

MOBILE, MEANINGFUL AND INCLUSIVE: RETHINKING ONLINE COURSE DESIGN FOR DIVERSE STUDENT POPULATIONS

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Abstract

As institutions serving increasingly diverse student populations expand their online offerings, course design must move beyond general best practices to intentionally address the needs of underrepresented students. Metropolitan State University of Denver (MSU Denver), a federally designated Hispanic-Serving Institution, enrolls a student population that is 56.9% students of color and 53.2% first-generation college students. These demographics underscore the urgent need for inclusive, equity-focused online course design that supports persistence, confidence, and academic success. This paper presents an integrative framework for online course development grounded in the authors' extensive teaching experience at MSU Denver. Drawing from institutional context and applied instructional practice, the authors identify key design and instructional strategies that enhance access, engagement, and retention among ethnically and economically diverse learners. These strategies include: (a) optimizing courses for mobile and handheld device access; (b) providing clear, structured timelines and intuitive course organization; (c) emphasizing conceptual, application-based assessments over rote memorization; (d) embedding a course-specific online orientation; (e) fostering consistent and meaningful student-instructor interaction; (f) incorporating reflective blogging to personalize learning; and (g) limiting mandatory group projects that may create barriers related to time, work obligations, or social anxiety. Mobile optimization supports students who rely primarily on smartphones or tablets due to financial constraints. Clear timelines and structured organization help mitigate challenges associated with self-regulation, which may disproportionately affect first-generation and underprepared students. Course-specific orientations increase technological confidence by allowing students to practice essential tasks such as discussion participation, quiz completion, video engagement, and assignment submission within a low-stakes environment. Shifting assessments from memorization to conceptual understanding reduces inequities associated with prior academic privilege while promoting deeper learning. Finally, consistent instructor presence and opportunities for reflective engagement foster belonging, connection, and academic integration. Collectively, these practices represent an integrative, equity-driven approach to online course design. By intentionally aligning pedagogy, technology, and assessment with the lived realities of underrepresented students, faculty can enhance retention, academic confidence, and overall student success in online learning environments.

Keywords: *Online course design, equity-focus pedagogy, student retention.*

1. Introduction

Online education is often promoted as a flexible pathway for students whose lives do not fit traditional campus-based schedules. Yet flexibility alone does not guarantee equity. For many students, particularly first-generation learners, students from economically constrained backgrounds, adult learners, and students of color, online courses can either reduce barriers or reproduce them in new digital forms. A course may be technically online but still difficult to navigate on a phone, confusing in its organization, dependent on hidden academic expectations, or built around assessment practices that reward prior academic privilege more than meaningful learning. In equity-focused online design, the central question is not simply whether course content is available online, but whether the course structure, communication patterns, assessments, and technology expectations align with the lived realities of the students being served.

This issue is especially important at Metropolitan State University of Denver (MSU Denver), a federally designated Hispanic-Serving Institution. Current institutional reporting shows that 56.9% of MSU Denver undergraduates are students of color, Hispanic students represent the largest undergraduate group at 37%, and 53.2% of students are first-generation college students (Metropolitan State University

of Denver, 2025). These demographics are not merely background information; they are design mandates. Online courses serving this population must be intentionally structured to support persistence, belonging, confidence, and academic success. Drawing from applied teaching experience and the broader literature on online learning, this paper proposes an integrative framework for designing online courses that are mobile, meaningful, and inclusive.

2. Equity as a design principle

Equity in online learning requires attention to access, participation, and outcomes. Tate and Warschauer (2022) argue that digital inclusion is shaped not only by physical access to devices and connectivity, but also by human and social resources that influence how students use digital tools for learning. This distinction is critical. A student may technically have access to a learning management system but still struggle if course materials are not mobile-friendly, instructions are difficult to interpret, deadlines are scattered across multiple locations, or instructor support is inconsistent. Equity-focused design therefore requires faculty to anticipate structural barriers rather than respond only after students fall behind.

One practical implication is that online courses should be designed from the beginning for mobile and handheld access. Research on student-initiated mobile device use in online courses shows that students use phones and tablets for convenience, portability, communication, reading, downloading materials, and completing course-related tasks, even when those devices create limitations compared with laptops or desktop computers (Milheim et al., 2021). For students who rely on shared technology, public Wi-Fi, long commutes, or work breaks, mobile access is not a convenient feature; it may be the difference between staying engaged and disappearing from the course. Mobile-responsive design includes readable documents, short videos with captions, clear module structures, accessible PDFs, streamlined navigation, and assignments that do not require unnecessary software or large-screen formatting unless essential to the learning outcome.

3. Structure, orientation and self-regulated learning

Online learning requires students to manage time, motivation, help-seeking, task planning, and self-monitoring. These self-regulated learning skills are associated with success in online environments, but faculty cannot assume that students develop them simply by enrolling in online courses. Wandler and Imbriale (2017) emphasize that instructors can promote self-regulated learning through intentional course design, including clear expectations, structured supports, opportunities for planning, and prompts that encourage students to monitor their progress. For first-generation and underprepared students, such scaffolding is not remedial; it is transparent teaching.

Clear timelines and intuitive organization are therefore central to inclusive online design. Students should not need to search multiple locations to determine what is due, when it is due, and how it will be evaluated. Modules should follow a predictable rhythm, such as overview, learning objectives, readings or videos, practice activity, discussion or reflection, and assignment submission. A course-specific online orientation can further reduce uncertainty by allowing students to practice essential tasks in a low-stakes environment: posting to a discussion, submitting an assignment, completing a quiz, viewing feedback, accessing captions, and locating instructor contact information. This orientation is particularly valuable because many online learning challenges arise not from lack of ability, but from lack of familiarity with course-specific expectations and digital routines.

4. Meaningful assessment and instructor presence

A second design commitment is to emphasize conceptual and application-based assessment rather than overreliance on memorization. In counseling, human services, behavioral health, and other practice-oriented fields, students must be able to apply concepts to real-world ethical, cultural, relational, and systems-based situations. Application-based assignments, case examples, reflective responses, scenario analyses, and scaffolded projects can better capture students' developing knowledge, attitudes, and skills than exams focused primarily on recall. This approach also reduces inequities associated with prior academic privilege because it creates multiple ways for students to demonstrate understanding through practice, reflection, and integration.

Instructor's presence is equally important. The Community of Inquiry framework identifies teaching presence, social presence, and cognitive presence as central elements of meaningful online learning (Garrison et al., 2000). Teaching presence includes design, facilitation, and direction; it is

experienced by students through clear organization, timely communication, feedback, announcements, and visible instructor engagement. Fiock (2020) offers practical strategies for designing online courses around this framework, emphasizing that presence can be built through intentional design choices rather than constant synchronous meetings. For faculty, this distinction matters. Inclusive online courses do not require faculty to be available at all hours; they require predictable, meaningful, and accessible interaction. Weekly announcements, short video or written check-ins, timely grading patterns, rubric-based feedback, optional office hours, and responsive email practices can create connection while preserving sustainable faculty workload.

5. Reflection, belonging and flexible engagement

Reflective activities can personalize online learning and strengthen students' sense of connection to course material. Blogs, reflective journals, and discussion-based reflections ask students to connect theory to lived experience, professional identity, ethical decision-making, and community context. Halic et al. (2010) found that blogging in an undergraduate course had the potential to support reflection, collaboration, and perceived learning, particularly when students experienced a sense of community. In equity-focused online courses, reflective blogging can help students see their experiences as legitimate sources of insight while also practicing professional communication and critical thinking.

At the same time, inclusive design requires careful attention to group work. Collaboration can be valuable, but mandatory online group projects may create barriers for students balancing work, caregiving, transportation challenges, health concerns, social anxiety, or inconsistent access to technology. A systematic review of online group projects found that such assignments create recurring challenges related to communication, coordination, unequal participation, and technology use (Donelan & Kear, 2024). This does not mean group work should be eliminated. Rather, it should be used intentionally when collaboration is central to the outcome, supported with clear roles and timelines, and balanced with individual alternatives or accountability structures when appropriate. In many online courses, students can still engage with peers meaningfully through structured discussions, peer feedback, shared resource boards, or optional collaborative activities without making high-stakes group projects the core determinant of success.

6. An Integrative framework for inclusive online course design

The framework proposed here brings these practices together through seven design commitments. First, courses should be mobile-responsive so that students using phones or tablets can access core materials without unnecessary barriers. Second, courses should use clear, consistent timelines and module structures to support self-regulation. Third, each course should include a low-stakes orientation that builds confidence with the specific learning management system tasks required for success. Fourth, assessments should prioritize conceptual understanding, application, and professional judgment. Fifth, instructor presence should be consistent and meaningful but sustainable, using predictable communication and feedback practices. Sixth, reflective assignments should be incorporated to personalize learning and support belonging. Seventh, mandatory group work should be limited or carefully scaffolded so that collaboration supports learning rather than creating avoidable obstacles.

These practices are especially important for programs preparing students for counseling, human services, behavioral health, and related fields. Students are not only learning content; they are developing professional identity, cultural humility, ethical awareness, and applied judgment. An online course that models clarity, responsiveness, flexibility, and inclusion teaches more than the stated curriculum. It communicates what it means to create accessible and respectful learning environments, and it demonstrates the same values students will be expected to carry into professional practice.

7. Conclusion

Equity-focused online course design must be intentional, practical, and grounded in the realities of diverse student populations. For institutions such as MSU Denver, where large numbers of students are first-generation, students of color, transfer students, working adults, and community-connected learners, online courses must do more than place content into a digital shell. They must be structured to reduce hidden barriers, strengthen confidence, support belonging, and promote meaningful application. Mobile access, clear organization, orientation, application-based assessment, instructor presence, reflective engagement, and intentional use of collaboration provide a practical framework for this work. Ultimately, inclusive online design is not separate from academic rigor. It is the pathway through which rigor becomes accessible, meaningful, and sustainable for the student's higher education is called to serve.

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