

Equity, Diversity, and Inclusion Design for Learning: Incorporating Critical Race Theory, Queer Theory, and Indigenous Pedagogies into Universal Design for Learning

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Abstract: This research explored inclusive education, including identity factors like gender, sexual orientation, race, culture, and ability. It critically assessed Universal Design for Learning (UDL) through the perspectives of Critical Race Theory (CRT), Queer Theory (QT), and Indigenous pedagogies. Utilizing a mixed-methods online survey, the research identified prevalent themes, including underrepresentation and positive impacts of representation. The results underscored the necessity of a more inclusive learning design, influencing educational practices and cultivating diversity in the educational environment. Synthesizing literature review and survey feedback, the study advocated for an expanded framework: Equity, Diversity, and Inclusion Design for Learning (EDIDL), shaped by these theories and student experiences. This study contributes to the field by proposing key principles for EDIDL, offering a comprehensive solution to enhance inclusive educational practices.

Keywords: Inclusive education, Universal Design for Learning, Critical Race Theory, Queer Theory, Indigenous Pedagogies, Equity, Diversity, and Inclusion

Introduction

Advancements in inclusive educational design, aimed at enhancing equal opportunities and access, face persistent challenges for students from historically marginalized communities (Biermann & Townsend-Cross, 2008; Gunckel, 2019). This research examines the literature on inclusive education and Universal Design for Learning's effectiveness, exploring theoretical foundations and practical experiences. It assesses if UDL recognizes diverse student identities beyond ability, highlighting the need for a comprehensive approach. A survey was conducted to gain insight into the lived experience of students. Building on the literature and the student perspective, this research proposes an Equity, Diversity, and Inclusion Design for Learning (EDIDL) framework, integrating Critical Race Theory, Queer Theory, and Indigenous pedagogies with Universal Design for Learning to foster genuinely inclusive environments.

Significance

The lived experience of diverse student identities calls for an intentionally inclusive education approach. This research addresses a literature gap by integrating UDL, Queer Theory (QT), Critical Race Theory (CRT), and Indigenous Pedagogies. This study explores aligning frameworks for inclusion, proposing a shift towards EDIDL. It aims to understand students' experiences and advocates for a framework embedding inclusive practices. The equity-focused design benefits all students, fostering a learning environment celebrating diverse identities. Recognizing the impact of incorporating CRT, QT, and Indigenous pedagogies into UDL is crucial for educators and policymakers (Abegglen et al., 2021; Shrodes & Paré, 2022).

Thesis

This research critically examined students' experiences, assessing UDL's effectiveness in meeting the needs of marginalized students beyond disability. Drawing insights from both literature review and student perspectives, the study proposes the integration of CRT, QT, and Indigenous pedagogies into the UDL framework. The aim is to optimize UDL for more meaningful inclusion, leading to considerations for expanding it into EDIDL.

Research Questions

1. How well does UDL address inclusion and representation for students with diverse identities, especially those from historically marginalized communities?
2. What are the gaps in UDL limiting its ability to cater to diverse identities, and how can CRT, QT, and Indigenous pedagogies address these gaps?

3. How can the literature review and students' experiences inform the proposal of an EDIDL framework, contributing to more inclusive practices, and what potential benefits and challenges does this strategy present?

Universal Design for Learning

UDL, rooted in the architectural practice of Universal Design (UD), aims to create flexible learning environments that reduce individual accommodations (Benton Kearney, 2021; CAST, 2018). UDL is guided by three principles:

1. Multiple means of Engagement – the 'why' of learning – provides options for recruiting interest, sustaining effort, and promoting self-regulation.
2. Multiple Means of Representation – the 'what' of learning – provides options for perception, language, and comprehension.
3. Multiple Means of Action and Expression – the 'how' of learning – provides options for physical action, expression, and executive functions.

UDL aims to create purposeful, motivated, resourceful, knowledgeable, strategic, and goal-oriented students (CAST 2018; Katz & Sokal, 2016).

While UDL addresses disability-related barriers, challenges emerge when extending to other equity-deserving groups, hindering systemic change (Baglieri, 2020; Sadowski, 2014). Aligning UDL with diverse student populations requires a more comprehensive and critical approach (Baglieri, 2020; Gunckel, 2019; Indar, 2019; Ladson-Billings, 1998; Sadowski, 2014).

The following sections explore the core components of the examined frameworks—CRT, QT, and Indigenous pedagogies—investigating their interactions with UDL, assessing the potential advantages of integration, and discussing possible limitations or challenges.

Critical Race Theory

CRT aims to dismantle racial roles deeply embedded in societal structures, advocating for social justice and equity by scrutinizing racism's pervasive influence on norms, institutions, and systems (Ladson-Billings, 1998; Wong et al., 2018). Emphasizing intersectionality, CRT acknowledges discrimination or privilege based on race, gender, class, and more (Wong et al., 2018).

Integrating CRT principles into UDL aligns to enhance inclusion by recognizing students' complex identities. UDL, addressing diverse learning needs, complements CRT's emphasis on acknowledging racial and cultural backgrounds, and fostering intentional and responsive pedagogy (Katz & Sokal, 2016; Wong et al., 2018). The alignment in emphasizing educator reflexivity and responsiveness prompts continuous assessment, adjustment, and self-reflection on practices challenging systemic inequities (Ghaziani & Brim, 2019).

Challenges emerge as intersectional discrimination faced by students with disabilities requires a more nuanced teaching approach than current UDL practices offer. Pedagogical approaches considering race and ability are crucial for a responsive teaching and learning environment, suggesting an opportunity to engage UDL with CRT to critically challenge assumptions and biases (Love & Beneke, 2021; Wong et al., 2019). Tension may arise between UDL's individualized approach and CRT's systemic analysis, challenging the compatibility of UDL with CRT and potentially facing pushback from those resistant to change (Sadowski, 2014; Baglieri, 2020).

Despite challenges, combining CRT with UDL offers a more comprehensive approach to addressing cultural and racial educational inequities by recognizing the interconnectedness of systemic and individual factors, and fostering inclusive and equitable learning environments (Sadowski, 2014; Papp, 2016).

Queer Theory

QT, grounded in critical analysis, serves as an interdisciplinary framework addressing gender and sexuality aspects, challenging normative assumptions, and fostering inclusion in education (Gunckel, 2019; Shlasko, 2005). Highlighting limited representation of diverse sexualities and gender identities in educational content, QT confronts

entrenched heteronormativity in curricular materials, urging educators to analyze norms and create inclusive learning environments (Ghaziani & Brim, 2019; Shrodes & Paré, 2022).

In alignment with UDL's commitment to inclusion and diversity, QT recognizes the fluidity and complexity of identities, endorsing multiple means of representation to cater to diverse student needs (Shlasko, 2005; Meyer, 2005). Gunckel's study (2019) emphasizes QT's potential to challenge education norms, resonating with UDL's objective of breaking down barriers and fostering inclusivity. Caniglia and Vogel's work (2022) underscores the importance of embracing diverse perspectives, aligning with both QT and UDL. QT's deconstruction of normative categories and power structures aligns with UDL's goal of promoting equity in education, challenging assumptions and practices that marginalize certain student categories (Mitchell et al., 2013).

Combining QT with UDL demands cultural competence regarding 2SLGBTQIA+ experiences (McWilliams & Penuel, 2016). Educators, in deconstructing normative categories, must comprehend diverse student experiences, steering clear of essentialization and tokenization (Lamoureux & Katz, 2020). Going beyond surface-level inclusion allows educators to critically engage with QT, incorporating 2SLGBTQIA+ perspectives and challenging normative assumptions in education.

Indigenous Pedagogies

There is no homogenous picture of an Indigenous pedagogy. Emphasizing connections between education, culture, community, spirituality, and the land, many Indigenous pedagogies prioritize land-based and experiential learning, fostering a holistic approach (Lake & Atkins, 2021; Biermann & Townsend-Cross, 2008). Despite their richness, mainstream education inadequately acknowledges Indigenous pedagogies, perpetuating colonial narratives (Biermann & Townsend-Cross, 2008).

The intersection of Indigenous pedagogies with UDL highlights the importance of recognizing diverse cultural backgrounds in education. Integrating Indigenous pedagogies into practices shapes an inclusive and culturally responsive curriculum, expanding on UDL's commitment to accommodating all learners' needs and offering multiple means of representation (ARPDC, 2018). Indigenous Pedagogies' holistic and experiential nature aligns with UDL's goal of providing multiple means of engagement and recognizing diverse learning needs. Indigenous teaching, which acknowledges individual strength, involving hands-on experiences, storytelling, and community participation, resonates with UDL's aim of providing multiple means of expression and engagement (Katz & Sokal, 2016; Lake & Atkins, 2021). This integration fosters learning environments that honor Indigenous knowledge and practices while accommodating diverse abilities and learning styles.

Integrating Indigenous pedagogies into the UDL framework necessitates focusing on cultural sensitivity and respect (Antoine et al., 2018). Collaborating with Indigenous communities, Elders, and knowledge keepers becomes essential for meaningful engagement (Lake & Atkins, 2021). To avoid superficial inclusion and address historical and systemic barriers Indigenous students face, ongoing reflection, collaboration, and professional development are crucial for creating a supportive and responsive learning environment (Fovet, 2020; Papp, 2016).

Intersection of CRT, QT, and Indigenous Pedagogies with UDL

The discussed frameworks collectively commit to dismantling oppressive structures in education. CRT confronts systemic racism, QT challenges normative systems, and Indigenous pedagogies strive to decolonize education. These align with UDL's objective of fostering inclusion and confronting systemic barriers (Ladson-Billings, 1998; Shlasko, 2005; Lake & Atkins, 2021). The interconnectedness of identity and power dynamics is a central theme across CRT, QT, and Indigenous pedagogies. CRT explores the social construction of racial identity and its ties to privilege and oppression, QT deconstructs normative assumptions about gender and sexuality, and Indigenous pedagogies emphasize holistic development tied to context and culture (Ladson-Billings, 1998; Shlasko, 2005; Lake & Atkins, 2021). These perspectives underline the complexity of identity and power, urging educators to critically engage with students' multifaceted identities and the systems influencing them.

However, integrating these theories with UDL demands thorough and intentional efforts. CRT, QT, and Indigenous pedagogies advocate for structural transformation, challenging UDL's individualized approach (Lake &

Atkins, 2021; Baglieri, 2020). Balancing individualized support with broader structural change poses a challenge, necessitating active and intentional collaboration with marginalized communities (Biermann & Townsend Cross, 2008; Indar, 2019). Cultural responsiveness and humility become imperative in expanding UDL to avoid perpetuating harmful stereotypes and biases. Meaningful collaboration is essential to prevent tokenistic efforts that might inadvertently reinforce larger systems of oppression (Lamoureux & Katz, 2020). Navigating these opportunities and challenges, the evolution of UDL stands as a transformative framework fostering inclusive and equitable learning environments that honor diverse identities while addressing systemic inequalities.

Methodology

This research adopts a pragmatic epistemological perspective, recognizing knowledge as context-dependent. Using a mixed-methods approach, the study aims to comprehend how student experience is constructed by social, structural, and contextual factors. Aligned with a social constructivist ontology, the research views reality as socially constructed through individual experiences and interactions, acknowledging diverse perspectives shaped by unique social and cultural contexts (Vygotsky, 1978). Convenience sampling, acknowledging participant accessibility constraints, and inclusive recruitment strategies aim to capture varied voices shaped by sociocultural factors. The research employed both online surveys and mixed methods analysis to leverage quantitative data for numerical insights and qualitative thematic analysis to understand individual experiences. This research project obtained approval from the Athabasca University Research Ethics Board.

Survey Design

The survey methodology focused on capturing students' experiences and perceptions regarding representation and UDL. Participants provided demographic information encompassing sexual orientation, gender identity, racial identity, cultural background, and ability/disability, enabling a comprehensive analysis of potential response variations across diverse backgrounds. The survey assessed participants' perceptions of representation in course content, assessments, and teaching strategies, exploring the frequency and impact of representation, including its absence and potential positive effects. Additionally, participants shared experiences of exclusion based on various identity factors. The survey delved into participants' awareness of UDL principles, their familiarity with UDL concepts, and their ability to identify UDL strategies in their educational experiences. Participants expressed their perceptions of UDL strategy effectiveness and its impact on the learning environment. The inclusion of open-ended questions allowed students to articulate experiences, challenges, and suggestions related to UDL and inclusive education, contributing valuable qualitative data for a deeper understanding of individual perspectives.

Data Analysis

Participant responses have been examined for data analysis to uncover insights into representation and UDL strategy effectiveness. The survey received 81 valid responses. For the data analysis, descriptive statistics were employed to summarize the participant responses, primarily using percentages to convey the representation experiences of different demographic groups.

Results

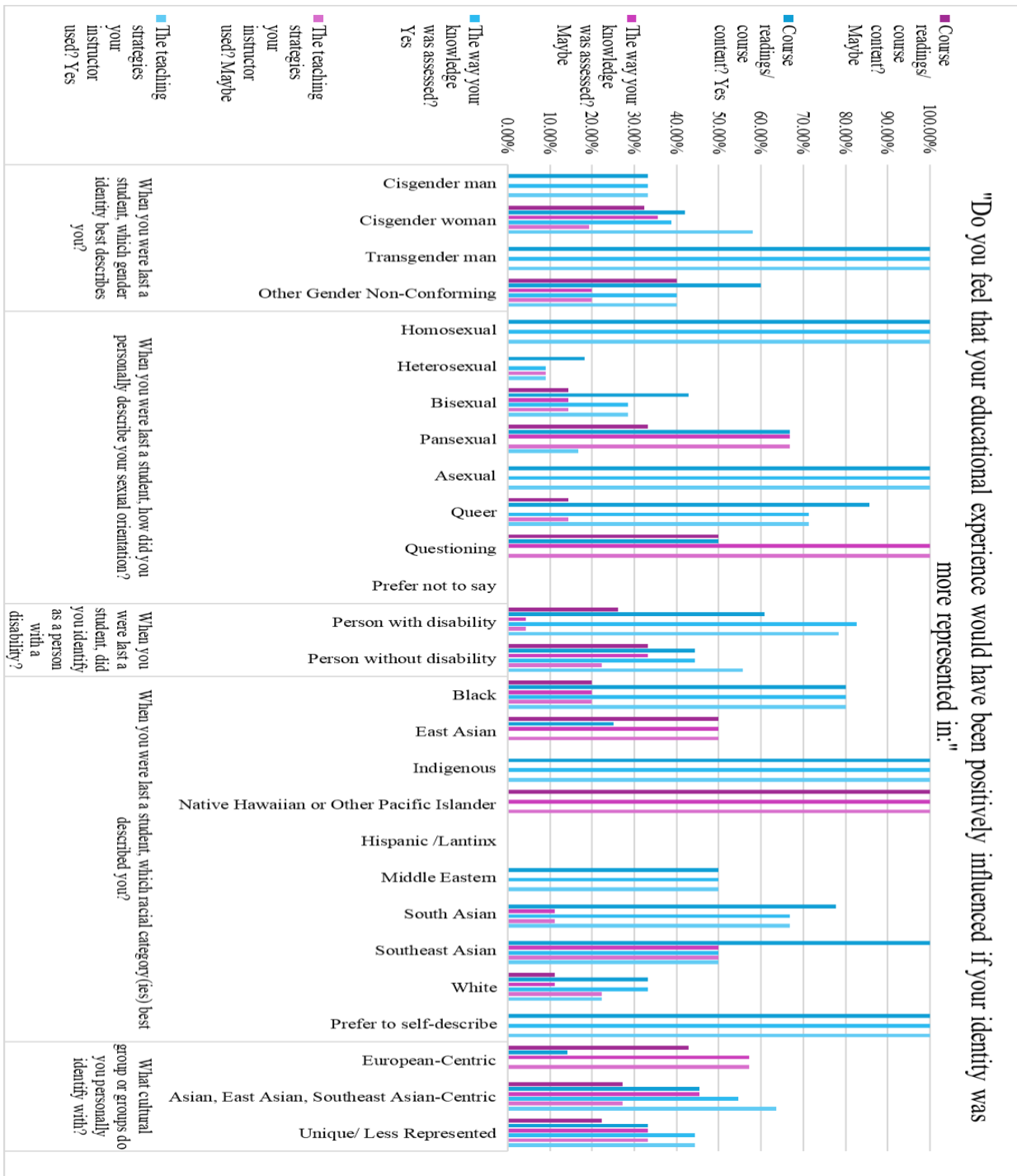


Figure 1: Impact of Representation by Identity Category (gender identity, sexuality, disability, race, culture).

Gender Identity

77% of survey participants identify as cisgender women, 15% as cisgender men, and 8% as non-cisgender. 57% of non-cisgender respondents felt rarely or not represented in course content, compared to 9% of cisgender men and 7% of cisgender women. 100% of non-cisgender participants felt that increased gender identity representation in course content would have positively impacted their education. In assessments, 71% of gender diverse individuals rarely or never felt represented, in contrast to 0% of cisgender men and 11% of cisgender women; 67% believed increased gender representation would enhance their experience. Furthermore, 57% of gender diverse respondents rarely or never felt represented in teaching strategies, compared to 18% of cisgender men and 15% of cisgender women. Additionally, 67% of gender diverse respondents believed increased gender representation would positively impact their educational experience.

Sexual Identity

The majority of participants identified as heterosexual (53%), while 44% identified as 2SLGBTQIA+. 67% of heterosexual individuals often felt well-represented in course readings and content, 56% in knowledge assessment, and 56% in teaching strategies. Conversely, 47% of those with diverse sexual orientations rarely or never felt represented in course content. Among them, 89% believed increased representation in course content would improve their educational experience. Additionally, 81% of 2SLGBTQIA+ respondents rarely or never felt represented in either knowledge assessment or teaching strategies. In addition, 71% of 2SLGBTQIA+ respondents indicated that increased assessment representation would positively influence their experience, and 79% in teaching strategies.

Disability

35% of respondents identified as having a disability when last a student. Among them, 48% rarely or never felt represented in course content, 63% rarely or never felt represented in assessment strategies, and 48% rarely or never felt represented in teaching strategies. In contrast, these figures were notably lower at 4% for respondents without disabilities in course content, 4% in assessments, and 6% in teaching strategies. Participants with disabilities responded affirmatively (yes or maybe) to the potential improvement of educational experience with increased representation, with percentages of 87% for course content and knowledge assessment, and 83% for teaching strategies.

Racial Identity

Most respondents identified as white (69%), with 30% identifying as a race other than white. Of respondents of diverse racial identities, 39% indicated rarely or never feeling represented in course content, compared to 7% of white respondents. Additionally, 86% of racially diverse respondents believed increased racial representation would positively influence their educational experience. In assessments, 32% rarely or never felt represented, compared to 7% of white respondents, with 82% indicating that increased racial representation would positively influence their experience. In teaching strategies, 34% rarely or never felt represented, compared to 7% of white respondents, and 82% believed increased racial representation would positively influence their learning experience.

Cultural Representation

53% of participants identified as having European cultural identities, while 42% of respondents identified as being part of non-Eurocentric cultures. Among the non-Eurocentric respondents, 65% rarely or never felt their culture was represented in course content, 56% rarely or never felt represented in assessment, and 52% rarely or never felt represented in teaching strategies. For respondents of non-Eurocentric heritages, 75% indicated that increased representation in course content would positively influence their experience, 80% in assessments, and 75% in teaching strategies.

Student Experiences of Exclusion and Marginalization

Examining respondents' exclusion experiences based on racial backgrounds revealed significant disparities, with 65% of non-white respondents reporting exclusion. Gender identity also played a role; 52% of cisgender women reported exclusion, while 83% reported exclusion was observed among transgender, non-binary, and other gender non-

conforming respondents. Respondents with a non-heterosexual orientation also reported exclusion at a rate of 56%. Among respondents identifying as having a disability, 56% reported feeling excluded at some point during their education.

Familiarity with and Experiences of UDL

The data revealed diverse awareness levels regarding UDL, with 44% of participants knowingly experiencing UDL in their education, 38% not, and 19% uncertain. The findings suggest potential disparities in individual awareness or communication of strategies used in the educational environment. Questions about instructor strategies revealed widely adopted strategies, including providing multiple ways to learn or understand information (70%), opportunities for diverse engagement (59%), and choices in demonstrating understanding (54%). Despite varied awareness, findings indicate a high level of interaction with UDL strategies by participants.

The data showed the positive impact of UDL practices across demographic groups. Participants consistently reported overwhelmingly positive experiences with various UDL strategies, with high percentages indicating 'very positive' or 'somewhat positive' impact:

- 82% for multiple ways to learn or understand information,
- 87% for opportunities to engage in various ways,
- 88% for choices in demonstrating understanding,
- 81% for flexible learning materials and assessments,
- 83% for personalized learning options.

This uniform positivity underscores the potential for UDL practices to create an inclusive educational environment for diverse students.

Discussion

This section discusses the findings from the data analysis in parallel with the literature review, exploring how the diverse backgrounds of participants relate to UDL experiences and implications for inclusive design in education.

Representation and Inclusion in UDL Effectiveness

Responses from participants outside the majority demographic underscore prevalent themes of insufficient representation and inclusion, echoing Baglieri's (2020) and Sadowski's (2014) critiques of UDL for its oversight of systemic inequities.

Racial Identity, Cultural Representation, and UDL

Survey responses reflected a Eurocentric bias in course content, aligning with literature on cultural minorities' inadequate representation (Biermann & Townsend-Cross, 2008). Indigenous participants' underrepresentation emphasizes the necessity of integrating Indigenous pedagogies into UDL (ARPDC, 2018; Fovet, 2020; Lake & Atkins, 2021).

Queer Experience and UDL

Findings related to gender identity align with the literature's emphasis on recognizing diverse identities (Gunkel, 2019; Meyer, 2005; Shlasko, 2005). Participants express that increased representation would positively influence their educational experiences, emphasizing the need for a more intentionally queer approach. Disparities among non-cisgender respondents highlight the need for frameworks like QT to address systemic issues (Gunkel, 2019; Ladson-Billings, 1998). Findings on sexual identity align with discussions of QT in education, underscoring the importance of challenging normative assumptions.

Ability/Disability and UDL

Responses on ability/disability align with Baglieri's (2020) critique, suggesting ingrained structures of ableism may persist despite widespread UDL adoption. Participants with disabilities consistently felt underrepresented, supporting the literature's call for UDL to dismantle systems of inequity (Baglieri, 2020; Katz & Sokal, 2016; Mitchell et al., 2013).

Student Experiences of Exclusion and UDL

Experiences of exclusion underscore UDL limitations in addressing systemic issues (Mitchell et al., 2013; Sadowski, 2014). Disparities in exclusion experiences support the call for a comprehensive framework integrating CRT, QT, and Indigenous pedagogies with UDL (Benton Kearney, 2021; Hanesworth et al., 2019; Indar, 2019; Kieran & Anderson, 2019; Lamoureux & Katz, 2020; Mitchell et al., 2013; Sadowski, 2014; Shrodes & Paré, 2022).

Considerations for Next Steps

Addressing diversity in education requires moving beyond UDL's foundational aspects. While UDL strategies show positive impacts, the data highlights limitations when considering a broader spectrum of identity factors. While beneficial, the survey suggests that UDL may not comprehensively meet diverse student needs. Achieving genuine inclusive education calls for expanding UDL principles into a more comprehensive framework: Equity, Diversity, and Inclusion Design for Learning (EDIDL). This transformative framework fosters inclusive and equitable learning environments by integrating insights from CRT, QT, and Indigenous pedagogies.

Equity, Diversity & Inclusion Design for Learning

Built upon the principles of UDL, the EDIDL framework integrates insights from CRT, QT, and Indigenous pedagogies to reshape educational practices. EDIDL is comprised of the following key principles:

1. Recognition and Representation of Diverse Identities:

- *Recognition*: Acknowledge and respect racial, ethnic, gender, sexual orientation, cultural, and disability diversity.
- *Representation*: Authentically represent diverse identities in course content, assessments, and teaching strategies.

2. Inclusive and Culturally Responsive Curriculum:

- *Inclusion*: Go beyond traditional curriculum development, embracing diverse identities and ways of learning.
- *Cultural Responsiveness*: Prioritize cultural responsiveness, avoiding tokenism, and ensuring meaningful representation.

3. Collaborative and Participatory Learning:

- *Collaboration*: Emphasize collaboration with marginalized communities to value diverse perspectives and promote active contributions to the learning process.
- *Participation*: Encourage active participation, ensuring opportunities for engagement reflecting diverse identities.

4. Pedagogical Flexibility and Intersectional Awareness:

- *Pedagogical Flexibility*: Maintain flexibility in instructional approaches, recognizing and accommodating diverse learner needs.
- *Intersectionality*: Address intricate relationships between identity dimensions, promoting an inclusive learning environment.

5. Critical Reflection and Professional Development:

- *Critical Reflection*: Encourage ongoing critical reflection among educators to understand diverse perspectives.

- *Professional Development*: Provide continuous development for educators and administrators to implement the EDIDL framework effectively.

6. Structural Transformation:

- *Advocate for Systemic Change*: Seek opportunities to advocate for systemic change within educational institutions: challenge and reform policies, practices, and curricula for an inclusive and equitable educational environment.

Revisiting the UDL principles, an EDIDL framework would offer the following expansions:

1. Provide Multiple Means of Representation and Recognition:

- Incorporate Indigenous worldviews and cultural practices to respect and recognize Indigenous ways of teaching, learning, and knowing,
- Acknowledge and represent diverse gender, sexual, ability, racial, ethnic, and cultural identities in curriculum content and materials,
- Offer flexibility of choice for presenting information that aligns with diverse perspectives, and
- Promote representation that challenges normative assumptions and embraces the fluidity of identities.

2. Provide Multiple Means of Action and Expression:

- Optimize access to tools, technologies, and learning resources for students with diverse abilities and preferences,
- Encourage diverse forms of expression, communication, and construction in various media, including land-based and experiential opportunities,
- Guide goal setting and planning that considers the diversity of identities and experiences, and
- Facilitate varied methods for response and navigation, accommodating diverse abilities and preferences.

3. Provide Multiple Means of Engagement:

- Optimize individual choice and autonomy, acknowledging and respecting diverse interests and values,
- Foster collaboration and community that includes perspectives from historically excluded and underrepresented groups,
- Vary demands and resources to optimize, challenge, and address diverse learning styles, and
- Develop self-regulation strategies that promote expectations and beliefs, fostering motivation across diverse backgrounds.

The synthesis of literature and survey findings lays the groundwork for EDIDL, aiming for a comprehensive approach to inclusive education. Rooted in CRT, QT, Indigenous pedagogies, and UDL, EDIDL uniquely acknowledges and addresses identity and power dynamics within educational contexts. Expanding UDL in this way challenges systemic issues, holding transformative potential against Eurocentrism, racism, heteronormativity, cisnormativity, and colonial legacies. Collaborating with historically marginalized communities ensures meaningful and respectful integration. The implications for inclusive education are significant, fostering culturally responsive curricula, affirming environments, and advancing equity and social justice in education.

Potential Benefits and Challenges

The benefits of EDIDL lie in encouraging educational inclusion, creating diverse, responsive environments, enriching the learning experience, and contributing to a diverse educational community. It challenges systemic barriers, fostering acceptance and respect, and breaking down traditional identity-based barriers (Biermann & Townsend-Cross, 2008; CAST, 2018; Ladson-Billings, 1998; Shalsko, 2005). However, challenges emerge when addressing profound systemic change within educational institutions. EDIDL demands the dismantling of Eurocentrism, racism, heteronormativity, cisnormativity, and colonial legacies, potentially facing resistance. Implementation requires examining and transforming policies, curricula, and practices, presenting a complex process (Ghaziani & Brim, 2019; Lake & Atkins, 2021). In addition, ongoing professional development and cultural humility training for educators is a crucial aspect of successful EDIDL implementation (Papp, 2016). Despite challenges, EDIDL's benefits outweigh the difficulties, representing a critical approach to inclusive education aligned with social justice, equity, diversity, inclusion, and accessibility goals.

Implications for Educational Practices and Policies

Practical recommendations involve policymakers incentivizing inclusive education practices and aligning policies with EDIDL principles. Continuous professional development for educators is crucial. The study emphasizes a paradigm shift to EDIDL, recognizing diverse student identities beyond UDL's focus on disability. Survey findings highlight UDL's importance but reveal challenges, drawing attention to the need for an expanded EDIDL approach. The study advocates for intentionally considering diverse identity categories to foster an authentically inclusive educational environment. This shift requires collaborative efforts among educators, institutions, and policymakers for tangible improvements in inclusive education practices aligned with equity and accessibility goals.

Conclusion

This study advances inclusive education by exploring intersections of gender, sexual orientation, race, culture, and ability, adding complexity to UDL's effectiveness. Beyond the conventional focus on disability, it illuminates students' experiences from diverse backgrounds, advocating for a comprehensive framework. EDIDL intentionally considers various identity categories, recognizing students as complex individuals. Building on UDL principles and incorporating insights from QT, CRT, and Indigenous pedagogies, EDIDL aims to create a more inclusive educational environment, emphasizing the diversity of identity factors and academic experiences.

Limitations

As the researcher, I must recognize the influence of my perspectives, biases, and assumptions on the study's design and interpretation. Despite efforts to minimize bias during analysis, the inherent subjectivity in qualitative analysis presents a challenge. A notable limitation arises from potential sampling bias due to participant self-selection, limiting the generalizability of findings. Additionally, reliance on self-reported data may introduce response bias and may only partially capture the nuanced experiences of individuals with intersectional marginalized identities. Practical considerations, such as the English-language survey and online format, may have excluded specific demographics, and the absence of a pilot phase raises concerns about potential issues with the survey instrument. The absence of a pilot phase means that participants' varied interpretations of questions may impact the validity and reliability of the collected data.

Areas for Future Research

Avenues for future exploration include qualitative studies for in-depth insights into students' lived experiences with UDL, longitudinal research for tracking its long-term impact, and perspectives of educators and administrators on UDL implementation. Future research could better capture the impact of intersectional or multiple marginalized identities on the student experience in educational design and inclusive education.

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