Course Design Considerations for Inclusion and Representation

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RECOMMENDED ACTION PLAN

- Explore and apply evidence-based best practices for developing and sustaining universally accessible environments online.
- Incorporate ways to amplify student voice and validate learners' diverse ways of knowing in the course development process.
- Implement multi-dimensional course design practices, such as collaborative learning and alignment of course content, and engagement strategies with learners' lived experiences.

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Introduction: The Crucial Role of Inclusive Design

Integrating strategies for creating inclusive online courses is a valuable endeavor that enriches the learning experience of all members of the learning environment. Given the specific conditions necessary to foster equitable intercultural learning within online education, developers and instructors should critically assess current strategies for promoting diversity and inclusion within educational systems. This assessment should attempt to address existing disparities, amplify unintentionally silenced voices and marginalized communities, and uncover barriers to access that learners may face each time they engage in the online learning space. By intentionally and iteratively evaluating course design practices and online learning norms, developers can support the work of reimagining, creating, and recreating safe, inclusive, and equitable experiences for all online learners. This paper will offer a foundational exploration of inclusive online education, an examination of various course design models that normalize inclusive design practices in online learning, and practical recommendations for applying theoretical and research-based best practices for inclusive and representative course design.

> “To teach in a manner that respects and cares for the souls of our students is essential if we are to provide the necessary conditions where learning can most deeply and intimately begin.”
>
> *bell hooks*

Defining Diversity, Inclusion, and Equity in Online Education

Academia, similar to many fields, is replete with several definitions that attempt to accurately and concretely describe the ideals of *diversity, equity*, and *inclusion*. Diversity, as defined by the Association of American Medical Colleges (AAMC), applies to the “richness of human differences including socioeconomic status, race, ethnicity, language, and individual aspects such as personality, learning styles, and life experience” (McCleary-Gaddy, 2019, p. 1443). Similarly, the American Association of Colleges and Universities (AACU) defines diversity through the lens of *inclusive excellence*. As such, the AACU contends “inclusive excellence emphasizes student intellectual and social development and the need to create a welcoming community that values cultural differences” (Chun & Evans, 2010, p. 2).

Educational research asserts that learners are negatively impacted in the absence of inclusive practices and that learners often encounter marginalization, isolation, and racism in such environments (Hurtado & Ponjuan, 2005; Sáenz et al., 2018). In 2000, the United Nations Educational, Scientific, and Cultural Organization further built upon the introduction of inclusion as an innovative pedagogical approach and affirmed that the most efficient strategy for neutralizing the effects of discriminatory attitudes and fostering inclusive educational environments is to promote “the inclusion of all children in regular schools” (UNESCO, 2000 in Krischler et al., 2019, p. 632). Nevertheless, diversity and inclusion alone are not sufficient to cultivate learning environments that meet the needs of all learners.

The concept of equity extends these definitions by first acknowledging the importance of identifying differences and by actively encouraging inclusivity. Unlike diversity and inclusion, equity underscores the existence of systemic and historical barriers that contribute to the disparities negatively impacting underrepresented and minoritized groups (McCleary-Gaddy, 2019). In the field of online education, deficiencies in digital equity can not only hinder the

social and economic growth of individual learners, but can also serve to systematically disenfranchise entire populations (Resta & Laferrière, 2008).

However, effective integration of diversity, inclusion, and equity in online education can promote environments ideal for engaging in intercultural learning. According to Garson (2013), *intercultural learning* refers to the type of learning that fosters a learner's intercultural competence and enhances their understanding of diverse cultural preferences beyond their own. Likewise, intercultural learning encourages interactions that are characteristically respectful, empathetic, and inquisitive, which occur when learners are engaged in safe, validating, and supportive environments. Such environments are established through sharing power amongst participants and acknowledging differing perspectives (National Aboriginal Health Organization, 2008).

The Educational Impact of Culture

To assess the current state of online learning and its proximity to the ideals of *inclusion*, *representation,* and *equity*, course developers and instructors would benefit from the work of cultural researchers and critical educational theorists to illuminate the remaining barriers that diverse learners continue to navigate. One such theorist provides insight into how the intersection of a learner's social upbringing and cultural identity may impact the way they interact within the learning environment. Hofstede (2001) postulates five dimensions to differentiate culture in learning settings based on findings from his groundbreaking review of 116,000 questionnaires collected over six years in the 1970s. The original data were generated from over 60,000 IBM employees across more than 50 countries and provided a framework for exploring the impact of culture in business and education. This paper will briefly examine four of Hofstede's dimensions that are most relevant to the development of inclusive online learning environments.

The first of these dimensions is the *power distance index.* Power distance index relates to the degree to which persons within groups accept or anticipate power is unequally distributed within the group. Wang (2007) studied Chinese, Korean, and US online learners' willingness to seek support from their online instructors, and found there was no significant difference between the three groups regarding their comfort in seeking assistance or clarification from their instructors when it pertained to group work. By contrast, there were significantly different levels of comfort when related to seeking support when it pertained only to themselves; Chinese and Korean online learners, for example, expressed increased discomfort in seeking support from superiors. Furthermore, Korean online learners were also less inclined to be comfortable with seeking support from peers for individual assignments or homework. The author concluded,

> Power distance indeed affected students' ways in approaching instructors and their peers. By contrast, individuals were able to overcome their sense of power distance when working as a group. In other words, individuals become 'braver' when working as a team to approach their instructors for help (p. 308).

A second dimension, *uncertainty avoidance index,* can function in a similar way, by reducing the inclination for online students to reach out to their instructor. This dimension addresses a society's affinity toward or resistance to uncertainty and ambiguity. In online learning, learners who have been socially or culturally conditioned to tolerate ambiguity, particularly when coupled with navigating systems of power, may be less inclined to seek assistance from their instructors or request clarification.

A third dimension, *individualism*, is framed by the extent to which an individual engages within a group. According to Hofstede's definition, individuals—and by extension, online learners—are affiliated with, and navigate between individualist societies/cultural values, in which persons are conditioned to prioritize themselves, and with more collectivist societies, potentially including students' immediate family members, who value commitment and loyalty to extended families and broader communities. In the

United States, for example, the academic experience can heavily emphasize values of competition and individualism that force many Latina and Latino students to "negotiate the inherent cultural incongruity between the university's values and their personal cultural values" (Gloria, et al., 2009, p. 319). Learners from cultures and societies that similarly prioritize the ideals of collectivism and collaboration may feel alienated, conflicted, and highly stressed when confronted with challenging or maintaining their values and identities (Carson, 2009; Cole & Espinoza, 2008).

The final dimension of Hofstede's framework is related to *long-term orientation*. This dimension highlights the value a society places on traditions and long-term goal-setting. Subsequently, it would be expected that an individual from a culture that has a high long-term orientation would not be motivated by immediate self-gratification, but would be willing to work diligently for an extended period of time with the expectation of a distant reward. Conversely, Hofstede's framework argues individuals from societies with low long-term orientations may be more open to change, however they may also be more concerned with personal stability (Cassel & Blake, 2011). As one example of educational impact, students with a culturally-based long-term orientation might've had more trouble navigating the COVID-related shift to remote learning, especially without their instructor reinforcing ideas of navigating change for the sake of academic continuity. Students with a long-term orientation might also benefit from clear information about how coursework scaffolds to a culminating project, while those with a low long-term orientation may be more motivated to do well on the discrete steps, and learning that the scaffolding may help their day-to-day work and planning.

Representative Content and Engagement as Liberation

Critical evaluation of normalized course design practices related to content selection and engagement strategies may also highlight opportunities to incorporate online equity work. It is essential for online instructors to participate in self-reflexivity to identify potential biases, beliefs, and attitudes they may unintentionally apply in the learning space. Similar to the qualitative research practice of accounting for the researcher as instrument (Guba & Lincoln, 1981; Merriam, 2002), Ellis and Berger (2003) defined self-reflexivity as the need to "understand ourselves as part of the process of understanding others" (p. 486). Unidentified instructor and developer biases and preferences can influence various elements in the online course development process including, but not limited to, the articulation of course objectives, preference for assessment methods, selection of instructional materials and technology, and affinity toward certain engagement and interaction approaches. Unfortunately, these selection biases may reflect developers' educational values that do not align with or are unfamiliar to their learners (Bowers, 2000), thereby introducing barriers to access and learner engagement.

As developers and instructors continuously engage in self-reflexivity and the assessment of learning environments, institutions can further address and correct the systems that may present educational obstacles. Extant research affirms learners of color frequently encounter *deficit models* that stereotype them as needing to overcome weaknesses attributed to their cultural, ethnic, and racial backgrounds (Harper, 2010; Tuck, 2009; Zembylas, 2013). Identifying these false narratives promotes validation of each learner's valuable personal experience and cultural knowledge, and invites all learners to be co-creators of the learning environment. Thus, educators can foster a culture of inclusion and equity in which all participants benefit from one another (Bowers, 2000). Moreover, reinforcing the importance and value of learners' personal identities in the academic space affirms feelings of self-worth and belonging. Among

Black students, security in one's identity positively correlates with success in academic settings. Specifically, Hurd et al. (2012) attested,

> researchers have found an association between higher racial centrality and more positive academic performance among African-American college students, indicating that seeing race as a central part of one's identity may contribute positively to one's academic performance (p. 1197).

Engaging learners in the co-creation of instructional content is a well-researched practice in education (Bergmark & Westman, 2016; Bovil, 2020; Cook-Sather, 2020; Mitra, 2018). However, it is critical to also encourage the *demonopolization of knowledge* to cultivate environments that are diverse, inclusive, and equitable. Despite the advances in online education and increased access to broader populations of students, the instructional strategies and materials favored in online classrooms rarely reflect the diversity of the student body (Chen et al., 2006; Olaniran, 2009). To counterbalance this inconsistency, educators should actively seek to adopt practices that represent and involve the cultural identities of students of color to support their success and universally enrich the learning experiences of all participants (Arora et al., 2011; Tierney, 1992).

Inclusive Course Design Models

Decisions course developers make directly impact learners' opportunities and experiences. Therefore, it is essential for faculty members and developers to endeavor to create inclusive and equitable learning environments and communities. The following course design models provide pathways for instructional designers, instructional technologists, faculty, and course developers to normalize inclusive design practices in online spaces.

Universal Design for Learning

While it is crucial for academic institutions to promote diversity, inclusion, and equity symbiotically within online learning, making sure that courses are accessible is also critical. Unfortunately, accessible content is often only provided to diverse learners after a barrier to engagement is identified (Roberts et al., 2011). Through the implementation of Universal Design for Learning (UDL) principles as foundational to the course development process, faculty and institutions are capable of designing online, hybrid, and web-enhanced courses that are created to be accessible and beneficial to multiple learners. The origins of Universal Design trace back to architect and visionary Ron Mace, and his pioneering efforts to promote architectural designs that provide inclusive access to all individuals. Likewise, in the field of educational design, Universal Design pertains to the strategies employed to ensure access to learning environments for all learners (Courey et al., 2012). The first three principles of the UDL model detail the importance of information being presented in a variety of formats to increase the cognitive accessibility of materials, provide flexibility in the manner by which learners demonstrate their learning, and utilize multiple methods of student engagement. Additional guidelines for UDL principles, developed by North Carolina State University's Center for Universal Design and the Center for Applied Special Technology (CAST, 2011), contend that accessible instruction should provide multiple options for:

1. Perception
2. Language, mathematical expressions, and symbols
3. Comprehension
4. Physical action
5. Expression and communication
6. Executive functions
7. Recruiting interest
8. Sustaining effort and persistence
9. Self-regulation

Given the foundation offered by the UDL framework and literature pertaining to diverse student populations and pedagogical approaches that support accessibility, McGuire et al. (2006) detailed nine Principles for Universal Design for Instruction (UDI):

1. The UDI principles speak to equitable use of instructional materials permitting learners with diverse abilities the ability to easily engage and interact.

2. It also promotes flexibility in the ways in which instructors implement various strategies for supporting learners throughout the learning process. In the realm of online learning, academic institutions can promote flexibility by offering assignment options that permit learners to select the outputs by which they demonstrate their achievement of the designated competencies or objectives. Such examples of student choice provide instructors a manner by which they may support all learners in showcasing their strengths and may contribute to a culture of deep learning (Wasik et al., 2019).

3. UDI principles further encourage simple and intuitive course design. Designing online courses that include predictable formatting, moderate amounts of visual and aural stimulation, and consistent structure is a practice that benefits a wide variety of learners, including neurodiverse learners (Cai & Richdale, 2015; Wyatt, 2010).

4. An additional strategy to consider when incorporating UDI principles is the inclusion of perceptible information that is easily accessible for learners.

5. Course design should also allow for a tolerance for error. By incorporating a tolerance for error, course developers account for the possibility that learners will progress through courses at varying paces based on their specific needs.

6. The UDI principle of low physical effort discourages implementing unnecessary physical exertion that may impact learning. Nevertheless, McGuire, et al. (2006) argue this principle is not applicable in instances in which activity is a required component of the course.

7. UDI principles guide online learning experience developers to ensure that the size and space of the educational environment do not prohibit learning. In the online learning space, instructors can support diverse learners by verifying the usability and accessibility of all multimedia. This may include ensuring ease of use of multimedia controls such as playback speed, closed captioning, image and text size, and playback volume (Pittman & Heiselt, 2014).

8. Additionally, UDI principles encourage the development of a community of learners.

9. Finally, UDI principles advocate for the creation of an inclusive instructional climate that sets high expectations for all learners.

The incorporation of these UDL and UDI principles through the development and subsequent delivery of online, hybrid, and web-enhanced courses may assist instructors in preparing online learning environments that benefit a wide variety of learners (Clark, 2005; Pittman & Richmond, 2008).

Inclusive Design Thinking

Comparable to the Universal Design for Learning model, Design Thinking centers the needs of the learner throughout the design process. Specifically, this model delineates the course development process into five distinct steps that frame the structure of the course and elements presented therein to support a variety of learners (Ballenger & Sinclair, 2020). The first step in the Design Thinking model challenges learning experience developers to empathize with learners. In this phase, faculty and instructional designers should consider what unique

needs their learners may have and what are the potential frameworks that shape their worldviews. Next, this model encourages developers to clearly define learners' needs and subsequently articulate the objectives of the course. In doing so, developers could consider how learners' needs and goals potentially align to influence the objectives chosen for the course.

After defining needs and objectives, the model promotes an ideation phase in which developers should broadly consider innovative methods for engaging learners through active learning and meaningful, authentic learning experiences. It is critical to reimagine traditional online offerings for new environments and audiences, particularly those composed of learners from minoritized groups. Morong and DesBeins (2016) argued,

> embedding and assessing the core competencies of intercultural understanding, teamwork, critical thinking, problem solving, and digital literacies is now expected. In design for learning, the focus shifts from instructional inputs to learner experience, activities, and what students actually learn to inform effective design and teaching. Key aims include making design more explicit to facilitate reuse and adaptation of teaching and learning activities that address course redesign challenges, and to embrace plural pedagogies that encompass diverse cultural perspectives (p. 4).

The fourth step of the Design Thinking model involves a period of prototyping the course by creating the learning activities and engagement opportunities that will allow learners to apply their skills. The model culminates with testing the created content using rubrics and other quality assurance metrics. The aim of the testing phase is to verify the accessibility and usability of the course, ensure learners are presented with opportunities to co-create the learning experience, and confirm the course reflects the principles that comprise Universal Design for Learning.

Morrison, Ross, and Kemp Instructional Design Model

The Morrison et al. (2010) Instructional Design model proposes nine core elements that are organized in a cyclical way, as opposed to the more common linear layout. The cyclical nature of this model provides learning experience developers access to the development process at various points within the process, based on the needs of the developers, instructors, and learners, as well as the specific learning context. This model supports the creation of learning activities and experiences guided by the unique characteristics of the learner audience—namely learners' identities, learning needs, goals, and prior knowledge. The core elements of this model include:

1. Articulate learning goals and identify challenges or barriers to instruction.
2. Consider learners' identities and their impact on course design decisions.
3. Select course content and explicitly align these selections with the stated course goals.
4. Explicitly define instructional objectives and outcomes learners should achieve by successfully completing the course.
5. Verify a consistent, logical, and sequenced course structure.
6. Create a plan for instruction that guides learners through content mastery and goal achievement.
7. Encourage developers to craft the instructional message and determine a suitable modality for offering the course.
8. Curate and design assessments for evaluating learners' progress throughout the course.
9. Select relevant, engaging, and representative resources to support the learning experience.

Theoretical Approaches for Fostering Inclusion and Representation

Researchers have developed several frameworks that incorporate inclusive practices to support the cognitive, instructional, and social engagement of learners. These frameworks, when utilized in conjunction with critically reflexive practices, can support inclusivity and democracy in online learning.

Social Emotional Learning Framework

One prevalent framework commonly applied throughout the literature is that of Social Emotional Learning (SEL), developed by the Collaborative for Academic, Social, and Emotional Learning (CASEL). SEL emphasizes five integral components: self-management, self-awareness, social awareness, relationship skills, and responsible decision-making (CASEL, 2017). According to the National Conference of State Legislators, these components may directly impact a learner's academic success and success in life (National Conference of State Legislators, 2021). Hurtado and Carter (1997) further postulated that learners' sense of belonging is impacted by their perceived identification and relation to the college community, and influences cognitive and affective aspects of their educational experiences. Notably, Tinto (1993) found that students are inclined to experience higher rates of attrition if their social and intellectual needs are not met or if they are unable to establish connections foundational to their membership within the college community. This sense of belonging is jeopardized for minoritized groups when they are unable to form and maintain healthy relationships or experience empathy, validation, and understanding in relation to their diverse backgrounds. Conversely, learners across identity groups broadly benefit in terms of improved critical thinking and cognitive engagement when presented with opportunities to learn from and interact with one another, particularly in the online space (Arguedas et al., 2016; Han & Johnson, 2012; Milem, 2003; Whitt et al., 2001).

Psychosociocultural Framework

An interrelated, student-centered approach to democratizing learning involves embedding opportunities for learners to choose how their educational experiences are constructed. Morrison (2008) argued that, "if people have choice and freedom to study what interests them, then they become more deeply engaged in, and thus less alienated from, their learning" (p. 53). Authentically engaging learners and minimizing alienating practices are critical within the context of educating diverse student populations. Among Native, Hispano, and Mestizo learners, Chávez et al. (2012) found that the ability to make meaning of and to fully participate in the learning experience was enhanced when learners were able to choose experiences that incorporated practices emphasizing mind, body, emotions, spirit, and intuition. Similarly, while exploring the invaluable role of Native Elders as educational leads in post-secondary STEM education, Aikenhead and Michell (2011) underscored the foundational Native worldview of understanding being dependent upon and inseparable from learners' interconnectedness with their world and the content under exploration. They affirm that the aim of educating Indigenous students—and by extension other minoritized groups—should not be to assimilate learners into a Western, Euro-centric academic enterprise. Instead, norms and traditions of minoritized populations should be actively interwoven as part of a community of accepted knowledge. As such, the academy should reflect "an effort to honor the individual, family, and community within the context of the learning environment that generates a level of trust for an individual to be inquisitive regarding the wonders of their world" (Ferreira et al., 2014, p. 2).

Integrating strategies championing communal and relational learning is important for a variety of diverse student groups. These approaches work to provide learners consistent opportunities to see and advocate for themselves as experts in their fields of study and promote instructional practices that foster participation, student voice, ownership, validation, cultural alignment, and responsibility to members of the learning community. Through their exploration

of best practices for supporting Latina and Latino college students, Gloria and Castellanos (2003) developed the Psychosociocultural (PSC) Framework to counterbalance educational value systems honoring competition, individualism, self-importance, and secularism. Conversely, the PSC Framework promotes collaboration, interdependence, group-importance, and spirituality—ideals foundational to systems of learning valued across diverse populations. As such, this framework promotes enriching educational experiences by fostering psychological, social, and cultural elements of success for diverse learners.

Validation Theory

Evans and Boucher (2015), as well as Flowerday and Schraw (2000), suggested that learners from racial minority groups, students from low-income households, and students with learning disabilities are less likely to receive opportunities to utilize choice within their learning environments. The constrained learner agency of disadvantaged learners is problematic, both for educational equality and social justice. Addressing this challenge is particularly imperative in the context of online learning, as this modality is increasingly utilized to provide educational access to diverse communities (Blau & Shamir-Inbal, 2018). Through cultivating educational environments in which learners' voices are validated and their choices are affirmed, instructors can support the development of individuals who recognize their importance in the global community, are confident in exercising their autonomy, and in turn, value the perspectives of others.

As a further means of amplifying and honoring inclusive practices such as student voice, Laura Rendón (1994) developed Validation Theory, which offers a framework whereby faculty can engage students in ways that encourage agency, belief in self, and resilience. Grounded in research centering the needs and experiences of women as learners, Validation Theory emphasizes the creation and maintenance of supportive learning environments that incorporate educational experiences and teaching strategies that are inclusive, equitable, and liberating (Garcia, 2018; Garcia & Okhidoi, 2015; Nuñez et al., 2010; Rendón, 2009). In practice, the theory can be addressed within two categories—academic validation and interpersonal validation. Whereas academic validation pertains to the act of faculty creating learning opportunities that reinforce the potential for learners to be successful, interpersonal validation occurs when learners cultivate relationships that involve affirmations of one another.

Practices for Promoting Inclusive, Representative, and Emancipatory Courses

The process incorporating inclusive course design and delivery practices provides faculty the academic freedom to explore creative, innovative, and potentially unconventional approaches to enhance the rigor of their courses and support all learners. The following select strategies provide guidance for the incorporation of several inclusive, representative, and emancipatory practices.

Applying the Psychosociocultural Framework

The Psychosociocultural Framework supports the redistribution of power in the learning space and offers learners the opportunity to determine how their learner experiences are constructed. By targeting the psychological, social, and cultural factors that impact diverse learners, this framework concurrently enhances the experience of the entire learning community. Strategies faculty could adopt that support the psychosociocultural well being of their learners include:

Psychosociocultural Dimension	Application Strategies
Psychological	• Acknowledge potential concerns students may have. • Provide prompt, consistent, and reassuring communication. • Openly indicate a willingness to support learners with diverse needs.
Social	• Invite learners to discuss the implementation of assigned accommodations in the online learning environment. • Host live, consistent check-ins to help learners stay organized, assess their growth, and monitor their progress. • Build in opportunities for students to ask for and receive assistance in order to readjust their approach. • Provide frequent, timely, and meaningful feedback.
Cultural	• Promote pluralist education via relevant, authentic, and meaningful interaction. • Promote student voice and perspective-sharing through engagement in learning communities. • Select instructional materials and learning activities that are applicable, interesting, and reflective of diverse backgrounds and value systems. • Provide clear expectations and instructions for engagement to support learners in understanding how they are to interact with the class. • Explain your positionality as an instructor regarding existing or implied power dynamics and ways in which learners are welcome to shape the learning environment.

Validation Theory in Practice

As an essential characteristic of inclusive and representative online learning, faculty and designers must ensure online courses center, acknowledge, and amplify the needs, aspirations, and potential of all learners – particularly those representing groups that are historically minoritized and underrepresented. Laura Rendón's (1994) Validation Theory encourages the development of nurturing educational environments that elevate academic and interpersonal validation as accepted norms. Strategies for practically applying each type of validation in ways that promote inclusivity and representation include:

Validation Type	Application Strategies
Academic	• Provide representative exemplars through the selection of texts, guests speakers, and leaders that allow students to imagine their future successful selves. • Intentional curricular alignment that integrates and encourages diverse ways of knowing. • Offer flexibility through layered curricula that allows learners to personalize pathways for success. • Incorporate learning activities framed by topics grounded in learners' diverse histories and experiences.
Interpersonal	• Plan consistent meaningful interactions to allow learners to actively support and be supported by their learning communities. • Employ means of continuous and authentic communication that foster supportive and caring learner-instructor relationships.

Emancipating Engagement Practices

Diverse, inclusive, and equitable online learning should not only be accessible, but should also emancipate learners from the systems and barriers that attempt to hinder their success. The ethos of faculty, instructional designers, and course developers committed to emancipatory online learning for all learners can be summarized by Geneva Gay's (2010) six attributes of culturally responsive teaching:

Attribute	Application Strategies
Validating	• Provide learning activities that encourage learners to engage in active learning. • Challenge learners to apply their own experiences and prior knowledge to solve real-world problems. • Make connections from the content to learners' lived experiences when possible (e.g., provide examples of genetic diseases familiar to learners when discussing the topic of chromosomal abnormalities).
Comprehensive	• Reflect on the holistic elements that factor into overall student success. • Consider and address issues of stereotype threat, sense of belonging, identity as scholars within the discipline, and degree of preparation for learning engagement. • Utilize early warning systems to assist learners in successfully navigating the learning experience. • Incorporate positive reinforcement (e.g., leaders, scholars, advocates representing diverse communities). • Introduce students to career options relevant to their fields of interest.

Attribute	Application Strategies
Multi-dimensional	• Implement culturally-relevant teaching in a holistic way. • Use simple course designs that ensure intuitive navigation. • Provide easy access by incorporating logical, predictable structures. • Label course components with plain language that supports learners from multiple linguistic backgrounds. • Ensure instructional materials represent diverse learners. • Include authentic learning activities and assessments that celebrate learners' ethnocultural identities, such as collaborative and cooperative learning. • Utilize storytelling when introducing concepts to emulate diverse cultural traditions. • Ensure discourse is inclusive, encouraging, and reflective of a growth mindset. • Offer a variety of representative instructional materials.
Empowering	• Provide learners with a clear description of how all course components are aligned to support the achievement of the objectives. • Promote course design that is transparent by clearly defining the purpose, expectations, and success criteria for all tasks. • Scaffold course assignments using simple, clear language. • Offer practice opportunities and continuous feedback. • Supplement instructions with resources, examples, and tutorials. • Provide authentic, culturally relevant content and experiences that mimic real-world tasks.
Transformative	• Incorporate learning preferences and multiple intelligences in the creation of learning activities. • Capitalize on learners' strengths and talents. • Integrate cognitive and Social/Emotional Learning strategies. • Infuse positive cultural influences into the content and discourse. • Develop and maintain a risk-free learning environment.
Emancipatory	• Provide students multiple opportunities to engage in voice and choice. • Make assessments and assignments relevant to the student by providing options for student outputs. • Offer a layered curriculum that aligns leveled success criteria with output options. • Incorporate elements of Social Emotional Learning.

Conclusion

Implementation of diverse, inclusive, and equitable online course design best practices can transform the learning experience for all members of an online learning community – particularly those from systemically minoritized groups. As such, institutions and practitioners must intentionally explore and apply evidence-based best practices for developing and sustaining universally accessible environments online. The identification of existing learning disparities, amplification of student voice, and validation of learners' diverse ways of knowing should be integral components of the development process for all online courses. Furthermore, faculty and course developers should endeavor to foster multi-dimensional design practices, such as championing collaborative learning and intentionally aligning course content and engagement strategies with learners' lived experiences. Through the application of inclusive, representative, and emancipatory online course design practices, faculty and developers may further cultivate the conditions necessary to promote deep learning for all.

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