L., & Fiore-Walker, B. (2020). Insights gained into marginalized students access challenges during the COVID-19 academic response. *Journal of Chemical Education*, 97(9), 3391–3395. <https://doi.org/10.1021/acs.jchemed.0c00774>

- Kravitz, M. (2020, July 14). The gender binary is a tool of white supremacy. *An Injustice! Magazine*. <https://aninjusticemag.com/the-gender-binary-is-a-tool-of-white-supremacy-db89d0bc9044>
- Lawrence, M., & Mckendry, S. (2019). *Supporting transgender and non-binary students and staff in further and higher education: Practical advice for colleges and universities*. Jessica Kingsley Publishers.
- Lugones, M. (2016). The colonality of gender. In *The Palgrave handbook of gender and development* (pp. 13-33). Palgrave Macmillan, London. http://doi.org/10.1007/978-1-137-38273-3_2
- Maughan, L., Natalier, K., & Mulholland, M. (2022). Institutional transphobia: barriers to transgender research in early years education. *Gender and Education*, 721-737. <https://doi.org/10.1080/09540253.2022.2057930>
- Mavhandu-Mudzusi, A. H., Mudau, T. S., Shandu, T., & Dorah, N. N. (2021). Transgender student experiences of online education during COVID-19 pandemic era in rural Eastern Cape area of South Africa: A descriptive phenomenological study. *Research in Social Sciences and Technology*, 6(2), 110-128.
- McLemore, K. A. (2018). A minority stress perspective on transgender individuals' experiences with misgendering. *Stigma and Health*, 3(1), 53-64. <https://psycnet.apa.org/doi/10.1037/sah0000070>
- McPhail, D., Rountree-James, M., & Whetter, I. (2016). Addressing gaps in physician knowledge regarding transgender health and healthcare through medical education. *Canadian Medical Education Journal*, 7(2), e70. <http://dx.doi.org/10.36834/cmej.36785>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674-697. <https://doi.org/10.1037%2F0033-2909.129.5.674>
- Omowale, J. (2021, August 18). Colonialism still affects how black and indigenous people see gender. *Them*. <https://www.them.us/story/colonialism-black-and-indigenous-people-gender-identity>
- Phirangee, K., & Malec, A. (2017). Othering in online learning: An examination of social presence, identity, and sense of community. *Distance Education*, 38(2), 160-172. <https://doi.org/10.1080/01587919.2017.1322457>
- Pryor, J. T. (2015). Out in the classroom: Transgender student experiences at a large public university. *Journal of College Student Development*, 56(5), 440-455. <https://doi.org/10.1353/csd.2015.0044>
- Rankin, S. R. (2006). LGBTQA students on campus: Is higher education making the grade? *Journal of Gay & Lesbian Issues in Education*, 3(2-3), 111-117. http://dx.doi.org/10.1300/J367v03n02_11
- Schneider, F. (2010). Where do we belong? Addressing the needs of transgender students in higher education. *The Vermont Connection*, 31(1), 11. <https://scholarworks.uvm.edu/tvc/vol31/iss1/11/>
- Seelman, K. L. (2014). Recommendations of transgender students, staff, and faculty in the USA for improving college campuses. *Gender and Education*, 26(6), 618-635. https://scholarworks.gsu.edu/ssw_facpub/58
- Selander, J., & Tidball, S. (2020). Creating and supporting an inclusive student services experience for trans and non-binary students. *College and University*, 95(2), 49-52.
- Siegel, D. P. (2019). Transgender experiences and transphobia in higher education. *Sociology Compass*, 13(10), e12734. <https://doi.org/10.1111/soc4.12734>
- Sinclair-Palm, J., & Chokly, K. (2022). 'It's a giant faux pas': Exploring young trans people's beliefs about deadnaming and the term deadname. *Journal of LGBT Youth*, 1-20.
- Swanbrow Becker, M. A., Nemeth Roberts, S. F., Ritts, S. M., Branagan, W. T., Warner, A. R., & Clark, S. L. (2017). Supporting

transgender college students: Implications for clinical intervention and campus prevention. *Journal of College Student Psychotherapy*, 31(2), 155–176. <https://doi.org/10.1080/87568225.2016.1253441>

Whitley, C. T., Nordmarken, S., Kolysh, S., & Goldstein-Kral, J. (2022). I've been misgendered so many times: Comparing the experiences of chronic misgendering among transgender graduate students in the social and natural sciences. *Sociological Inquiry*, 31(2), 155–176. <https://doi.org/10.1111/soin.12482>

APPENDIX A: Survey Questions

1. Please check this box to indicate that you are trans, gender-diverse, gender non-conforming, and/or non-binary. If this does not apply to you, please do not complete the survey.

[]

2. Which year of study are you currently in at McMaster University?

1. Year 1
2. Year 2
3. Year 3
4. Year 4
5. Year 5+
6. Master's
7. PhD
8. MD
9. Other
10. Prefer not to say

3. Which faculty are you currently a student in?

1. Humanities
2. Social Sciences
3. Science
4. Health Sciences
5. Engineering
6. DeGroote School of Business
7. Other
8. Prefer not to say

4. Please indicate your program of study. If you prefer not to say, please skip this question.

5. As a transgender, non-binary, or gender-diverse student at McMaster, relative to your experience with in-person classes, how would you describe your experience with online classes?

1. Very Positive
 2. Positive
 3. Neutral
 4. Negative
 5. Very Negative
6. Based on your answer above, please elaborate on why your experience has been especially positive or negative if you feel comfortable.
7. How frequently have you felt uncomfortable or unsafe while navigating online learning technologies (e.g. participating in recorded lectures/seminars, turning your camera/audio on during synchronous online classes, etc.)?
1. Almost Always or Always
 2. Often or Very Often
 3. Occasionally
 4. Rarely
 5. Almost Never or Never
8. How frequently have you been deadnamed or misgendered while navigating online learning technologies/ platforms?
1. Often or Very Often
 2. Occasionally
 3. Rarely
 4. Never
9. Of the online platforms that you have engaged with as a student at McMaster, which of these would you describe as being accessible and safe for you as a transgender, non-binary, or gender-diverse student?
1. Microsoft Teams: Very Unsafe/Inaccessible, Relatively Unsafe/Inaccessible, Neutral, Relatively Safe/ Accessible, Very Safe/Accessible, N/A (do not use)
 2. Zoom: Very Unsafe/Inaccessible, Relatively Unsafe/Inaccessible, Neutral, Relatively Safe/Accessible, Very Safe/Accessible, N/A (do not use)
 3. Webex: Very Unsafe/Inaccessible, Relatively Unsafe/Inaccessible, Neutral, Relatively Safe/Accessible, Very Safe/Accessible, N/A (do not use)
 4. Google Meets: Very Unsafe/Inaccessible, Relatively Unsafe/Inaccessible, Neutral, Relatively Safe/Accessible, Very Safe/Accessible, N/A (do not use)
 5. Discord: Very Unsafe/Inaccessible, Relatively Unsafe/Inaccessible, Neutral, Relatively Safe/Accessible, Very Safe/Accessible, N/A (do not use)
 6. Skype: Very Unsafe/Inaccessible, Relatively Unsafe/Inaccessible, Neutral, Relatively Safe/Accessible, Very Safe/Accessible, N/A (do not use)
 7. Other (Insert Name): Very Unsafe/Inaccessible, Relatively Unsafe/Inaccessible, Neutral, Relatively Safe/

Accessible, Very Safe/Accessible, N/A (do not use)

8. None of the Above

10. Follow-up: If you are comfortable sharing, please elaborate on why the platform(s) chosen in the previous question are preferred.
11. Have you been able to bring any concerns about online learning technologies to instructors, faculty members, teaching assistants, staff, or other administrators at the university?
 1. Yes
 2. No
12. If yes, what did this conversation look like? If no, what, if anything, has acted as a barrier to having this conversation?
13. What are some benefits of the online school setting as a transgender, non-binary, or gender-diverse student? Is there anything specific in the online setting that has made you realize what is lacking for transgender students during regularly scheduled in-person classes at McMaster?
14. What are some disadvantages of online learning that are particularly significant or salient as a trans, non-binary, or gender-diverse student? Is there anything specific in the online setting that has been of particular concern to you?
15. What are some ways in which instructors, teaching assistants, and staff can build more trans-inclusive spaces in their online classes? In other words, what would you want instructors, TAs, and staff to know while preparing their online classes?

APPENDIX B: Follow-Up Interview Questions

1. As a transgender, non-binary, or gender-diverse student at McMaster, relative to your experience with in-person classes, how would you describe your experience with online learning?
2. What are some particular concerns that have arisen for you during the transition to online classes and the use of online learning technologies?

3. How has the use of online learning platforms impacted your comfortability in participating/engaging in your classes, if at all? What has this looked/felt like?
4. Have you been able to discuss these concerns with anyone? If so, what did this look like?
5. Are there any positives that have come out of online learning? What, if anything, could be taken from online learning and applied to the transition into blended or in-person learning?
6. What are some ways in which instructors can build more trans-inclusive spaces in their online classes?