Expanding the Scope of Universal Design: Implications for Gender Identity and Sexual Orientation

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Abstract: This article encourages postsecondary educators to expand the scope of applications of universal design and universal instructional design by exploring how principles of UD and UID can be applied to other social identities, and specifically to gender identity and sexual orientation. There are many parallels that can be drawn between students who are excluded because of their disability and students who are marginalized on the basis of nonconforming gender identity or sexual orientation. It is important that faculty and staff understand intersectionality and interdependence among social identities and consider what steps they can take to apply UID principles in ways that consider multiple aspects of identity in order to provide inclusive educational experiences for all students. Scenarios for further discussion are provided.

Keywords: universal design; universal instructional design; gender identity; sexual orientation; postsecondary students; inclusive pedagogy

1. Introduction

The concept of universal design (UD) has stimulated numerous applications in higher education beyond the architectural and functional intent of its creators [1–5]. Faculty, administrators, and student development professionals at institutions across the US and internationally have been striving to make higher education more accessible to students with disabilities. In the 1990s, three distinct models emerged for applying UD to teaching: universal instructional design (UID), universal design of instruction (UDI), and universal design for learning (UDL). Although the guiding principles for each of these models vary slightly from one to the next, their goals are the same: to provide equitable learning experiences for students with disabilities. Thus, although in this article we refer primarily to UID, our recommendations can apply to each of the three models. Meanwhile, postsecondary educators also have begun to explore other implications of UD for enhancing the educational experiences of all students. Why limit ourselves to a single aspect of social identity? After all, was it not the vision of UD to consider all users of a space? [6].

For this article, we have chosen to focus on promoting access and success and reducing marginalization for students who self-identify as lesbian, gay, bisexual, transgender, and/or queer (LGBTQ+), or any other student who is minoritized on the basis of gender identity and/or sexual orientation—hence the inclusion of the plus (+) sign in the acronym. It is important to note that LGBTQ+ is an umbrella term that can include a wide range of identities not limited to the terms represented in the acronym. Gender identity refers to one’s self-perception that guides one’s gender expression or presentation. Sexual orientation refers to type of attraction to others, whether sexual, romantic,
emotional, or spiritual. Neither gender identity nor sexual orientation is a binary term. Furthermore, gender identity does not necessarily dictate sexual orientation, and vice versa. The Safe Zone Training and Facilitator Guide [7] has provided definitions that assist in understanding the terminology that has been used to label these identities, but also has pointed out that there are no absolute, universal definitions, and that preferred terminology is constantly evolving.

Like disability or any other aspect of social identity or group of people who are lumped together for purposes of demographics, within these identity groups there are similarities and differences. Each individual is unique, with many intersecting identities, no single one of which defines them, and any one of which may be more or less salient at any given time. People who have been stereotyped on the basis of their gender identity and/or sexual orientation each have their own story to tell. It is not our goal with this article to minimize the importance and value of individual differences; nor do we mean to suggest that educators should take a one-identity-at-a-time approach to multiculturalism. What we hope to accomplish is to encourage readers to think more broadly about applying models for making postsecondary education more inclusive for all learners. We also want to clarify that we do not intend to infer that these aspects of social identity are somehow more closely aligned with disability than any other. However, we do fear that when educators address diversity and social justice, sexual orientation and gender identity [8], like disability [9], are more likely to be overlooked unless new legislation, court cases, or national or local crises draw attention to them.

We would like to believe that attitudes related to gender identity and sexual orientation, at least in the US, have become more accepting over recent decades. One indicator was the 2015 ruling by the Supreme Court of the United States that same-sex marriage is a legal right. According to Wikipedia [10], as of 2018 same-sex marriage has been legalized nationwide in 21 other countries as well. A 2016 study in the US by the Pew Research Center found that 63% of respondents believed that “homosexuality should be accepted by society”, while 93% of LGBT respondents to a 2013 Pew survey reported “that society had become more accepting of them in the previous decade” [11]. Pertaining to higher education, the authors of [12] asserted that LGBTQ+ students in the US are more visible than in past decades and have more protections under the law. Garvey, Sanders, and Flint [13] found significant differences in LGBTQ+ alumni perceptions of campus climate depending upon the year in which they graduated and the sociocultural and historical influences of the era. However, postsecondary students who self-identify as lesbian, gay, bisexual, transgender, or queer continue to experience discrimination, harassment, bullying, and microaggressions that can disrupt learning and impede meeting educational goals [14–16].

In this article, we will address how UD and later models can assist in addressing gender identity and sexual orientation when creating inclusive learning environments and experiences. After providing a brief discussion of the importance of understanding intersectionality and the need to address attitudinal barriers, we will outline the evolution of a model that provided additional guidelines to extend UD to embrace all aspects of social identity. Then, focusing on the architectural and functional applications of UD, we will address the design and allocation of physical spaces. From there, we will transition to learning experiences and instructional issues. Next, we will consider student development programs and services, learning support, health and wellness services, and extracurricular activities. Finally, we will discuss microaggressions (i.e., the kinds of subtle slights and insults experienced in everyday life that are aimed at specific identity groups) and provide scenarios for further discussion.

2. Understanding Interdependence and Intersectionality

Hackman [8] discussed the need to understand the complex, overlapping, and interdependent nature of forms of oppression to engage in social justice education. She wrote, “Social justice education addresses the social construction of identity groups, the creation of dominate and subordinate categories with respect to these identity groups (depending on their relationships to power and resources), the systemic power structures within each form of oppression and how these structures overlap and reinforce each other, and the various pathways to liberation”. Although noting that at
times it may be helpful to approach one “ism” at a time when working with people who have little knowledge or exposure to a particular identity group, Hackman [8] asserted that “different forms of oppression are not discreet entities that merely intersect but are in fact deeply interdependent for their very survival”. Thus, although this article focuses on equity and access for students who are LGBTQ+, we cannot ignore the reality of how gender identity and sexual orientation intersect with other aspects of each student’s identity, and that social justice must be achieved for all.

In his article, titled “Toward Intersectional Identity Perspectives on Disability and LGBTQ Identities in Higher Education”, the authors of [17] identified five perspectives that we believe can assist educators in understanding intersectionality, not only between these aspects of social identity but when exploring interdependent forms of oppression in general. In semi-structured interviews, participating students each brought up two or more of the following types of relationships between their queer and disability identities: “(a) Intersectional, (b) interactive, (c) overlapping, (d) parallel, and/or (e) oppositional” [17] (p. 327). Coursework and leadership experiences acquainted some of the interviewees with a social justice lens that could enhance their ability to communicate about intersections among their identities. Understanding their identities as interactive allowed some respondents to view their multiple identities as mutually beneficial and an aid to becoming more resilient, while others noted negative interactions. One student described being a gay person with a disability as being “closeted twice” [17] (p. 337). Those with an overlapping perspective saw the opportunity for alliances, sense of community, and solidarity. Among the perceived parallels were stigma and similar obstacles and barriers, but also the ability to build resilience. Students sharing the oppositional perspective rejected intersectionality per se; some even ranked identities. Miller noted that the oppositional perspective “illustrates the strain students felt experiencing multiple oppressions” [17] (p. 340).

Aspects of identity intersect and cannot be considered in a vacuum. Universal design advocates have shared many ways in which modifications and accommodations for students with disabilities can benefit all students. Those who conceived universal design to achieve universal access have made significant contributions to both architecture and education, but this conversation need not be limited to a single identity group. Now, it is time to pursue the next logical steps using a social justice lens.

3. New Models Extending UD’s Multicultural Implications

Researchers and practitioners at the University of Minnesota, Twin Cities became involved in implementing UD and UID [18] through the Curriculum Transformation and Disability project (CTAD) [19], funded by the US Department of Education. Basing their work on Chickering and Gamson’s [20] “Seven Principles for Good Practice in Undergraduate Education”, as well as the Center for Universal Design’s [6] “Principles of Universal Design”, they created the following guiding principles of UID:

- Create a classroom climate that fosters trust and respect.
- Determine the essential components of the course.
- Provide clear expectations and feedback.
- Explore ways to incorporate natural supports for learning.
- Provide multimodal instructional methods.
- Provide a variety of ways to demonstrate knowledge.
- Use technology to enhance learning opportunities.
- Encourage faculty–student contact. [21]

Clearly, these are basic guidelines for good teaching, but there still can be dissonance between these ideals and everyday practice in the classroom. In an ideal world, faculty would consider the multiple social identities of all students in order to create truly welcoming learning experiences. Are these considerations at the forefront when faculty are developing curricula, or is the primary focus on course content with minimal attention to pedagogy?
As they worked toward implementing UID's guiding principles to foster the success of students with disabilities, CTAD participants began contemplating next step: “Where do we go from here?” [22]. Simultaneously, an intersecting group was focused on adapting Banks et al.’s [23] Identity Within Unity to postsecondary settings, resulting in the publication of the Multicultural Awareness Project for Institutional Awareness (MAP IT) [24] inventories. MAP IT provided a springboard for expanding the focus of UD and UID to multicultural education [25]. When the Pedagogy and Student Services for Institutional Transformation project (PASS IT) [4,26,27] was funded by the US Department of Education, project participants continued to consider how guidelines for UID might be re-envisioned to be more inclusive of different social identity groups. Eventually, a new model evolved, integrated multicultural instructional design (IMID) [28–31]. IMID addressed one of the primary weaknesses of UID [32] by encouraging authenticity in the integration of cultural perspectives. IMID explored not only what we teach and how we teach, but also how we support and assess learning. The UID guidelines were revisited, and the following IMID guiding principles were proposed:

How we teach:

- Create welcoming, accessible learning environments.
- Promote understanding of how knowledge and personal experiences are shaped by historical, cultural, social, political, and economic contexts.
- Work collaboratively to construct knowledge.
- Understand that learning is a complex process that involves many layers of reflection.
- Identify what skills must be developed in order to achieve mastery without excluding students on the basis of nonessential skills.
- Integrate skill development (e.g., critical thinking, problem solving, and written and oral communication) with the acquisition of content knowledge.
- Establish and communicate clear expectations in terms of (a) learning objectives, (b) engagement in the teaching and learning process, and (c) evaluation measures for teaching and learning.
- Use teaching methods that consider diverse learning styles, abilities, ways of knowing, and previous experience and background knowledge.

What we teach

- Determine what content mastery is essential for each course and for the program or curriculum as a whole.
- Establish course objectives that reflect essential course components and do not exclude students on the basis of gaps in prior knowledge.
- Meet or exceed professional standards for excellence in content mastery within an environment of inclusion.
- Integrate multicultural perspectives within course content.
- Relate course content to historical trends, current events, and future directions.
- Consider global perspectives.

How we support learning

- Maintain the delicate balance between challenge and support.
- Support students outside, as well as within, the classroom.
- Support growth in skill development, as well as content knowledge acquisition.
- Address both cognitive and affective aspects of learning.
- Respond to students’ needs related to day-to-day living.

How we assess learning

- Develop multiple ways for students to demonstrate knowledge.
- Encourage use of creative and critical thinking and problem-solving skills.
- Establish a clear link between course or program objectives and the content knowledge and skill acquisition being assessed.
- Ensure the absence of bias in the assessment of student learning.
- Use both formative and summative assessment measures.
- Impose time limits only when relevant to the task or needed as scaffolding for future assessments (e.g., providing timed tests as preparation for standardized credentialing exams). [29] (pp. 2–6).

Thus, IMID provided a much more nuanced approach to inclusive pedagogy and required educators to think more deeply about course content and instructional strategies while considering students' multiple social identities. Although within the context of a journal article it would be impossible to provide specific examples of how each of the IMID guiding principles can be applied to ensure access and success for students who identify as LGBTQ+, Sections 5–10 of this paper attempt to highlight a few specific strategies. However, prior to exploring these applications, first it is necessary to address how our own attitudes and beliefs can create insurmountable obstacles for some students.

4. Attitudinal Barriers

Attitudinal barriers—whether constructed by the institution or individual faculty, staff, or students—can be the most significant obstacle LGBTQ+ students may face. In some cases, college campuses can be a safe haven for some LGBTQ+ students, as well as persons with disabilities [33]. Attitudinal barriers exist for both persons who identify as persons with disabilities and the LGBTQ+ community [34–37]. In some situations, there is also a division regarding attitudes based on the type of disability. Just as people with physical disabilities have been confronted with better attitudes than individuals who identified with having learning disabilities and/or mental illness [36,38], there may be varying levels of comfort and experience with persons who identify as sexual orientation minorities or gender minorities or any combination thereof.

Colleges and universities are encouraged to hire faculty and staff from diverse backgrounds to promote a campus culture that supports diversity. However, diversity is only part of the equation. Verna Myers once said, “diversity is being invited to the party; inclusion is being asked to dance” [39]. Thus, colleges and universities are also encouraged to hire individuals who have a spirit devoted to multiculturalism and social justice and demonstrate those values in practice through inclusive behaviors—people who will ask others to dance. It is the combination of values and actions that can lead to an environment that most advantageously works to expand the practices of UD, UID, and IMID to go beyond the bounds of being inclusive of persons with disabilities.

Studies demonstrate that employees of colleges and universities may be more likely to be inclusive of persons with disabilities if they have prior experience with persons with disabilities and/or training [40–42]. One can expand this notion also to consider working the LGBTQ+ population. Some of the barriers that people erect are due to lack of experience or ease around members of the LGBTQ+ community [43]. Safe-zone or ally training exists as an opportunity for education regarding LGBTQ+ students and inclusive practices. The Campus Pride Index [44] cited the importance of safe-zone training to demonstrate to students a level of acceptance and appreciation for all aspects of their identities. Often after this training, pins, magnets, and other paraphernalia can be collected to display to the community that a person has successfully completed ally training [44]. Colleges and universities are encouraged to strengthen inclusion by expanding UD, UID, and IMID practices through providing training related to multiple historically marginalized populations including those with disabilities and persons who identify as LGBTQ+ to remove attitudinal barriers due to ignorance or lack of experience [36].
5. Design and Allocation of Physical Spaces

Universal design was initially created by architects with the concepts of physical spaces and structures in mind. As educators, architects, and designers continue to imagine new spaces and reimagine old ones, they are encouraged to consider expanding their internal concept of accessibility and universal design to go beyond the bounds of including persons with disabilities. In doing so, it is important to mention that there are numerous factors that may affect the capacity of institutions, and particularly public institutions, to design for all students. One of the primary factors is governmental influence. The passage of the Americans with Disabilities Act (ADA) of 1990 guaranteed persons with disabilities accommodations [45]. While accommodations without use of UD and UID can remain minimalist and often require students with hidden disabilities to out themselves (i.e., to disclose their disability), the ADA made the creation of UD a possibility and later a reality. Meanwhile, in the US and elsewhere, laws regarding equity and access for people who self-identify as LGBTQ+ have been inconsistent, nonexistent, or worse (e.g., laws defining homosexuality as criminal behavior). For transgender members of college and university communities, there has been a perpetual state of inconsistency regarding statutes and case law to ensure their inclusion. In May 2016, the US Departments of Justice and Education dispatched the Dear Colleague Letter on Transgender Students [46]. This first dear colleague letter extended Title IX of the Education Amendments of 1972 to include transgender persons under the protection of sex and gender discrimination, guaranteeing students that institutions consider a new model when it comes to access. However, this letter’s groundbreaking message was withdrawn nine months later under the banner of a new presidential administration [47]. In addition to inconsistency at the federal level in the US, there also has been a lack of continuity at the state and local levels. In March 2016, numerous members of the LGBTQ+ community and their allies cringed across the country as North Carolina’s (NC) legislators passed and Governor McCrory signed House Bill 2 (HB2) into effect. HB2 required individuals to use the restroom marked as their sex assigned at birth [48]. A year later in March 2017, Governor Roy Cooper of NC signed a compromise bill that stated that local governments could not make changes to local ordinances until 2020 [49]. As these laws can impact the ability of members of our college and university communities to use single-sex restrooms, administrators are encouraged to facilitate additional creation of all-gender, single-stall restrooms or gender-inclusive, multi-stall restrooms. This may not be an ideal solution for persons who identify as transmen or transwomen who have not had completed a medical sex change; however, it provides them an opportunity to use a restroom not associated with their sex assigned at birth. It also accommodates individuals who present with androgynous gender expressions, which can be more common among the LGBTQ+ community. Educators are encouraged to exercise their rights to contact their government representatives to discuss concerns regarding equitable access to restroom facilities. In continuing the promotion of equal access, we provide all students the opportunity to feel a sense of safety and security in using facilities for which they all have access.

In addition to restrooms, inclusive locker rooms are also an issue related to inclusion of the LGBTQ+ community. Recreation facilities and activities can be an important part of the postsecondary educational experience; participation can improve students’ health, foster growth in self-confidence, allow for socialization, and minimize stress [50–52]. Meanwhile, according to Eagan et al. [53], first-year transgender students self-reported lower levels of self-confidence and physical health. To ensure equal access to recreational activities, institutions need to provide inclusive locker rooms. Unfortunately, in a recent study in the US, only 44% of responding institutions reported having gender-inclusive locker rooms [54]. To exercise principals of UD, institutions should consider locker rooms that can be used by all persons, including single-stall changing rooms and showers.

Housing is also an area of concern from a structural perspective for students of the LGBTQ+ community. Historically, several of the residence life processes and procedures have been exclusive regarding students of the LGBTQ+ community, with binary gender-marked restrooms and single-sex floors and residence halls [55]. While several institutions may designate certain spaces for the LGBTQ+ community and/or allies, students who identify as LGBTQ+ may wish to live in other parts of...
campus. This might especially be true for graduate students who prefer to live on campus, as it is possible that the LGBTQ+ community is composed of predominantly undergraduate students. Some opportunities that exist for residence life staff are to include on their applications questions regarding sexual orientation, gender identity, and preferences of the gender identity of their roommates. This is easier for apartment-style and single-room residence halls, which are also preferred by members of the transgender community [55,56]. Additionally, residence life staff can ponder providing more diversity and inclusion-focused programming that is inclusive of persons from all backgrounds, as well as making information about gender-inclusive housing more readily accessible [57–60].

There are some older buildings on college and university campuses that face some of the same challenges for addressing gender identity and expression inclusion as they did and/or do face regarding accessibility for persons with disabilities. While in the past few decades there has been a growing emphasis in the US on making all historic landmark properties accessible to persons with disabilities, these measures can be costly and valued at a lower priority than new construction and are often questioned by people who seek to preserve buildings’ historic integrity [61,62]. Many of these buildings were designed with sex-specified restrooms, locker rooms, and/or living facilities such as residence halls with community bathrooms. The same efforts to accommodate people with disabilities could be designed to be gender- and sex-inclusive as well.

Meanwhile, these barriers do not impede colleges and universities from making every effort to create more inclusive amenities in new construction and existing single-user spaces, as well as developing more apartment-style housing [63]. Many current single-stall restrooms are already accessible to persons with disabilities [63] and could be made gender inclusive, as well by adding signage for “all-gender restroom” in addition to disability signage or simply removing gender-specific labels [64]. In situations where gender-neutral restrooms already exist but are inaccessible to persons with disabilities, colleges and universities are encouraged to create opportunities for students who identify as both persons with disabilities and transgender.

6. Learning Experiences and the Role of Faculty

Numerous studies have established the relationship between learning experiences and interactions with faculty members and perceptions of campus climate among LGBTQ+ students [13,65,66]. When faculty encourage their participation and demonstrate that they value their contributions, LGBTQ+ students are more likely to have favorable perceptions of their learning environments. On the other hand, Rankin, Weber, and Garvey [67] found that faculty have a negative impact on learning and perceptions of institutional climate among LGBTQ+ students when they discourage discourse on issues related to gender identity and sexual orientation in the classroom and fail to validate the voices and lived experiences of LGBTQ+ students or expect a single token student to represent all LGBTQ+ students.

The first guidelines of both UID and IMID focus on welcoming learning environments [21,29–31]. One way to demonstrate respect for students’ identities and privacy is to provide a form to be completed and returned via email on which students can provide necessary information, if desired. Open ended-items on the form might include the following:

- Do you prefer to be called by an alternative name or nickname (i.e., different from what appears on the class roster)? If so, please provide. (This question can address multiple issues without implying any assumptions about gender identity, while also providing the opportunity for students who are transgender to use their preferred name before completing the process for a legal name change.)
- What gender pronouns do you prefer? Do you have different preferences depending upon whether in a private (e.g., during an office appointment or confidential written communication) or public (e.g., in class) setting? (Some students may be “out” to some of their teachers, but not to their peers, or may have different preferences for a letter of reference or any document that might be made available to wider audiences or the public.)
Do you have a disability that might affect your performance in this course? Are you aware of any other potential personal (e.g., family commitments), medical (e.g., side effects of prescribed medications), or institutional barriers to achievement in this course that you would like to share with me? What can I do to assist in ensuring your success? (This question can open many doors and demonstrate the faculty member’s interest in the individual without requiring students to disclose specifics.)

Do you anticipate any absences that are considered excused according to this institution’s policies and procedures (e.g., for religious observance or to represent the institution in athletic endeavours or other competitions or meetings)?

Do you have any other concerns you wish to bring to my attention? If you would prefer to meet with me in person, please schedule an appointment via my electronic calendar. The details of all appointments (including your name) are not visible to others accessing my calendar.

Syllabus statements [68] can also communicate faculty members’ interest in fostering student success. Some institutions have prepared statements regarding such topics as student conduct, sexual harassment, disability accommodations, mental health and suicide prevention, and support services, which are to be included on all syllabi, while other schools leave the contents of syllabi to the individual instructors. Regardless, faculty can develop their own messages to share their commitment to social justice and to providing learning environments that are welcoming to all. Some faculty also include guidelines for respectful in-class and online discussions. However, it can be more powerful to engage students in constructing a list of class “rules”, which can then be distributed as a reminder the next time the class meets and posts on the course website. When students contribute to developing their own standards for behavior, they are also more likely to take responsibility for abiding by the rules and encouraging their peers to do likewise. What is critical is that faculty create safe learning spaces in which all students can share their identities and ideas without fear of reprisal. It is also important to note that safe spaces refer to virtual, as well as physical, spaces, and that the same guidelines apply to online communication as well.

UID encourages faculty-student contact, while IMID suggests that faculty support students both within and outside the classroom. The importance of providing opportunities for faculty-student contact outside the classroom has been established over decades of research [69–74]. However, for faculty-student interactions to have a positive impact for students who are LGBTQ+, faculty must have examined their own values and attitudes and be knowledgeable about the current literature and comfortable discussing issues related to gender identity and sexual orientation. Professional development activities may be a prerequisite for successful interactions.

Among “high-impact practices” [74] in which faculty members play a key role are opportunities to conduct research under a faculty member’s supervision, mentoring activities, and capstone projects. These in-depth interactions can be crucial in validating student experiences and creating a sense of belonging while also preparing students for graduate school or the world of work. However, less formal short-term interactions between faculty and students can also be significant. Since the advent of email, the use of office hours has diminished unless required, and students and faculty are less likely to communicate in person outside the classroom or by phone. One way to ensure more informal contact with all students is to require a “getting acquainted” appointment at the beginning of the term. For large lecture courses, this can be accomplished in small-group meetings if individual appointments are not feasible. Throughout the term, faculty are encouraged to remind students that they are available to meet outside of class. In a national study, Woodford and Kulick [75] found that interaction with faculty was positively related to academic and social integration among sexual minority students. Silverschanz, Cortina, Konik, and Magley [76] linked faculty-student interactions to academic engagement and social acceptance for LGBTQ+ students.

According to Vaccaro’s [77] research, LGBT students considered supportive faculty members to be the most positive aspect of their undergraduate experience. Meanwhile, Garvey, BrckaLorenz, Latopolski, and Hurtado [78] noted the potential adverse impact of negative interactions with faculty,
asserting that LGBQ students may choose to leave the institution if faculty do not create learning environments that are inclusive for students of all sexual orientations. They wrote, “Faculty members have a unique influence on students’ classroom perceptions and academic experiences. LGBQ students’ experience in the classroom largely governs perceptions of the overall academic experience; therefore, it is critical that scholars examine the relationships between faculty and LGBQ students and the relationship with academic success” [78] (p. 212).

7. Student Development Programs and Services and Learning Support

Student development programming can be an essential component to holistic student development during the tenure of postsecondary students. It is crucial in these functions that the individuals responsible for these programs promote inclusion. A suitable way to do that is to incorporate universal design and universal instructional design principles as they relate to all students, including persons with disabilities and members of the LGBTQ+ community. Beyond some of the areas discussed during the attitudinal barriers section of this article as relates to training, there are other opportunities available to professionals to ensure inclusion. This starts with marketing materials that are accessible to everyone and inclusive. For those who have experience with UD and UID, creating materials that are screen-reader accessible is not new; but to be inclusive of everyone, gender neutral pronouns should be included whenever third-person singular pronouns are used (instead of he/she or s/he using she/he/they). If there are pictures, one might consider including pictures that showcase persons with visible disabilities and persons of androgynous gender expression. On more granular levels, one might consider individual offices and how they operate; in the following paragraphs, we will discuss advising, career services, and academic support.

According to Habley [79], advising is a singular situation that consists of consistent, longitudinal, one-on-one meetings with students on campus. For some students, the interactions with their advisors may be the only time in which they have one-on-one meetings with employees at their college or university. Therefore, advising offices would do well to learn about a wide variety of identities and how those lenses frame students’ experiences in college and how they may affect student persistence, retention, and graduation. Advisors might also consider familiarizing themselves with social justice champions among their campus colleague, so that they can direct their students into other safe spaces and classrooms.

As almost 85% of students enter postsecondary education for career purposes, it is vital that career services departments be prepared to support LGBTQ+ students’ needs in attaining employment [53]. Career services professionals can provide guidance to students about career exploration. They can have discussions and work with corporate partners on teaching students how best to navigate systems and how/when to disclose hidden identities, including disability, sexual orientation, and gender identity. Departments of career services would also be well-advised to be intentional in the organizations they recruit to attend career fairs, particularly organizations that have good reputations of inclusive environments for all people. From an LGBTQ+ perspective, professionals can look to The Human Rights Campaign Corporate Equality Index [80] and other resources to identify companies that have policies that are inclusive and environments that make employees feel welcome. In addition, as career services professionals present workshops on topics such as appropriate business attire for different situations, they should incorporate UID to include the LGBTQ+ community by discussing androgynous gender expression clothing in addition to men’s and women’s fashions.

There are also opportunities to expand principals of UD, UID, and IMID to the LGBTQ+ community in academic support service capacities. One should be intentional about including examples that represent a multitude of identities in tutoring and Supplemental Instruction lessons. At any time, starting with introductions to new students, academic support personnel can introduce themselves by stating their name and sharing their personal pronouns; this concept can be applied in any setting and have similar effects. This immediately signals to students, especially those of the LGBTQ+ community, that the staff member promotes diversity and inclusion. If individuals
are providing coaching that includes discussing personal relationships, they should always use the
verbiage “significant other” or “partner”; this helps avoid the use of heteronormative and cisnormative
assumptions and microaggressions.

8. Health and Wellness Services

One area that is particularly unique for members of the LGBTQ+ community is health and
wellness services. Much of the health world relates to the purely biological and diagnosable aspects of
patients. All healthcare professionals, but especially those on college campuses, are encouraged to
learn about and consider social identities in addition to biological and medical identities. This can
start with health forms; many health forms require patients to identify as “male” or “female”. Student
health offices are encouraged to provide questions that extend beyond this binary approach to include
sex identity, gender identity, and sexual orientation in order to best serve patients in regard to every
aspect of health, but especially sexual health and mental health. It is also in their best interest to remain
current with the activities of The World Professional Association for Transgender Health [81]. Finally,
health services are encouraged to hire at least one professional who can confidently write referral
letters for hormone initiation. These professionals can help in preventing students from dangerously
using “do-it-yourself” hormone replacement therapy (DIY HRT). Rotondi et. al [82] conducted a
study in which approximately one fourth of participants who were using HRT had obtained the drugs
from “non-medical sources”. This is a significant issue, as DIY HRT increases the likelihood of health
problems due to a lack of monitoring and subsequently improper dosing [82–84].

Counselling offices also need to provide appropriate services for students who identify as
LGBTQ+. It goes without saying that all counsellors should exhibit Rogers’ [85] unconditional
positive regard and should have a certain level of diversity and cultural humility training. However,
counselling offices could also benefit by having individuals who specialize in counselling clients who
identify as LGBTQ+, as they experience the world differently than their cisgender and/or heterosexual
counterparts. Members of the LGBTQ+ community have a constant choice of being “in” or “out” of
the social identity closet. Any time they come out, they face the possibility of rejection from family
members, friends, and their communities. This is also an area in which counsellors are encouraged to
be mindful of intersecting identities with sexual orientation and gender identity, as well as nationality,
race, religion, and disability. For example, students who identify as LGBTQ+ often have a unique
experience with social media; it can be a source for strength and acceptance, as well as a portal for
hate and victimization [86]. Additionally, members of the LGBTQ+ community can experience higher
levels of mental health concerns, as well as suicidal ideations and alcohol and drug abuse [87–91].

9. Extracurricular Activities

Student organizations and programming can be an important component of the college experience
for many students. It is imperative that these organizations receive training on how to make student
organizations inclusive. Swan [92] specifically noted that Greek Life and athletics need to work toward
inclusion for LGBTQ+ students. Wikipedia [93] also has a list of LGBT and LGBT-friendly fraternities
and sororities. Regardless, the verbiage fraternity and sororities is not inclusive, as the words ascribe
to the gender-binary with the former being masculine and the latter feminine. Offices of Greek Life at
various colleges and universities are encouraged to make use of the Lambda 10 National Greek Ally
Network as an opportunity [94].

There exists a level of negativity regarding LGBTQ+ individuals among college athletics personnel
and participants [95]. However, in some ways organizations have worked to try to minimize bias
regarding sexual orientation and gender identity minorities in college athletics. The National Collegiate
Athletic Association (NCAA) in fall of 2011 created a policy regarding transgender student-athletes [96].
Specifically, the policy permits transgender students to compete as long as they meet the standards
regarding hormone replacement therapy as outlined by the NCAA [97]. While this policy still excludes
individuals who identify as trans+ who may prefer not to use hormones, it is a step in the right direction.
Campus Pride Index has also taken steps to start to include awareness for LGBTQ+ student-athletes and their safety by starting a Campus Pride Sports Index [98]. To promote inclusion at principles of UD and UID, athletic directors, administrators, and coaches should work cohesively to create anti-harassment policies that include all individuals including members of the LGBTQ+ community and anti-LGBTQ+ derogatory language [95]. Finally, with collegiate athletics being team-based, likely one of the strongest interventions is going to come from individual players who are well-respected [95]. Coaches may want to consider the inclusive nature of players when selecting team captains and potentially requiring diversity and inclusion training of those captains. Coaches may also want to consider team-building activities early in the year that focus on diversity and inclusion such as “Crossing to the Line” [99], for which facilitators can use a host of statements to acknowledge members of various minority groups.

In addition to Greek Life and athletics, there are numerous other opportunities for student organizations and programming boards to implement UD and UID principles to be inclusive of the LGBTQ+ community. In their charters, they can elect to have inclusivity statements that include sexual orientation and gender identity. They can partner on events with established organizations whose primary focus is to support LGBTQ+ individuals. They can host events focused on the LGBTQ+ community during LGBT History Month in October. Executive board (e.g., president, vice president, secretary, and treasurer) members can participate in “Safe Zone” or ally training [44] to gain knowledge and intention regarding inclusivity of LGBTQ+ individuals. These are just a few possibilities. Advisors and executive board members can also reach out to their student organizations that support the LGBTQ+ and offices that support diversity, inclusion, and multiculturalism for more institution-specific suggestions.

10. Research Involving Human Subjects

Sexual orientation is rarely included as a demographic variable in quantitative studies of postsecondary students and their educational experiences or in national higher education data sets [100]. Meanwhile, gender is usually presented as a binary construct (i.e., female or male). Before choosing to include sex or gender as variables, researchers must consider their purpose and whether either one or both of these variables will contribute to understanding groups of students. For example, when studying the physical or mental health of postsecondary students, there may be circumstances in which scholars seek information about both gender identity and sexual orientation when simply asking whether a student is male or female would be of little use. Similarly, if conducting research on the relationship between play and the acquisition of academic skills like spatial visualization, it may be necessary to ask about the nature of students’ childhood activities rather than drawing any conclusions based on biological sex, gender identity, or sexual orientation; in many countries, play no longer reflects traditional gender roles.

Whether referring to sexual orientation or gender identity, scholars are encouraged to recognize the fluidity of these constructs and to ask open-ended questions so that students can use the terms they prefer to identify themselves. It is likely that for smaller samples, identity groups will need to be aggregated for statistical purposes, but researchers will be able to provide terms to label each group based upon students’ own descriptions of their identity status. Garvey [100] urged that after collapsing categories, researchers test for within-group differences before drawing conclusions about outcomes across a group that represents multiple identities. For qualitative studies that will report responses from individual students, it is also imperative to ask students what pronouns they prefer and report those preferences and use them when referring to the students individually. These practices will provide richer results and also foster greater understanding about historically marginalized students.

When writing for publication, scholars can avoid appearing to make heterosexist assumptions by using plural construction and pronouns whenever possible. Writers should also take care to refrain from using language that tends to describe and define students according to a single aspect of their identities.
11. Microaggressions

Even educators who are comfortable embedding multicultural perspectives in their teaching and prompt students to share their unique viewpoints may be unaware of some of the less obvious ways in which LGBTQ+ students may be excluded from full participation or given the impression that their voices are not valued. Heterosexism, cisgenderism, and negative attitudes toward people who are LGBTQ+ are frequently expressed through microaggressions. Pierce \[101,102\] coined the term *microaggression* to describe slights and insults aimed at African Americans, but the use of the term is now used more broadly in regard to any minoritized group. Microaggressions are often subtle, which can make them even more pernicious, because it is difficult to respond to them without being accused of being overly sensitive. Over time, their cumulative effect can be more deleterious than a single act of blatant discrimination. Thus, it is imperative that educators be aware of microaggressions and address incidents witnessed both within and outside formal educational settings.

Sue \[103\] created a typology of microaggressions. He used the term *micro-assaults* to refer to overt, intentionally hurtful language or actions. Example might include “cat calls”; name calling (e.g., referring to someone as a “fag,” “dyke,” “tranny” or “pansy”); or mimicking and exaggerating a gesture (e.g., “the limp wrist”). *Micro-insults* may be more covert, including the use of sarcasm or nonverbal cues such as rolling the eyes. They are no less harmful just because they may be a reflection of insensitivity rather than an intentional insult. Another more subtle form of microaggression is the *micro-invalidation*, which ignores a person’s claimed identity or negates a person’s thoughts, feelings, beliefs, or lived experiences (e.g., “It’s just a phase; you’ll outgrow it”).

Woodford, Weber, et al. \[104\] differentiated between environmental and interpersonal microaggressions in their study of depression and attempted suicide among students who are LGBTQ+. Interpersonal microaggressions occur during human interactions (e.g., in conversation or group discussion), while environmental microaggressions can be expressed through institutional policies and practices (e.g., the absence of nongendered restrooms). Woodford, Weber, et al. \[104\] found that interpersonal microaggressions served as a risk factor for some identity groups but could be mitigated by resilience and LGBTQ+ pride. Woodford, Chonody, et al. \[105\] have developed and validated a scale for exploring microaggressions against college students who are LGBQ.

We believe that one of our roles as educators is to assist students in understanding how their words and deeds impact others. We cannot sit idly by and observe without acting. Too often students who have been minoritized on the basis of their social identities are told that it is their responsibility to educate their peers; instead, they should be able to focus on their own learning. We have developed the following scenarios, which are based on students’ personal experiences, to be used in both the classroom and for purposes of professional development. Additional scenarios are provided in the *Safe Zone Training and Facilitator Guide* [7].

12. Scenarios

Consider possible responses by participants and observers to the following situations, which are based on the lived experiences of students, faculty, and staff. (Unfortunately, the language used in these scenarios is not atypical.)

Design and Allocation of Physical Spaces:

- Ashley identifies as non-gender-neutral and prefers the pronouns *ze/zir/zirs*. *Ze* has class in a beautiful, historical building that has been recognized as a national heritage site. During a break, *ze* asks for the location of the restroom and is told that men’s restrooms are on odd-numbered floors and women’s restrooms are on even-numbered floors.
Learning Experiences and the Role of Faculty:

- On the first day of her first-year experience class with mandatory attendance, Lori raises her hand during the teacher’s explanation of the syllabus and states, “I cannot come to class on the day with the guest speaker from the ‘gay’ office. My religion says that homosexuality is evil in the eye of God”.
- During a discussion on sexuality in a Psychology of Adolescence course, Sam turns to Zhou and says, “You’re a ‘dyke’, right? I just don’t get the whole ‘Lesbo’ thing. Why don’t you explain it to us?”
- The faculty member tells the class to break up into small groups of 5 or 6 students. Sandy, who is currently going through hormone replacement therapy, is turned away by each group he approaches.
- Jordan, an education student who identifies as Black and gender-nonconforming, shares with their academic coach that they are upset because they got the following question wrong on an exam: “A study has the research question ‘Do men like action movies more than women?’ True or false: The potential gender variables are male and female”. Jordan answered false.

Student Development Programs and Services and Learning Support:

- Jose, a sophomore student who identifies as a Latino cisgender man, shares with his adviser that he identifies as gay and he recently came out to his parents. Jose also shares that he grew up in a rather strict Catholic household. He states that his mother expressed concern, and his father has not spoken with him since. He is not doing well academically, because he feels cut off from his family, and he is concerned about going home for the semester break.
- As students are beginning to move into their residence halls at the beginning of the academic year, Terry storms into the resident adviser’s room and says, “I can’t live with that person! I don’t even know if ‘it’ is a girl or guy!”

Health and Wellness Services:

- Pooja goes to student health services on campus for a pap smear. After completing the pap smear, the doctor asks if she is sexually active. Justine has a girlfriend with whom she has a sexual relationship, so she responds “yes”. The doctor then asks if she needs a birth control prescription. She responds, “no”. The doctor then asks Justine if she is trying to get pregnant. Justine replies “no”. The doctor replies, “while condoms are a suitable form of birth control, you may wish to consider additional protection in addition to condoms”.
- Two counselors from the counseling center run a LGBTQ+ support group. Khalid is newer to the group, and during a group session, comes out that he identifies as bisexual, immediately after which one of the other group participants responded, “you’re either just experimenting or you’re transitioning. There is no such thing as a bisexual”.

Extracurricular Activities:

- Jason plays second base on the university baseball team. Last week in the locker room, one player called another player a “fag”. Jason’s little brother shared with him a few weeks ago that he is gay. He asks his coach what he can do to overcome his own biases and to confront members of his team when they use derogatory language.
- Sonya is excited to be serving on the University-wide Homecoming Committee, which includes students, administrators, faculty, student center staff, and alums. She asks about the allocation of non-gendered restrooms in the major venues, including the football stadium, noting that they could serve multiple purposes as accessible and family-friendly as well. A major donor responds, “I am not really sure what you are talking about, but why would we need something like that? There are very few of ‘those people’ who have anything to do with this institution, and we do
not want to encourage their participation. They may make other people uncomfortable, and we would not want that”.

Professional and Social Interactions:

- **Li** identifies as a heterosexual male. He enjoys wearing pastel and bright colors and gender-nonconforming clothing styles that are representative of his cultural heritage. Before going out one night, some of his friends ask him to change to jeans and a “masculine-colored” shirt, saying, “We don’t want everyone to think that we’re Queer”.

- **Lakeshia**, who identifies as a woman, bisexual, and multiracial, is very excited about being the first student in her Ph.D. cohort to be offered an assistant professorship until she overhears a classmate say, “Yeah, who wouldn’t hire her—she’s a diversity trifecta!”

- Six months later: Lakeshia loves her new position, has been pleased that her students are accepting of her social identities, and believes she can make a difference as a role model, ally, and resource. However, every time she tries to reach out to colleagues to get together outside work, even to go out for lunch, they always seem to have an excuse to avoid spending time with her.

- At an awards presentation, a vice president performs an introduction using she/her/hers pronouns for a faculty member whose pronouns are they/them/their.

Although some of these scenarios may seem far-fetched, incidents like these do happen. What is important is how we respond to them. Microaggressions, whether intentional or not, cannot be withdrawn, but they can be “teachable moments” that enlighten us and facilitate the creation of a more welcoming campus climate for all.

### 13. Recommendations and Conclusions

The concepts of universal design and universal instructional design were born with the idea of persons with disability in mind. As time has gone on, educators have begun to consider that these principles can be expanded to include additional populations. The purpose of this article was to expand on how college and university communities could apply these principals when considering members of the LGBTQ+ community. Just as educators must consider how to utilize UD and UID to provide multiple modalities for students with disabilities to access knowledge, resources, and activities, they must likewise consider intersecting and interdependent identities when considering implementation of principles of UD and UID to enhance inclusion for members of LGBTQ+ community.

We have several recommendations, beginning with the implementation of integrated multicultural instructional design guiding principles and consideration of the ways in which educators and learners both participate in the learning process. Educators must also consider the attitudinal barriers they and their colleagues create and seek opportunities for knowledge acquisition, experience, and personal and professional development. Access to facilities is one of the most basic but also one of the most crucial areas on which administrators need to focus. In doing so, educators must consider older buildings and new construction, promoting the development of all people to satisfy the basic needs and dignities of the LGBTQ+ community. Faculty must consider their role in these processes and how they relate to students from their syllabus to their activities in class. Student development and academic support personnel must also consider how they can make their environments, marketing materials, and programming more inclusive. Health and wellness professionals on-campus are encouraged to be intentional with forms, services available, and diagnoses and to participate in specialized training to best be inclusive of students who identify as LGBTQ+. Professionals, advisors, and mentors who support extracurricular activities, especially Greek Life and Athletics, are encouraged to promote inclusive policies and opportunities to support members of the LGBTQ+ community through activities such as team-building exercises.

As one may note, much of this article focuses on students; however, in a couple of the scenarios we discussed faculty members and administrators as well. Implementation of UD and UID impacts everyone. Therefore, we hope that as individuals intentionally take new steps towards including
LGBTQ+ students, they apply the same UD and UID principles focused on LGBTQ+ people to all their constituents.

Throughout this article, we have referred to people who identify as lesbian, gay, bisexual, transgender, queer, and more as members of a community, and that is what first and foremost they need: community. Community includes people around whom and spaces wherein people who are LGBTQ+ can feel safe and accepted for all of their identities. The same way that every member of a college community is responsible for the recruitment, retention, and graduation of students, they are also responsible for inclusion and community-creating. This can be done in any number of ways, from something as small as a faculty member including his/her/their personal pronouns in his/her/their signature line under the name to the creation of an LGBTQ+ Center in a central part of campus. Harvey Milk once said, “all young people, regardless of sexual orientation or identity, deserve a safe and supportive environment in which to achieve their full potential” [106]. We encourage educators to align with Harvey’s sentiment to make that a reality for all persons who identify as LGBTQ+ in their college and university communities.

Although the focus of this article has been to explore how we might apply UD, UID, and IMID in creating more welcoming learning experiences for students who identify as LGBTQ+, our final recommendation is to extend our thinking beyond the “one-identity-at-a-time” approach and consider “the whole student”. How can we become more observant, knowledgeable, and considerate of difference, so that we ensure that no student is excluded on the basis of any facet of identity? At the same time that we learn to embrace difference, how can we place more emphasis on our shared attributes, goals, values, and beliefs?


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