2

HOW MY INSTRUCTORS DESIGN INCLUSIVE COURSES

> "[T]he instructor thought it was very important to include everyone and created an environment that made it easy and less stressful to learn."
>
> —*A private university student who identifies as a straight Polish female*

This chapter centers students' perspectives on inclusive course design based on responses from hundreds of students around the country who shared what inclusive course design approaches most resonated with them. Their input is valuable for instructors. Having a firm grasp on inclusive course design principles and practices, and knowing strategies that support a diversity of students, can inform teaching and learning for instructors while also acknowledging and addressing students' individual accessibility needs. Here we emphasize key themes identified through content analysis of student surveys and interview responses where students were asked to provide reflections on their instructors' inclusive course design efficacy, highlighting practices and pitfalls. We have further supported student voices with expert voices from the educational literature and our own real-world instructional experiences. The student quote above exemplified how inclusive teaching is not making course material easy but rather creating environments where students feel comfortable learning.

The Themes

Seven key themes emerged when we analyzed students' collective responses on how their instructors did or did not succeed in designing inclusive courses. Their instructors' course designs:

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- Maximized student engagement from the first assignment and throughout the course
- Included course policies, activities, and assignments that respectfully considered students' time
- Involved structures that were easy to follow and designed for student success
- Personalized the course for individual students, acknowledging mental health status, disability, neurodivergence, and socioeconomic status
- Encouraged students to provide feedback on instruction
- Used diverse course materials that valued real-world student experiences
- Accounted for the type of course delivery (in-person, hybrid, or online)

These themes emerged from the responses of students that varied by institution type, across geographic regions, visible and invisible demographics, major and discipline, class year, full-time or part-time enrollment, and veteran status. The power of these themes arising amidst the diversity of students demonstrated that there are shared fundamental needs that they believed to help them be successful learners. Sometimes these themes appeared when the students described learning experiences that worked well. In other instances, students highlighted how the lack of inclusive course design hindered their learning. In general, when an instructor designed inclusively, with intention to who may be in the room, it benefited the greatest proportion of students.

Reflection Questions

- Do any of these themes surprise you? If so, which ones?
- Which, if any, of these themes have students commented upon in your courses? Was the feedback positive or negative?
- How could you go about gathering student voices to identify relevant themes that apply to your own inclusive course design planning?

Maximized Student Engagement from the First Assignment and throughout the Course

First Assignment

> *The first day of class I like when a professor asks us to email them about who we are, makes me feel like I am being seen.*
>
> *—A public university student who identifies as White, non-binary, and lesbian*

I'm taking a sociology of death and dying course and the first assignment was asking us to introduce ourselves with an obituary.
—A small, private liberal arts college student who identifies as Caucasian, non-binary, and lesbian

Students highlighted the importance of the first assignment. Several students believed that inclusive course design includes a first assignment that has a high degree of student engagement and requires little new content mastery, rather, relying on existing student knowledge. Positive feedback from successfully completing a first assignment can trigger both short-term and long-term positive emotions in students. Students have reported a successful first assignment is critical to increasing self-efficacy, motivation, and ultimately future student engagement (Kahu et al., 2019). One important consideration is that student engagement is not always positive and subject to fluctuations and cycles. As the course progresses, content and later assignments can get more challenging and negate the positive emotions facilitated by a successful first assignment. These difficulties may trigger strong negative emotions and reduce students' self-efficacy later in the course. A common first assignment Khadijah has used in her classroom to maximize student engagement is "What's your origin story in three chapters (past, present, and future)?" as it relates to the course topic. Sometimes this is an oral presentation and at other times it is a written assignment. Students routinely say how they appreciate the opportunity to share about their personal backgrounds and what first got them interested in the discipline, their motivation for taking the class now, and how they believe their newfound knowledge will help them accomplish future professional and personal goals.

Throughout the Course

Created [an] opportunity to connect with other classmates.
—A public university student who identifies as White, male, and straight

Peer Teaching and Peer Review

The professor had the students teach different subject material, which got everyone involved in the learning.
—A public university student who is a first-generation college student and identifies as a heterosexual Hispanic male

Discussions on readings and peer reviews.
—A community college student who self-identifies as a pansexual White female

Another way students recognized effective inclusive course design, which maximized their engagement, was peer teaching and peer review throughout the course. Their instructors planned peer teaching activities where students learned in groups by teaching others. Peer teaching requires student "interactivity," where teachers contribute their own information to their learners, and involves interdependence, where students participate as both teachers and learners (Rusli et al., 2021). Peer teaching allows students to be actively engaged with one another and the learning process.

Peer review activities can hone communication, critical thinking, collaboration/teamwork, and awareness skills (Wu et al., 2014; Suñol et al., 2016) and is one approach to keep students learning and involved. As a part of the peer review process, students use metacognition. Metacognition is thinking about how one thinks. Specifically, it refers to the processes used to plan, monitor, and assess our own understanding and performance. Metacognition includes being critically aware of one's thinking and learning. This facilitates a collaborative exchange of ideas and feedback among students by creating a space for dialogue where students better understand current standards and produce better work in the future (Yucel et al., 2014). Students' participation in peer review is likely to create a more engaged and cohesive learning community. One pitfall of peer review is that it can require a significant time investment. To combat this, astute inclusive course design can allow for peer review to be used for discrete course elements, such as assignments, assessments, teaching and learning activities, and content. For example, student A can use a grading rubric to provide peer review of Student B's written report or final portfolios before Student B submits the assignment or assessment to their instructor. Additionally students may need to be coached on how to provide productive feedback.

Group Work

Physics/in-person/labs required group work.
—A public university student who identifies as Caucasian and Native American racially but does not identify his Native heritage on any documents, is male, straight, and between the ages of 25 and 34

Group work activities that involved collaborating ideas and perspectives.
—A small, private liberal arts college student identifies as heterosexual and White but did not supply a gender identity

We often did group work and were encouraged to speak to new people and share ideas.
—A private university student who identifies as a first-generation college student and identifies as a straight Caucasian female

Most of the assignments or activities were designed to include everyone and so the class can work together.
—A private university student who identifies as a straight Asian female

Last semester my teacher ha[d] us do many group activities that encouraged us to all make friends.
—A private university student who identifies as a first-generation White female

The labs included working with your classmates to ensure that you are getting to know new people and learning in a new environment.
—A private university student who identifies as a straight Latina/White female

Made random seating to force us to talk to others.
—A private university student who is a first-generation student and identifies as a straight White male

Group work is often used throughout higher education as an active learning strategy that promotes deeper learning and teamwork. Numerous students in our study appreciated when inclusive course design included group work throughout the course because it maximized student engagement, as illustrated in the preceding quotes. Furthermore, culturally diverse groups are known to help prepare college and university students for a multicultural and global society (Poort et al., 2020). Therefore, maximizing student engagement through group work can help realize these goals. Recent work has used student voices to explore how trust in the group, cultural diversity in the group, and group formation contribute to student engagement in group work (Poort et al., 2020).

Trust among group members is known to be crucial for group functionality and performance. Surveys of 1,025 bachelor's students from six universities identified students' trust in the group as the strongest positive predictor of behavioral and cognitive engagement (Poort et al., 2020). Greater perceived cultural diversity also promoted behavioral and cognitive engagement, but to a lesser degree when compared with trust. A higher perception of cultural diversity increases idea exchange, evaluation, and integration and promotes deeper learning. Culturally homogeneous groups tend to have ideas and perspectives that are more similar. Whether students could choose their group members did not significantly affect student engagement.

Khadijah uses instructor tools, like the Who's in Class? form and Comprehensive Assessment of Team Member Effectiveness (CATME), to assemble and manage diverse groups without outnumbering historically excluded students in her classroom (Addy et al., 2021; Layton et al., 2010; Dasgupta et al., 2015). For example, the CATME Team-Maker feature allows instructors to only use criteria that are important to them. Team-

Maker provides a list of criteria from which instructors can choose when forming teams. These are presented to students in a Team-Maker Survey. Instructors can also write in their own questions. Research has found some criteria (e.g., gender, race, ethnicity) to be important to student learning in groups (Layton et al., 2010). CATME can also be used for peer review and to structure group roles. This is important as outnumbering historically excluded students in small group settings can have a great impact on underrepresented student persistence (Dasgupta et al., 2015).

Group work also comes with pitfalls. Designing courses inclusively with culturally diverse groups means that some students can face challenges, such as different cultural and communication styles, language differences, and feelings of anxiety. By contrast, students in Poort et. al.'s study indicated that the overall effect of cultural diversity on cognitive engagement was positive (Poort et al., 2020). Another pitfall concerns the needs of neurodivergent students.

Instructors should also design group work experiences that take into account how neurodiverse students in their courses can experience such learning activities. The documentary film *Autism Goes to College* (2019) features five diverse students on the autism spectrum disorder (ASD) and takes us into their lives and classrooms to show us how they are making college work. Many autistic students in higher education report having challenges with group work (Hillier et al., 2017). If a student discloses they have ASD, instructors can help design more inclusive environments for them by individually asking them about their thoughts and experiences on group work, and what can best support them in accomplishing the learning goals. Alternatives might be considered if group work proves to be too challenging. Instructors can have similar conversations with students with attention deficit hyperactivity disorder (ADHD). They may find group work is a preferred mode of learning and have insights into what helps them learn in such environments. Tracie has had the experience of students with ADHD privately approaching her about learning concerns, particularly for longer courses like three-hour laboratories. She witnessed positive outcomes when a student discovered that engaging in hands-on group work activities for the course worked well for them. They told Tracie at the end of the course that they never felt their ADHD to be a barrier to their success in that class.

During one of the study interviews, a student who was neurodiverse shared their experiences with inclusive group work:

> *Yeah, I think the dynamic of the group is definitely important, and whether or not it feels like a sort of inclusive space, like if one person in the group is zooming ahead on all the work and kind of leaving the other people in the dust that does not necessarily feel like you're all on the same page. But when everyone is kind of working together to help each other,*

> *figure out the problems, or even if they finish their problem first, they just check in like. What did you guys get? Do you have any questions? I didn't understand this XYZ. Just kind of listening to each other more, and actually taking the time to check in with each other as you're doing the work rather than just doing it on your own, checking the answers and then being like, okay, we [agree,] that was like so-called group work.*
>
> *—A small, private liberal arts college student, who identifies as a White female and has an unspecified disability*

Group work has undergone innovations in higher education to meet current sociocultural norms. Students have found multiple methods of communicating and successfully completing group work assignments, even when not meeting in person (McKinney & Cook, 2018). Cellphones, in particular, have become a popular method of collaboration through social media and messaging apps. Video Conferencing sites and apps provide learners with opportunities to see one another as they complete the work, perhaps in contradiction to the idea that group work can only happen in shared physical spaces. The virtual spaces students occupy create another mode of engagement that increases student accountability and participation in its disavowal of the belief that learning can only take place in the physical classroom. This is especially true when the group consists of individuals without close proximity to one another.

Another pitfall to consider when inclusively designing group work is the emergence of "free-riders" and "social loafers" (McKinney & Cook, 2018). Group agreements can be a useful tool for every student involved. The idea is for group members to co-create their own ground rules for how to work together effectively and respectfully, and to discuss actions that the team will take if there is a problem. Disruptive, ineffective, and unsuccessful group work is the result of a plethora of factors that can be mitigated through thoughtful, structured inclusive course design. For example, specifying roles for each member allows students to take responsibility for portions of the assignment they feel best suits their expertise and comfortability. McKinney and Cook explain that the absence of defined roles may leave certain group members lacking confidence or interest, causing them to withdraw from the work altogether; doing so invites other group members to make assumptions about the degree of investment the free-riding student has to the assignment, often causing animosity toward that student. Students might overlook the emotional or mental challenges a group member might be experiencing when they have discomfort with their role.

This is not to say that all free-riding students lack a defined role and do not participate to the fullest extent possible. Some students may depend too heavily on the rest of the group to complete the work. Designing group assignments that result in all members receiving one grade can unintentionally

produce free-riders. While the intent of inclusive course design is to encourage equitable participation and accountability, group assignments can sometimes instigate a contrary outcome. Disinvested or self-conscious students tend to be more willing to play the background if they are convinced the rest of the group will earn a good grade, giving the free-rider perceived permission to not engage (McKinney & Cook, 2018).

The same can be said of free-riders within multicultural group dynamics, where specific approaches to group dynamics inform the level of engagement students have with one another. As previously mentioned, issues like language barriers and how difficult the task or assignment may be, among other factors, play a part in encouraging a student's active participation in the group (McKinney & Cook, 2018). For instance, some international students may gravitate toward hierarchical group dynamics due to cultural respect for guidance and structure. It is not unusual for these students to seek one specific leader who will ideally create ordered interactions and assign responsibilities because compromise is preferred to direct confrontation. These students may perceive critiques of the work being produced as disrespectful and may go along with the rest of the group members, even if they see fault in the work being created (McKinney & Cook, 2018).

The student quoted above also noted during the interview the importance of in-class group work in which their professor actively engaged with groups to support inclusivity by supporting learners and keeping them on track and accountable:

> *I definitely think it's up to professors there, and walking around the classroom and checking in on what you're doing, so that you have to be doing what you're supposed to be doing, or else.*
> *—A small, private liberal arts college student, identifies as a White female and has an unspecified disability*

Reflection Questions

- How can you, or do you, design first course assignments that allow your students to engage with you and their peers?
- In what ways do you maximize student engagement throughout your course?
- What are the most likely student engagement pitfalls you may need to avoid?
- If you currently, or in the future, integrate group work in your courses, how can you design it so that it is more inclusive from the start?

Included Course Policies, Activities, and Assignments that Respectfully Considered Students' Time

Allows for Self-Pacing and Provides Open Access to the Syllabus, Course Materials, and Assignments

I go to [institution name redacted] where it is all self-paced. I think the instructors have designed each of the courses in a way that makes self-pacing possible.

—A public university student who identifies as a heterosexual White female between the ages of 45 and 54

Syllabus

Providing [the] syllabus beforehand.

—A small, private liberal arts college student who identifies as a straight South Asian male

Course materials

[T]he instructor made sure that all the readings and lecture materials were available since the beginning of the semester and that we could work on it anytime that we're free. This reduces the stress of having to complete the work on weeks/days that we're not free.

—A private university student who identifies as a straight African and Asian female

Assignments

[O]pened all assignments from the beginning of the course with suggested due dates so that students could work at their own pace.

—A public university student who is a first-generation college student and identifies as a straight White female

All assignments were 0s until graded, which allows working at your own pace.

—A small, private liberal arts college student who identifies as a straight White male

One professor … asked us about the schedule and rate of assignments.

—A private university student who identifyies as a bisexual White female

[M]y professor notified us of assignments well before due dates to allow students to have as much time as possible and with several acceptable formats to turn assignments in.

—A small, private liberal arts college student who identifies as a straight White female

Higher education courses can be a source of student anxiety about assignments and grades, and self-pacing with can be a tool to circumvent it. Several of our study respondents commented on how effective inclusive course design clearly explains self-pacing on the syllabus and then utilizes self-pacing in the course materials and assignments to reduce student anxiety. Assignments that allow for students to work at their own pace with a suggested and final deadline can effectively take away the anxiety some students feel at having to submit work at the same time as peers. Coupled with multiple-attempt assignments, this may alleviate the stress of feeling one's work has to be perfect on the first try. Recent research has shown students given self-paced assignments provided increased student confidence over the course of an academic term (Bell, 2023). Using pre- and post-surveys, the Westside Test Anxiety Scale showed the use of self-paced, multiple-attempt assignments reduced students' perceived anxiety. Student comments were largely positive and grades strongly correlated with high scores. A pitfall to consider is that negative correlations are observed between course grades and late module attempts and submissions. This is due to academically weaker students having a harmful association with student procrastination and course performance.

Overall, clear evidence exists regarding the effectiveness of self-paced, multiple-attempt assessment in reducing the stress and anxiety students may feel when having to complete challenging assignments (Bell, 2023). Including self-pacing strategies in inclusive course design is important in strengthening a student's perception of their academic selves and their intellectual capabilities. It also allows them to see the ways in which they have grown over the course of an academic term, and reinforces the concept of growth mindset, that intelligence is not fixed, as well as formative assessment, that multiple low-stakes assessments (e.g., multiple attempt) can support students in achieving learning outcomes through practice.

Uses Flexible Deadlines

Flexible deadlines for assignments.

—A public university student who identifies as bisexual White female

There are no hard deadlines.

—A private university student who identifies as asexual, agender, and White

Giving extra time for homework and exams.
—A community college student who identifies as a heterosexual Caucasian female over 55 years old

This teacher made their Canvas page very easy to access and find all the information that I needed. Also I felt that the time to complete assignments was structured very well.
—A public university student who identifies as a bisexual White woman

[M]y instructor designed the course in a way that everything was not rushed through and we had enough time to go over the concepts and understand them.
—A private university student who identifies as a Hispanic and White female

During this course our instructor made sure to give us enough time to complete assignments while also helping teach us about important things before they were needed.
—Student has not identified the type of institution they are enrolled in and identifies as a White male

My writing professor is extremely thoughtful and always makes sure everyone knows what they are doing and always understands things happen and deadline extension.
—A small, private liberal arts college student who identifies as a White male

Understanding how full our schedules are and giving us extra time to complete.
—A small, private liberal arts college student who identifies as a straight Latina female

Numerous study participants recounted the importance of having flexible deadlines as a marker of inclusive course design. Deadlines have the benefit of providing structure for the instructor and learners to maintain a uniform pace and collective progression through course materials. Deadlines can also, however, make assumptions about the extracurricular lives of the students in any particular class. While deadlines can be helpful, they can miss the individual out-of-class priorities and experiences learners have. All students do not have the same barriers to accomplishing work by the predetermined dates throughout the term. Students with full-time employment, children, or caretakers for others, have medical issues that require constant treatment etc. may struggle with competing priorities, forcing them to choose between turning assignments in by the deadline or attending to their other equally important imperatives.

Flexible deadlines, however, take into account the whole person and acknowledge the realities of a person's life outside of school. Flexible deadlines are an inherent component in inclusive course design since a greater degree of flexibility regarding submission dates recognizes the individual nature of students' life circumstances. As such, moving away from rigid deadlines allows for greater participation and engagement by students with the added benefit of the student creating quality work without being under the duress deadlines bring with them. Furthermore, flexible deadlines give students more agency in how and when they meet their learning goal. Extensions, as a prime example, are useful in alleviating the stress students can feel when completing their work.

Extensions are defined as "proactive" when built into the course assessment structure in advance during course design planning and available to all students. For example, every assignment may have a deadline and extension date. Students can therefore use extensions for as many assignments as they desire without penalty. Students are not required to request the extension, self-disclose any reason(s) for the extension, or notify their instructor they are using an extension. When used effectively, extensions are not abused and only requested out of absolute necessity (Hills & Peacock, 2022). As a measure of inclusive course design, proactive extensions encourage an increase in the quality of the work a student does, increase equity and inclusivity, and make students more responsible for managing their own course loads and time, operating as self-pacing, self-regulated learners (Hills & Peacock, 2022). Inclusive course design also emphasizes areas where students commonly struggle and can provide support. For example, as the course progresses, content tends to become more challenging. Instructors can provide a suggested priority deadline and extension date to help students manage their time for assignments and assessments that deal with difficult topics later in the course.

Examples of how to provide flexible deadlines while still upholding expectations for individual students and teams are context-dependent. In a STEM laboratory course, this might include providing students with an opportunity to repeat particular experiments or re-analyze already collected data in a new way (in line with the scientific process) before submitting a high-stakes final laboratory report by a set deadline and/or standard extension date (typically one week later). For a team in a lecture-based course, this may facilitate iterative peer feedback on a low-stakes group presentation with an extension date (3–5 days) with students who have very different schedules. All deadlines and proactive extensions should be clearly described in the syllabus at the beginning of the course and on the learning management system website, if applicable. Overall, extensions are more commonly used for team assessments when compared with individual assignments (60 percent vs. 30 percent) (Hills & Peacock, 2022). Students are not the only ones who can benefit from proactive extensions. Instructors employing proactive

deadlines as a component of their inclusive course design saw the benefits by spreading out the time instructors have to grade assignments, as well as not feeling as if they have to judge the legitimacy of a student's request for extra time in completing their work. This approach reinforces the notion that students should be active participants and managers of their academic careers (Hills & Peacock, 2022).

Build in Brain Breaks

Structured the (online) class session with breaks built-in.
—A small, private liberal arts college student who identifies as agender, pansexual, and White

Using brain breaks is an inclusive design approach that acknowledges the way that the brain works to improve attention and learning. Recent work has advocated for instructors of adult students to shift from thinking about learning as an exclusively mental effort, and appreciate how they can improve their students' knowledge and skills through physical movement (Hrach, 2021). Brain break strategies can include movement breaks (e.g., stretching, yoga, jumping jacks, or dancing) or mental breaks (deep breathing, mindfulness, creative art activity, or playing music or a game). A recent study has shown that taking short breaks may help our brains learn new skills (Buch et al., 2021). Brain activity was mapped in healthy volunteers who were learning something new. During a rest phase, the brain rapidly and repeatedly replayed faster versions of the activity seen while they practiced. The more a volunteer replayed the activity, the better they performed during later practice sessions. This suggested that the breaks improved learning and memories (Buch et al., 2021). The improved learning may be due to the "spacing effect" (Vlach et al., 2008). Breaking learning up into several short chunks of time is better than cramming learning into one large block.

When planning brain breaks, the time duration of the class is an important consideration for the instructor. A general rule is to plan a quick and easy 3–5-minute activity for every 20–30 minutes of learning. Undergraduate and graduate students sustain attention to a taxing cognitive task for approximately 20–30 minutes (Lim et al., 2010; Lim et al., 2013). After that time, researchers have found blood flow decreased to regions of the brain involved in cognitive vigilance, leading to slower reaction times and greater mental fatigue (Lim et al., 2010). When focusing on a learning task, our brains devote more processing resources to areas that improve our performance. Mental fatigue might be a signal that we are expending too much energy relative to the benefit from staying on task. As a result, the brain withdraws these resources. In fact, theta brain waves (which indicate mental fatigue)

increase during bouts of sustained attention (e.g., up to 65 minutes) but decrease during 5-minute breaks every 30 minutes (Lim et al., 2013). Therefore, a 50-minute class is expected to have fewer and shorter brain breaks than a 3-hour seminar. Brain breaks (also known as screen breaks) are particularly advantageous for synchronous online courses since these students have fewer opportunities to take breaks on their own like their counterparts in asynchronous courses.

Reflection Questions

- Are you able to provide a syllabus (full or abbreviated) of the course before it starts to your students? If not, is there information you might be able to share beyond the course title and description?
- Could it benefit your students to make all of your course materials and assignments available at the beginning of the course?
- Do you build flexible deadlines and extensions into your courses? If so, does the type of assignment or assessment influence your deadline policy?
- Are you able to incorporate breaks into your courses? Are these short breaks during a class session or entire class periods? Are they movement breaks, mental breaks, or both?

Involved Structures that Were Easy to Follow and Designed For Student Success

The Syllabus Clearly Explains the Course Structure

Great syllabus and was organized.
—A community college student who identifies as a Filipino male

Course was organized and clearly followed the syllabus.
—A small, private liberal arts student who is a first-generation college student and identifies as a straight female of Asian and White descent

Following the syllabus was great.
—A community college student who is a first-generation college student and identifies as a straight White female

They set [a] good syllabus.
—A community college student is a first-generation college student and identifies as a bisexual White female between the ages of 25 and 34

They provided the students with a syllabus that contains all the due dates and expectations for the course.

—A private university student who is a first-generation college student and identifies as a White female

The syllabus was neat and due dates were clearly shown which made it easy to prepare for the semester.

—A private university student who is straight and White

The Course Set-Up/Structure/Organization Facilitates Student Success

They made the set-up easy so I could complete the task properly.

—A community college student who identifies as a pansexual Black female between the ages of 25 and 34

My … class was well set-up to succeed and easy to understand. Plus, there [were] plenty of help topics available.

—A community college student who is a first-generation college student and identifies as a gay White male between the ages of 25 and 34

Asked students how they wish the course could be set up.

—A private university student who is a first-generation college student and identifies as a straight Caucasian female

[M]y teacher always had a set structure… and it was highly beneficial in my ability to learn.

—A public university student who identifies as a White female

It's organized the same for all students.

—A community college student who identifies as a White female

Numerous students in our study commented on the importance of the syllabus clearly explaining the course structure, and how the organization made their success easier. An inclusive course design perspective can be adopted to create an inclusive syllabus. Helmer (2021) describes six principles of inclusive syllabus design (ISD): 1) learning-focused; 2) organized around big questions and themes; 3) integrates Universal Design for Learning (UDL) principles; 4) rhetoric and tone include inclusive and motivating language; 5) contains supportive course policies; 6) embeds an accessible design. Some of our respondents who reflected on the syllabus being clear were first-generation college students, highlighting its importance for all learners. Using ISD principles to develop a transparent syllabus is particularly important for this student demographic

given that they may have fewer family college supports. However, it is important to note that every syllabus, even an inclusive syllabus, has an associated hidden curriculum as there are unwritten mores, rules, values, norms, messages, and implicit biases that instructors may inadvertently communicate. For example, Khadijah routinely uses ISD practices 1, 2, and 5. She makes her syllabus learning-focused by centering set professional and personal course themes/goals for each student cohort, in addition to course learning objectives. In the body of the syllabus, she makes sure to spell out acronyms, explain that the essential office hours she facilitates are also to form positive instructor–student relationships, her preferred email etiquette from students, and how she prefers students to address her. This knowledge supports all students in successfully navigating the course.

Reflection Questions

- Which, if any, inclusive syllabus design principles do you use in your syllabus? Are there additional ones that you might be able to use?

Personalized the Course for Individual Students, Acknowledging Mental Health Status, Disability, Neurodivergence, and Socioeconomic Status

Sees Each Individual Student While Including All Individual Student Needs

> *They did not have a specific plan for all of us to be the same. They took time and made us each individual plans.*
>
> *—A private university student who identifies as a heterosexual White female between the ages of 35 and 44*

> *It catered to my needs.*
>
> *—A public university student who identifies as a bisexual White male between the ages of 35 and 44*

> *We were able to teach how [we] as individuals learned and post it to help out someone who might not understand in the way it was taught.*
>
> *—A community college student who is a first-generation college student and identifies as a heterosexual female of American Indian/White descent between the ages of 35 and 44*

> *This professor had a certain amount of daily assignments and quizzes that would be "dropped" at the end of the semester. This showed that she understood*

that we are individuals and have busy lives outside of school, and gave us a degree of accountability and responsibility over our learning.

—A private university student who identifies as a heterosexual White female

Professors were lenient and understanding with personal experiences that students had that affected school work.

—A public university student who identifies as a straight White male

Individual Student Preferences: Assignments and Exams

The professor gave the option to either present the final project or submit a long form essay on the topic to cater to students with anxieties in presenting or those who struggle to write analyses and decide which they would be more successful in.

—A public university student who identifies as White, non-binary, and queer

[P]rojects and assignments were flexible, meaning that you had a choice in how you wanted to format your work or complete the assignment.

—A private university student who identifies as a straight White female

[W]e were given very general questions for the essays. We were given the freedom to choose anything that interests us.

—A small, private liberal arts college student who identifies as a straight African American/Hispanic female

[C]hoice of a final exam format (take home essay or in person verbal exam).

—A private university student who identifies as a straight Caucasian female

According to the 2017 US Department of Education National Education Technology Plan, the definition of personalized learning is:

> Personalized learning refers to instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner. Learning objectives, instructional approaches, and instructional content (and its sequencing) all may vary based on learner needs. In addition, learning activities are meaningful and relevant to learners, driven by their interests, and often self-initiated.
>
> *(U.S. Department of Education, 2017, p. 1)*

The student respondents appreciated when instructors attended to individual learning needs and when they had some agency or choice in assessments. The essential function of individualized personalized learning is to engage students in taking ownership over their learning by focusing on their individual strengths, aptitudes, and interests (Hughey, 2020). When students are able to chart their own academic paths they tend to have a greater investment in their scholastic success. Rather than instructors dictating to students what they will learn and the methods through which they will gain mastery of particular subject matter, individualized personalized learning tends to student needs and preferences.

Major structural challenges limiting more personalized learning in higher education are that not all class sizes are small, course context matters, and some instructors have very high teaching loads and competing obligations. Instructors must consider the strategies that would be most appropriate for their situations.

Includes Everyone

> *Making sure we are all included.*
> *—A community college student who is a first-generation college student and identifies as a straight White male between the ages of 45 and 54*

> *Include[d] everyone.*
> *—A private university student who is a first-generation White female*

> *None were excluded.*
> *—A community college student who identifies as a heterosexual, White non-Hispanic male between the ages of 25 and 34*

> *During Biology the teacher had us do review days during class which involved the whole class.*
> *—A private university student who is a first-generation college student and identifies as a heterosexual Hispanic female*

Although individual students comprise a classroom, the needs of all must simultaneously be considered when designing inclusive courses. In our study, we saw this was vital for first-generation college student respondents. The majority of students who mentioned the importance of everyone being included were first-generation college students, whether they attended community colleges or private universities. This is important, because the interest of these students enhances the learning environment and allows their voices to be acknowledged in contributions to the entire classroom (Hughey, 2020).

The students in our study who saw "including everyone" as important varied by age, gender, and race. It is important to recognize that even the most inclusive instructor might not have familiarity with every student demographic. This requires you as an instructor to acknowledge this and do the work to inform yourself about particular groups through formal or informal mechanisms.

For example, increased awareness around religious diversity could be considered when planning courses. Instructors should take into account how adherence to certain religious holidays may impact a student's ability to fully participate in a class session or complete assignments.

Including statements about a student's inability to attend class, participate in the learning environment, or complete assignments due to religious observances connotes a sensitivity to the needs of students beyond the classroom. This strategy is important because it does not penalize a student for being unable to fully engage because of religious responsibilities; nor does it make the student feel like they have to choose between their participation in religious services and meeting their academic requirements. Instructors can plan in advance for these considerations by looking at the school's academic calendar for dates religious holidays fall on (Hughey, 2020).

Recent diversity, equity, and inclusion (DEI) efforts have foregrounded religious diversity on higher education campuses. The Interfaith, Spiritual, Religious, and Secular (INSPIRES) Campus Climate Index is a tool that scores colleges and universities on their levels of religious DEI based on extensive faith-related resource surveys from 185 public, private, and religiously affiliated institutions (Mayhew et al., n.d.). Instructors can consult their institution's INSPIRES score, if available, to better course plan for what type of religious diversity could be present in their student population. Students in our study attended institutions in the United States, which is a religiously plural society. Consequently, this means there are religious majorities and minorities. Instructors need to educate themselves on the various minority traditions to ensure those students are also included. There are a variety of courses, curricula, and tools to help increase religious DEI awareness (Wallace, 2023).

Considers All Student Accessibility Needs

Mental Health Status

> *Changed syllabus based on the mental health of the students.*
>
> *—A small, private liberal arts college student who identifies as a non-binary Asian lesbian*

I just remember the teacher being very flexible [with] submissions as long as you let her in with what was happening. And I really appreciated that because I knew friends in the class who were able to get extensions when they needed, because they let her know ahead of time, and they worked it out … we have other classes. We have mental health to take into consideration. So I really appreciated that.

—A public research university student who is a straight White female

One of my professors uses ungrading, a system in which students present the grade they think they deserve at the end of the course. This class is very important to me, but with no tests and an ungrading system I am able to get through it without immense amounts of stress and pressure.

—A small, private liberal arts college student who identifies as a straight White woman

My science teacher set up the course using ungrading and then asked for our thoughts and feelings on this.

—A small, private liberal arts college student who identifies as a bisexual White female

Student mental health is a pressing concern for colleges and universities around the country. Exacerbated by the COVID-19 pandemic, growing numbers of students have experienced mental health challenges and well-being issues. It is estimated that approximately a third of American university students meet the criteria for a clinically significant mental health issue (Lister & McFarlane, 2021). There are both individual and structural barriers to mental well-being. A certain level of stress is the norm in academic settings; however, higher education systems, structures, and study practices can trigger mental health episodes. One student in our study mentioned the importance of accounting for mental health status by changing the syllabus. Most research on how to better support student well-being is student-focused, such as enhancing student resilience, enabling mental health-related support mechanisms, and promoting self-care (Lister & McFarlane, 2021). By contrast, a willingness to change the syllabus, or designing the course in a way that accommodates mental health status, is a change to a higher education structural practice that creates a learning environment which promotes student well-being.

Other student respondents indicated the strategy of ungrading as effective in alleviating some of the stress and mental pressure they felt at the prospect of exams and graded assignments by the instructor. Ungrading in an umbrella term for a variety of grading methods that aim to focus more on learning than on grades. For example, through some ungrading practices students, through thoughtful and honest reflection, might evaluate their success and grade themselves in a course based on their perceptions of their

engagement with the learning process. In other words, students learn how to evaluate their development in a particular class based on personal reflection and assessment of their progress and understanding of the course's subject matter (Guberman, 2021). Inherent in this type of learning-focused grading is the willingness for students to fail. In fact, students may greatly benefit from instructors who emphasize ungrading as a more appropriate way of evaluation based on the principle that failure and laboring through assignments are fundamental to deepening one's conversance with a subject and should be embraced, rather than viewed as a marker of incompetence.

Ungrading certainly has its challenges. Pitfalls include not being fully transparent and clear with students how ungrading methods are different from traditional grading, reinforcing them throughout the course, and discussing with students how such approaches can be beneficial and support their learning. It can also be a learning curve for the instructor to implement ungrading successfully throughout an entire course. However, inclusive course design is amenable to using ungrading for a particular assignment or unit. According to a research study conducted in an online synchronous course by Gorichanaz (2022), the eight respondents (six information systems majors, one information technology major, and one business major; two women and six men) were overall agreeable to the method. Respondents reported a greater level of comfort with being wrong. One participant even confessed that rather than making him feel like each answer given needed to be correct, being wrong has its benefits, as it allows students to learn from their errors. The satisfaction that comes with being wrong but knowing why one was wrong encourages deeper, more sustained engagement with the instructor and the material. Ungrading also gives learners experience with assessing themselves and growing from self-evaluation. Another student respondent remarked that the exercise of ungrading and self-evaluation gave them a sense of success, rather than failure, due to the act of constant self-reflections on their work.

Learning Disabilities

> *Having all the assignments in one place and all learning materials online made it easier for students with learning disabilities to follow the class.*
>
> *—A small, private liberal arts college student who identifies as an asexual White woman*

Visual Disabilities

> *For a college marching band course, we had a blind student join. The primary instructor took great care to ensure he had readable music (inverted colors—white text on black page).*
>
> *—A public university student who identifies as a bisexual White cis-male*

Physical Disabilities

There was a student in a wheelchair in science. We all sat in a different seat every day.

—A community college student who is as a first-generation college student and identifies as a heterosexual White woman between the ages of 25 and 34

Sensory Disabilities

We had a lot of readings, and one of them was unavailable in a format that I needed. Instead of making me go out and continuously search for it to figure it out, my professor actually recorded herself reading each of the chapters for me, and shared it with me. And then there was this one time that she wasn't going to be able to do it, and so she arranged for her husband to do it.

—A public research university student who identifies as a straight White female

Yes, just getting things in different formats is challenging, because I think a lot of professors assume that those alternate formats make it the same for me, just like "Oh, get her the formats, and then it's just like all the other students." But that's not the case. Those digital formats are the only way that I can even access the material. Then it still takes a bunch of extra work to actually complete it. One of my psychology professors saw me. We had talked at the beginning of the semester, [and] sorted [it] out. How are we gonna work through the semester together? And I told her how we would do it. … then she saw me manipulating the screen once. How I have to do it to read, and she was like "This is the work that you have to do? Oh, no. Like we're going to not make you have to do this much work. We're going to figure out another way. I didn't realize. … seeing this is eye opening to me. So we're gonna reduce your work even more, because this is still too much. So that was just a great moment … it really took seeing it for herself to really understand what it's like on my side.

—A public research university student who identifies as a straight White female

Neurodivergence

This past semester one of my courses … was designed to give students a bunch of different opportunities to do well on assessments and assignments, so that it wasn't all riding on a few big assignments, which I think was really helpful for those who maybe get overwhelmed with that kind of idea, that a test tests knowledge, and that's it. If you don't do well, you don't do well. … in this particular course there [were] a lot of opportunities to do

> *other things that would go towards your grade and different completion of assignments. So I thought that was a good design.*
>
> *—A public research university student who identifies as a straight White female*

As evident through the quotes presented thus far, several of the students in our study had a disability or were neurodivergent. Their disabilities were both visible and invisible, and provided critical considerations for course planning. For these students, it was critical that the course design included class materials that were accessible. Equally important was embedding student choice in the assignment and assessment design. One student commented on how inclusive course design sometimes only partially supported their learning needs, and they were oftentimes left with the burden to fill in the gaps. For example, providing course readings in varied formats is important. A one-size-fits-all approach is insufficient and requires students to search for the appropriate format. Instructors should consider this in course design. This either requires the instructor to provide an alternative and appropriate format (e.g., reading the chapter themselves) or becoming more knowledgeable and understanding of assistive technology or accessibility features in technology (He et al., 2022).

Socioeconomic Status

> *Provide free literature instead of [making] students buy unnecessary books that are very expensive.*
>
> *—A small, private liberal arts college student who identifies as a straight White male*

> *The course allowed students of all financial backgrounds to succeed, even though some of the equipment being used was very expensive.*
>
> *—Student chose not to share demographic information*

Socioeconomic status can shape a student's experience in higher education. Even when students receive financial assistance, it does not always cover all of their educational expenses. Our student respondents highlighted an appreciation for inclusive course design that was welcoming to students from various socioeconomic statuses. The Open Educational Resources (OER) movement supports equity and flexibility in college and university classrooms. It is grounded in the human right to access high-quality education. This provides free or low-cost course materials to all students, regardless of financial background. In Khadijah's course, texts are often very costly. She reconciles the current edition with past editions on the syllabus, and provides OER to supplement content that may be lacking in older versions. She also does not require publisher

learning aids, but rather provides all students with the additional learning aids she created. Students can always exercise the option to purchase commercially available materials. Inclusive course design should offer students flexibility, variety, and choice in course materials (Devlin & McKay, 2016).

Reflection Questions

- In what ways do you incorporate individual student needs and preferences into your course design while making space for all students?
- How do you educate yourself on student demographic attributes in which you may be unfamiliar?
- How do you account for a variety of student accessibility needs, such as mental health, visible and invisible disabilities, neurodivergence, and diverse socioeconomic status, while designing your courses?

Encourages Student Feedback

> *Always ask for input from everyone in class.*
>
> *—A community college student who is a first-generation, heterosexual White female, aged 55+*

> *My instructor decided to let us all give our own views on one of our projects which was pretty cool.*
>
> *—A private university, first-generation college student who identifies as a heterosexual Black female aged between 25 and 34*

> *Several of my instructors have reached out to us as a class and inquired as to our opinions and suggestions as far as change is concerned.*
>
> *—A public university student who is a White male between the ages of 45 and 54*

Using student feedback in course design fosters a more inclusive learning community. Our student respondents commented on how their opinions, suggestions, and views can be incorporated into the course design in a prospective manner (e.g., a project). Student feedback can also lead to retrospective course design and a review of effective strategies that promote inclusive learning environments for future iterations of a course. Weekly journal reflections from 65 students over 10 weeks revealed the importance of embedding meaningful interactions and carefully scaffolded motivation, engagement, and management strategies in an online course (Speiser et al., 2022). A tree model was used to describe a process-oriented approach to fostering an inclusive learning community that highlights conditions and practices necessary for a transformative learning experience in remote

contexts. The model is based on a "learning tree." The "roots" represent instructors, students, and course structure. Careful cultivation is reflected in course planning (Speiser et al., 2022),

Some students were above the age of 25 years. Student feedback from these individuals is important as they may have more diverse life experiences than their classroom counterparts. For example, they may live off-campus or be older adult learners who are returning to school to earn certifications or degrees (Rao, 2013). For the older adult learners discussed here, they may experience challenges, such as ambiguity and uncertainty about expectations, isolation and lack of community, and technology challenges (Rao, 2013). Designing course elements that encourage student feedback can help support learners in this demographic by alleviating fears, building community, and offering technological primers. Additional discussion on when, how, and why to collect and utilize student feedback will occur in Chapters 3 and 4, as well.

Reflection Question

- Do you build in opportunities for students to provide feedback on the overall course design or specific elements (like projects) at the beginning of the course?

Used Diverse Course Materials that Valued Real-World Student Experiences

Diverse Course Materials

Diverse Scholars

> *In my English course the instructor included teachings based on people of different races and people who have disabilities. This allowed students to make connections or learn about something outside of what they're accustomed to.*
> *—A private university student who identifies as a straight Black female*

> *Content includes many different peoples lives and their perspectives as reading material.*
> *—A public university student who identifies as an aromantic/asexual White woman*

> *My teacher … included assignments and discussions of the contributions of diverse scholars by including individuals from a range of cultures, races, genders, or sexual orientations to convey that everyone can be successful.*
> *—A public university student who is a first-generation college student and identifies as a heterosexual Puerto Rican female, aged between 35 and 44*

Acknowledging things like colonization.
—A small, private liberal arts college student who identifies as a bisexual White female

Included male and female writers.
—A public university student who identifies as a bisexual Caucasian female

In our study, historically excluded students based on race (e.g., Black and Puerto Rican) and sexual orientation (e.g., aromantic/asexual and bisexual) shared that using diverse scholars was a sign of good inclusive course design. Particularly, diverse scholars being used and respected as legitimate sources of critique or knowledge resonated with them. They commented on the importance of multiple identities and communities being represented, including things you can see (like race and gender), attributes that are latent (like culture and sexual orientation), and things that can be both visible or invisible (like disabilities). Such framed content can help Black, Indigenous, persons of color (BIPOC), female, and LGBTQIA+ students improve learning outcomes (Livezey, 2021). Incorporating diverse scholars can de-emphasize Eurocentric representations. For example, one of our students mentioned the importance of acknowledging things like colonization. Considering diversity in course design is a critical pedagogical practice.

Diverse Course Content

Diverse selection of reading material.
—Student chose not to share demographic information

[D]esigned with a mix of readings, assignments and tests, which I appreciated.
—A small, private liberal arts college student who identifies as a bisexual White female

[C]ompletely open-to-discussion posts that aren't dedicated to any one question or questions.
—A community college student who identifies as a straight White male

All teachers had open discussion time of a given topic at least once.
—A small, private liberal arts college student who identifies as an asexual White/Jewish male

Communications class regarding inclusiveness within written texts, such as children's books and the examples of inclusiveness. Sometimes we had a worksheet to fill out with answers, sometimes it was essays.

—A public university, first-generation college student who identifies as a bisexual Caucasian, aged between 25 and 34

I had a professor give public exams, giving us the exam beforehand to review and ask questions about beforehand. Please look this up if you haven't heard about it, it was awesome! The exam was still very challenging, but there were no surprises, and I felt like I was given a fair shot at studying for it.

—A public university student who identifies as a White non-binary pansexual

As mentioned previously in this chapter, students in our study appreciated student choice in assignments and exams. Several students also mentioned variety in assignments and assessment methods overall throughout the course design, even if choices are not possible or limited. Offering assessment variety can support students in the following key ways: 1) students can have a deeper understanding of select topics or concepts instead of simply memorizing for an exam, thus moving higher on Bloom's taxonomy; 2) students can apply knowledge in authentic learning and assessment activities to develop the skills necessary to work in their future career or discipline; and 3) students have diverse abilities, backgrounds, and interests, so assessment diversity puts all students on a level playing field in terms of showcasing their knowledge and actions.

Real-World Student Experiences

Where I'm from it's predominantly a French-speaking country. And one of my college professors went to my hometown and knows so much about the culture there.

—A public university, first-generation college student who identifies as a straight Black female aged between 25 and 34

In a class about the history of sex in America, my professor designated a day each week (we only met three days each week) to only have a group discussion about the readings and how they relate to our own experiences.

—A public university student who identifies as a White, non-binary, and pansexual

Relating the concept to real life experience.

—A community college student who identifies as a White male between the ages of 25 and 34

Authentic learning is a teaching and learning philosophy that connects learning with real-world student experiences. Our students appreciated when inclusive course design facilitated authentic learning (1) by connecting course content to their real-world problems, situations, and experiences; (2) by providing opportunities for them to make their own connection between their real life and learning so that it is personally meaningful; and (3) when it is reflected in the learning tasks. This also involves disciplinary practices so students can be situated and immersed in real-world situations typically found in their professional careers (Abramenka-Lachheb & De Siqueira, 2022). Authentic assessment is an extension of authentic learning (Abramenka-Lachheb & De Siqueira, 2022). An authentic assessment evaluates if the student can successfully transfer the knowledge and skills gained in the classroom to various real-world contexts, scenarios, and situations beyond the classroom. Authentic assessments can include a variety of types, including discussions, simulations, role-plays, projects, and debates. All authentic assessments can be redesigned using diversity lenses as a tool. For example, using real-world student experiences in the course design appealed to our student participants with a diversity of identities, such as Black, non-binary, pansexual, and non-traditional ages.

Reflection Questions

- How can, or do, you consider diverse scholars in your course materials?
- What strategies do you use, or have you used, to add variety to instructional materials, assignments, and assessment tools?
- John Dewey's Constructivist Learning Theory is based on each student's own perspective and real-world experiences. In what ways do you scaffold your course's learning outcomes based on students' lived experiences?

Accounted for the Type of Course Delivery (In-Person, Hybrid, Online)

In-Person

> *Allowed online options.*
>
> *—A public university student who identifies as a straight White female*

Hybrid

> *When there is an exam assigned, class is optional that week. The professor understands that even though we picked a Hybrid course, we might need that specific time to get the exam done.*
>
> *—A community college student who identifies as White, non-binary, pansexual*

I think the online courses are very equally accessible for people who have a hard time having transportation.

—A community college student who identifies as White, non-binary, bisexual, aged between 25 and 34

Online

[T]he teacher invited students to come be with her during class on campus as well if they wanted.

—A community college student who identifies as a mixed race, asexual female, between the ages of 25 and 34

The final inclusive course design theme that emerged from our study accounted for the type of course delivery. Whether in-person, hybrid, or online, students mentioned the instructor's attention to the course delivery type was important. In a post-pandemic landscape, some instructors are hybridizing their in-person courses (Widjaja et al., 2023). Maximizing learning outcomes in both in-person and online modes, while facilitating concurrent delivery, has emerged as a key priority. Instructors also adapted an optional hybrid approach where students primarily attend in-person classes but are offered an online alternative if they are isolating due to health-related issues (Widjaja et al., 2023). The converse is also true. Sometimes online classes can have optional or encouraged in-person course elements. For example, Khadijah has held essential in-person office hours to meet with online students at the beginning of a course.

Options in hybrid course delivery models (e.g., hyflex, blended) were also mentioned by our study respondents. In particular, one student appreciated class being optional if an exam was assigned that week. Another appreciated how the hybrid format met their particular transportation needs. Inclusive course design recognizes transportation can be a barrier for some students, including those who live in rural and remote areas. Hyflex learning presents the components of hybrid in a flexible course structure that gives students the option of attending sessions in the classroom, participating online, or doing both. For example, one student in a completely online course liked the option of meeting with the instructor while they taught the class in-person on campus. This may be desirable for students with disabilities or neurodivergent students as additional support. Blended learning is another course delivery type where students learn online as well as through in-person instruction. Independent of hybrid course delivery, and as emphasized earlier in this chapter, students want course policies designed to allow for flexibility.

Reflection Questions

- Are there options you can provide students who cannot attend a class session in-person? What are they?

- How can you structure the course in a way that maximizes access to hybrid class sessions, whether in-person or online?
- How can you give in-person students online options, or online students opportunities to engage with you in-person?

Conclusion

When centering student voices on inclusive course design, seven robust key themes emerged. These were important for a variety of student demographics. Interestingly, student choice, student options, and instructor flexibility were cross-cutting, and permeated many of the themes. What was abundantly clear was students wanted to be intentionally and actively included, as well as considered for their individual needs and not treated as a collective.

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