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HOW MY INSTRUCTORS CONDUCT CLASS INCLUSIVELY

> "Having a wide range of opportunities, both for students to demonstrate that they understand the material that they're getting out of the class, and also a wide range of ways that the materials [are] being presented to students is really helpful in creating this kind of overall inclusive atmosphere in a classroom."
>
> *—A small, private liberal arts college student who identifies as White, female, and having an unspecified disability*

In Chapters 2 and 3 you heard from students about what instructors did to design inclusive courses and make them feel welcome within those courses, as well as teaching practices that did not work as well for certain students. In this chapter, we share and expound upon the perspectives of students on effective and inclusive endeavors within the class time itself, geared toward meeting the particular learning objectives of that specific course. We highlight common themes that emerged from the student survey and interview responses when they were asked to provide examples of when their instructors "did something well" or "have not done well" with regards to inclusive teaching in daily class activities. We identify specific points of progress and pitfalls, and supplement this information with the educational literature and our personal experiences.

The Themes

Four major themes emerged when synthesizing student responses on how their instructors did or did not succeed in conducting their classes inclusively:

DOI: 10.4324/9781003442929-5

- Using varied approaches to learning were beneficial for many students
- Incorporating student voices was critical
- Instructor time awareness and management mattered for course activities, and
- There was not one "right" way to conduct a class, but there were "better" ways to do so

Each of these themes emerged in the responses of numerous students, across educational settings and student demographics and identities, though approached in different ways and at times focusing on different aspects of the theme. Sometimes these themes appeared when the students were relating experiences that worked well, and other times they were noted in situations that did not go well. However, when analyzed holistically, replies came back to these same themes. That is not to say that there weren't other important responses that fell outside of these themes, but just that their repeated appearance potentially indicates shared criteria for what responses considered successful inclusive teaching.

Reflection Questions

- If you have taught previously, have you seen any of these major themes appear in the feedback you have received from students, either through course evaluations or via other means?
- If so, were they provided as examples of successes or opportunities for growth in your teaching?

Utilizing Varying Approaches to Learning Can Be Beneficial

There are a variety of different ways in which teaching and learning can be approached, including both aspects of instruction and assessment. Focusing on instruction, these include various forms of lecturing, active learning, group work, discussions, and more. For assessment, variety can present itself in terms of the format of the assessment, whether it is a small assignment, an exam, a paper, a presentation, or otherwise, to the relative grade importance of a particular assessment, to how the students then interact (or not) with that assessment after its completion. These different approaches have their own strengths and limitations, and when choosing which means to utilize in a particular course, careful consideration should be given to the goals of the course and which means of instruction or assessment is best able to help the students achieve those goals. In our previous book, *What Inclusive Instructors Do*, we detail a number of different approaches that instructors utilized with perceived success, with examples of how they can be and have been implemented, and evidence from the literature supporting these approaches

where available. What really came out through listening to students in this study was that students felt that variety, and even choice, in their learning were key aspects of courses they found to be inclusive. This aligns closely with concepts of Universal Design for Learning (UDL) (*UDL: The UDL Guidelines*, n.d.) and can be seen in the following quotes, where the students brought up the concept of using varied approaches specifically as something they found beneficial:

> *[Classes] that I've taken have been multimodal learning … we always have some sort of activity, whether it be hands-on or online. So it's not just written and verbal, it's also tactile learning, which is really good for me.*
>
> *—A private university student who identifies as African American, female, 25–34 years old, and neurodivergent*

> *Be … inclusive, especially to different types of learning. We split the class up by doing both group work and lecture from the professor. So we usually talk about some sort of concept, practice it in the group work in small groups within the class, get to balance ideas off of each other, and then kind of come back together as a whole class and review the group work, and that provides the opportunity to kind of both be an active listener, but also participating in the discussion and whatever it is you're working on. That also doesn't necessarily put pressure on students who aren't comfortable with the topic. So it allows the opportunity for people to work together in order to find the solutions, or to better understand the concepts, rather than just being lectured at and expecting them to understand what the professor is saying.*
>
> *—A small, private liberal arts college student who identifies as White, female, and having an unspecified disability*

Reflection Questions

- Would you consider your current course(s) varied in terms of teaching approaches? Why or why not?
- Would you consider your current course(s) varied in terms of assessment? Why or why not?

Teaching Approaches

The core idea behind using a variety of approaches learning is that students are provided with learning environments where instruction is presented in more than one sensory mode or pedagogical form (Bouchey et al., 2021; Sankey et al., 2010). This not only allows an individual student to encounter the instructional elements in multiple ways, deepening their understanding, but also provides opportunities for different students to utilize the means

that are most effective for them (Rose & Meyer, 2002). Ideally, each critical concept of a course would be explored in multiple modes, however issues of available course time may make this impractical in certain cases. Regardless, opportunity presents itself over the breadth of an entire class to vary the pedagogical approaches across the course content, and our student responses indicated the importance of this as well, both in their learning and their sense of personal value.

> *[The instructor] varied the daily structure of the class so that we did not repeat the same activities every day (like lecture and then examples), but instead had a variety of activities to keep us interested and unexpecting of what the daily class session would turn out like. A lot of varied, dynamic, and fresh approaches to learning prevents students from getting bored or skipping class [because] they think they know what will happen.*
>
> *—A public university student who identifies as White, female, and first-generation*

> *No group activities or review where we are open to ask questions. [The instructors] make us feel like we are just attending a class and never been seen, only graded. Like all we are worth is our effort and hard work, rather than valuable human beings.*
>
> *—A public university student who identifies as White and non-binary gendered*

Below are some examples of how our students viewed their experiences with various forms of instruction, both positively and negatively.

Lecture

The didactic, instructor-centered lecture format has long been the predominant mode of instruction in higher education, in part because of its ability to efficiently disseminate information to a potentially large audience leaning on the content expertise of the lecturer (Freeman et al., 2014). Further, the lecturer may serve as a "role model" for student learning, and students develop listening and note-taking skills (Regmi, 2012). However, the effectiveness of this pedagogical choice in developing deep understanding and disciplinary skill has been under debate for the better part of the last 50 years (Bligh, 1998; Knight & Wood, 2005; Roettger et al. 2007; Loughlin & Lindberg-Sand, 2023). To this end, there has been a push to move to more active learning approaches, or at least to incorporate these approaches, as well as to revamp how "lecturing" is done (*Effective Lectures*, n.d.; Tronchoni et al., 2022).

Our student respondents had both positive and negative experiences with the lecture format, which appeared connected to different aspects of those lectures.

Positive experiences included:

> *There are PowerPoint slides … but there's also talking and explaining what's on each of the slides, what everything means, and sometimes where the image is found in a book or where we can find additional material online.*
>
> *—A private university student who identifies as African American, female, 25–34 years old, and neurodivergent*

> *They provided us with lectures formatted in a way that makes sense to our learning.*
>
> *—A private university student who identifies as White/European, female, and first-generation*

> *[The instructor] gave clear notes on what to learn, what was important and [was] not important.*
>
> *—A small, private liberal arts college student who identifies as Asian/White, female, and first-generation*

> *Professor always wears a microphone and (tries very diligently) to keep it on and charged.*
>
> *—A community college student who identifies as White and non-binary gendered*

Negative experiences included:

> *[There was] no class engagement. Three-hour lectures with no break, too much content … [and the instructor] did not acknowledge students with attention disorders.*
>
> *—A public university student who identifies as Caucasian/Native American, male, and 25–34 years old*

> *[The class was] only lectures.*
>
> *—A small, private liberal arts college student who identifies as White and male*

> *When students are just sitting down and listening to a lecture instead of actually finding ways to engage in course materials, I feel like we are not really retaining the important information and just showing up to class just to show up.*
>
> *—A private university student who identifies as a Hispanic/Latina, homosexual, female, and first-generation*

The instructor would just lecture and/or cruise the material with poor question answering.

—A community college student who identifies as Asian, male, and first-generation

The quotes above are representative of others from the study, and indicate that features of lectures that make them more inclusive include aspects of organization and clarity, as also alluded to in previous chapters. When instructors were clear about the learning expectations, the format was logical, time was taken to expand on the meaning of topics, and could be well heard (or otherwise received), many students found lecturing an effective learning approach for them. Characteristics of goal setting and clarity in format are attributes found in the UDL framework (*UDL: The UDL Guidelines*, n.d.). Further, it makes logical sense that, if a lecture is to be effective, it needs to be clearly received by the student audience. This is true for all students, but even more poignant when considering a learning community that includes individuals for whom the course is not in their most-fluent language or those with hearing disabilities (Alsalamah, 2020; Kent et al., 2018; Mayer, 2014). Especially in large classrooms, the use of a microphone may overcome volume barriers within the space. Moreover, speech recognition and transcribing methods are becoming more widely available. In synchronous online courses, where live virtual meetings occur between the instructor and students, many of the virtual meeting platforms have the ability to caption the meeting in real time, while creating a complete transcript that can be accessed (and edited for clarity if needed) later. Similar captioning tools can be used even during in-person courses and projected in real time, and when recording lectures of asynchronous viewing, in online or in-person courses. While initial studies examining the efficacy of captioning on student performance across disciplines has varied and more research is needed (Allen & Katz, 2011; Ranchal et al., 2013; Ritzhaupt et al., 2015), student perceptions on the inclusion of captioning has been almost universally positive in the studies conducted to date (Dommett et al., 2022; Kent et al., 2018; Tisdell & Loch, 2017).

Alternatively, pitfalls for utilizing the lecture method as an inclusive teaching tool were the courses and instructors that relied solely on lecturing as the means of teaching, moved too quickly through the lecture content, lectured for too long in a single session, and did not find ways to engage the audience. Indeed, published literature supports the concept that students in courses which rely too heavily on lectures are less successful than those that incorporate other pedagogies like active learning (Freeman et al., 2014). So how can these pitfalls be avoided? While it is widely quoted that student attention span for lectures lasts less than 30 minutes, specific evidence for the exact time frame varies (Bradbury, 2016; Wilson & Korn, 2007). Rather,

there is likely a wide range in student attention spans, which are dependent only partially on the student, but more commonly based on the instructor and the teaching format itself. Lectures can go on for too long without interruption, alteration, or a break. The concept of "lecture bursts" or "microlecturing," as noted in earlier chapters, has become more prominent, where the lecture portion of a class lasts for a shorter period of time (5, 10, and 15 minutes are common durations), preceding a break, an activity, or other means of instruction. While published studies examining the effects of "lecture burst" pedagogy are limited, there are initial studies which show that students perceive improvement in their physical, mental, and cognitive condition simply by incorporating breaks during a standard lecture session (Paulus et al., 2021; Timmer et al., 2020). Mechanisms by which student engagement can be incorporated into lectures will be discussed further when the theme of incorporating student voices is addressed.

Reflection Questions

- If you utilize lecturing in your courses, how much do you focus on the organization and clarity of those lectures? Is there something that you could add to your lectures to enhance these features?
- If you teach through lecturing, in which of your courses do you use it most? What approximate percentage of the course time is lecture-based? Considering the information above, do you believe that to be appropriate?
- If you do not utilize lecturing, is there a course where it might be beneficial? How could you implement it in an inclusive manner?

Discussion

A contrast to the traditional didactic lecture, where the instructor does the majority of the speaking, is discussion-based learning. When using this approach, the instructor may frame and even guide the conversation; it is the students who are contributing most of the dialogue. The historical precedent for discussion-based learning goes back to Socrates and beyond, with roots across global cultures (Ying, 2020). In modern day, discussions can occur meaningfully both in a physical classroom, or, as is becoming more and more common, in online courses using written discussion boards (Bender, 2012; Herman & Nilson, 2018; Smith et al., 2003). Some of the goals of discussion-based learning are to enhance students' critical thinking about a topic, reduce the instructor–student power differential in the classroom, allow for the incorporation of a variety of student voices and perspectives (a topic that will be further addressed later in the chapter), and build communication skills (Brookfield & Preskill, 1999; Christensen & Others, 1991). Students in our survey acknowledged some of these benefits when speaking about what their instructors did well related to inclusivity:

In a discussion-based class heavily focused on social issues, it's great when a teacher treats every idea as valid and lets the students guide the discussion, letting us respond to other students' questions

—A small, private liberal arts college student who identifies as White, female, and asexual

Encouraged students to make space for the voices and perspectives of others and moderated discussions with attention to who was talking, for how long, and who wasn't speaking as much, and inviting them to contribute if they wished.

—A small, private liberal arts college student who identifies as White, agendered, and pansexual

One of my [instructors] always asks "who hasn't spoken all semester/this week" as we're a big class and he wants everyone to have a chance to share at least once. [This] made people feel like they had a place and something they felt like they could talk about. We all likely have wildly different lives to each other, but we become able to … talk about it.

—A public university student who identifies as White, female, and asexual

Some of the student responses also gave insight into what they perceived as a constructive means for incorporating discussions into their courses, as well as ways that were potentially detrimental. In an interview, one student spoke deeply about the importance of setting the expectations and community standards in discussions early.

This professor, from day one, was really good about setting the ground rules for our discussion, which were simple ground rules, like, we need to be respectful of what other people are going to say in this class, and we should all be willing to debate with each other over these topics. But we need to understand that these are sensitive topics to many people, and we might come out feeling different ways about them.

This student went on to then speak about the role the instructor took in the discussion itself, saying:

Another thing I really respected about that instructor is that they really were, from the very beginning, willing to include themselves into the discussion as an equal discussion member, and they would debate with us if we brought something up that they disagreed with, they would very happily join in and disagree or agree with us, but in a very respectful way. And that was really nice, because I think a lot of times instructors will feel like they can't join in … that's not their role. I think that by sort of showing us

> *through their actions that this instructor is a part of our class, just like any of us, and can join into the discussion if they feel like they have something important to say, that was really nice to see.*
>
> *—A public university student who identifies as White, non-binary gendered, and pansexual*

Meanwhile, other students spoke to aspects of discussion-based learning that they did not find inclusive:

> *[The instructor] relied on most outspoken students for class discussions, didn't encourage others to speak up.*
>
> *—A community college student who identifies as White, female, pansexual, and first-generation*

> *In [a] religion [course], I feel that the topics can be too much sometimes and we usually talk in groups, but a lot of the topics can be sensitive for some people. These approaches were not effective because it can make students feel out of place.*
>
> *—A private university student who identifies as Caucasian, female, and first-generation*

Within these quotes, we can see the importance of creating a space for discussion that is clearly defined, where the roles for students and the instructor are apparent, and the concept of respect for alternative viewpoints is paramount. This can be especially important in situations where there are topics that could be sensitive in nature. While guidelines can be crafted by the instructor, the co-creation of those expectations with students can both be inherently more inclusive and give students more investment in following the created guidelines (Bovill, 2020). Further, after creating the guidelines for the discussion, allowing room to practice implementing them as well as the foundational discussion skills of questioning, listening, and responding, is useful in developing quality discussion-based learning (Garrett, 2020). We also see in these student quotes how the instructor, while guiding a discussion, can also act as a member of the discussion, and both model appropriate discussion behavior and communication skills, and provide their perspectives. Being involved in this way allows for potential redirection or pivoting the conversation when needed, whether that be due to the sensitive nature of the topic and observed discomfort in members of the classroom, or the need to incorporate students beyond those who might be dominating the conversation. As noted earlier, these approaches are common not only to real-time, face-to-face or virtual discussions, but also to asynchronous discussion boards occurring in online courses. In some ways, having clear guidelines for discussions from the onset of a course may be even more critical in

asynchronous courses, as the instructor may not be directly present when the dialogue is occurring and able to immediately respond or redirect when necessary. While the guidelines will hopefully limit the occurrences when redirection or remediation is needed, it is important that the instructor does actively monitor the discussions and respond in an appropriate manner when required. This will help maintain the culture of respect and accountability to the guidelines that have been created.

Reflection Question

- What specifically could you do to make discussions in your in-person or online courses more inclusive?

Active Learning

Active learning is an inherently learner-centered practice where students are asked to be involved more directly in the learning process than just as listeners and recorders. This can range from teaching methods like the discussions noted above, to case studies, problem-based learning (PBL), process-oriented guided inquiry learning (POGIL), and more. A number of these approaches were described, and their efficacy in supporting learning and closing achievement gaps evidenced, in our previous book, *What Inclusive Instructors Do*, so they will not be repeated here. These active learning approaches can be implemented in manners whereby students work independently, in pairs, or as groups; and, interestingly, each of these scenarios was communicated by students surveyed and interviewed in our study in ways that their instructors were successful and unsuccessful in providing inclusive experiences for these students.

In situations where students were asked to work independently, aspects that made the experience more inclusive included the instructor actively engaging with the students, and the students progressing in their independent work in a way that considered their desires.

> *[The] lab instructor went from table to table to help students if they needed. Very hands on. The teachers went out of their way to make sure every student felt supported.*
>
> *—A community college student who identifies as mixed ethnicity, female, asexual, and 25–34 years old*

> *The professor always walks around and gives positive feedback, but also respects students who like to keep their art to themselves until they're ready.*
>
> *—A community college student who identifies as White, female, and 25–34 years old*

However, a student who has challenges related to executive functioning, such as planning, organizing, and managing time and space, noted the barriers that independent work created for her.

> *[In the class, students had to] work by yourself. It was not designed for people with EF [executive function disorders].*
>
> *—A private university student who identifies as White, agendered, and asexual*

These comments show that while some view independent work as inclusive, others, such as some students who are neurodivergent, may see independent work as exclusionary to them (Clouder et al., 2020). This further indicates the importance for instructors to know the students in their courses, and consider their needs in the day-to-day activities of the course.

Regarding paired work, again student feedback on classroom experience can provide insight into tactics that students view as more or less inclusive. Positive experiences included the following:

> *They paired us up but they made us pair each other.*
>
> *—A community college student who identifies as White, male, homosexual, 35–44 years old, and first-generation*

> *We were allowed to choose our partner.*
>
> *—A public university student who identifies as Caucasian/Native American, male, and 25–34 years old*

Those with paired-work experiences that they did not find inclusive stated:

> *I was forced to work with a partner, but neither of us talked. Having people randomly work together creates a sense of awkwardness and unknown. This makes students less inclined to work with one another.*
>
> *—A small, private liberal arts college student who identifies as White/Black and male*

> *Partnering up for class activities is less than ideal. But that's just because of the people we have in that class. I am much, much older than a lot of the people here, so I also am on a different emotional level. So it bothers me more than it might bother other people.*
>
> *—A private university student who identifies as African American, female, 25–34 years old, and neurodivergent*

In these quotes, students indicate that having some control over who they are paired with may increase their feelings of belonging and comfort in the

learning environment. However, as noted in the final student quote, some students may prefer not to work with partners in general, or in a particular class community where they feel uniquely different from their peers. In this case, the student noted an age difference between her and her classmates, however the same concept could be applied to race, gender, sexual orientation, sociopolitical status, or any other number of visible or invisible identities. An instructor having more knowledge about their student population may help avoid a situation like this, but perhaps an even more effective means to navigate these situations is by, where possible, allowing for student choice not only on what partner they work with on a project, but if they work with a partner on a project. This is evidenced in another student's response to what their instructor did to make the class inclusive, when they stated:

> *Giving us the choice to work with or without partners.*
> *—A small, liberal arts college student who identifies as White, female, and bisexual*

Interestingly, peer review, a process discussed in Chapter 2, was a specific topic that came up in multiple student responses here as well, both as something that students felt was inclusive and something they felt was not inclusive. One student said:

> *We did a lot of peer reviews which engaged all students and we were able to help others with their writing.*
> *—A private university student who identifies as Caucasian, female, and first-generation*

Alternatively, another stated:

> *I do not want to peer review, okay. Some kids do not know how to write and I don't want them criticizing my work.*
> *—A public university student who identifies as White, female, and bisexual*

Published data does indicate the value of peer review for student learning, and in general finds peer review to be a positive experience, which mimics the fact that in our student response data there were more responses that noted peer review as an inclusive practice than not. However, the second student's comment alludes to a challenge that can be faced in peer review of students at different stages of developing their understanding of a topic and their writing skills (Mulder et al., 2014; Nicol et al., 2014; Serrano-Aguilera et al., 2021). Methods that can be used to address these challenges in situations where peer review is utilized in a class include: explaining the goals of peer review as a process that benefits both the reviewer and reviewee,

clarifying the expectations of the process, the use of structured review forms, the potential incorporation of "expert" reviewers in addition to the student reviewers, and many of the features discussed in Chapters 2 and 3 of this book, which describe how to develop a culture of inclusivity within the classroom (Mulder et al., 2014, Boardman et al., 2023). In Derek's courses, he finds having each student conduct and receive confidential reviews from multiple students, rather than just a single peer, can also help minimize some of the challenges indicated.

Small group work is often looked at as a mechanism to enhance student engagement in large courses, giving students some of the benefits of leveraging their peers' understanding, skills, and perspectives, while also providing the opportunity for their own understanding, skills, and perspectives to be utilized in accomplishing a common goal. There are many variations on how small group work can be implemented, from cooperative and collaborative learning, to problem-based and team-based learning, and others (Davidson et al., 2014). A large number of our student respondents noted group work from the prompt of daily class activities that they found to be inclusive, including comments such as:

> *Our professor spent at least one day a week where we would break up into groups and do posters to explain the different topics we were learning about. This allowed us to get to know each other as well as learn from our peers.*
> *—A private university student who identifies as Latina/White and female*

> *Allowing group work. It makes the class more engaging and gives students the opportunity to engage themselves in the content.*
> *—A small, private liberal arts college student who identifies as White and male*

However, there were also students who had experiences with group work that they did not consider inclusive:

> *Having us work with unreal, abrupt, and disrespectful students not seeing there is toxic energy.*
> *—A part-time community college student who identifies as Black and first-generation*

These differences in experience highlight the importance of the instructor's role in overseeing the group activities and being able to respond to situations that are not working effectively in real time, similarly to what was noted in the conversation on discussions. A different student who had similar experiences provided some insight on how the instructor could both prevent and navigate such situations:

[Setting clear] boundaries, communication and then reassignment.
—A private university student who identifies as African American, female, 25–34 years old, and neurodivergent

In their interview, this student further expounded upon how setting initial guidelines and boundaries for group work was important, both in the class as a whole and between members of each group. When issues arise, students should be able to communicate with each other, and if appropriate, with the instructor. Following this, if the issues cannot be resolved, then considering options for having the students join other groups may be beneficial. While this could be challenging in a situation where groups have been formed intentionally, or work has already begun, this flexibility within courses is a key component to maintaining equity, and will be discussed later in the chapter.

Within responses that noted the positive impact of group work, were comments that spoke specifically to means of group formation. These included:

[The instructor] has different cards that assign us to groups daily so we can learn from each other and help one another.
—A community college student who identifies as White/Hispanic, female, and 25–34 years old

Allowing students to have a say in the formation of their small discussion groups for the semester.
—A private university student who identifies as Caucasian and female

Meanwhile, another student, who identified as having a vision-related disability, stated challenges she had with certain means of group formation.

I think there are a few activities that are supposed to be fun, but assume a certain ability that I don't have visually. Something like counting off [to then] find your group, are actually very overwhelming and not fun for me …. In my anthropology class we had to get in order, or group ourselves by the color that we were wearing on our shirts.
—A student with a sensory disability who identifies as White and female

The student describes how she would have to rely on a friend in the class to help her get to the proper group, and how that could be challenging in certain situations. This demonstrates how the diverse needs of a class' student population can in some cases take a process or activity that was intended to be inclusive, and in fact make it an obstacle for certain students. In the case of this student, she noted how she appreciated when her instructors were aware of what group she was in, and then instead of having her go to a

specific meeting place in or out of the classroom, have her group mates come to her. In this instance, the student was comfortable with this being announced directly in the class; however, in some cases a student may not feel as comfortable having a similar acknowledgement in front of their peers, so a more subtle approach involving a discussion in advance with the student or pre-planning group locations would be warranted. To this end, providing opportunities for students to share information with you as their instructors that may impact their comfort, sense of belonging, and ability to succeed in the class can be vital to ensuring a broadly inclusive course.

Reflection Questions

- Consider an activity you have had students work on in your course (or if you have not done this, create a hypothetical activity).
    a Was it structured as an independent, paired, or small group assignment?
    b What barriers could that structure present to a learner, considering the neurodiversity found in student populations?
    c How could you design the activity to mitigate this barrier(s) without sacrificing the student's ability to achieve the desired learning outcomes?

Assessments

Whether through traditional letter grades, numerical rubrics, mastery-based mechanisms, or even forms of ungrading (as mentioned in Chapter 2), assessment is a key component in the majority of college courses. Assessments can be categorized as formative, to monitor and support student learning commonly as it is developing, or summative, to evaluate student learning generally after the learning was intended to occur. However, there can certainly be cases that blur these lines, instances where one or the other is preferred, and times when both can be implemented (Glazer, 2014; Ismail et al., 2022; Morris et al., 2021; Yüksel & Gündüz, 2017). Assessments can come in many forms such as examinations, presentations, written pieces, performances, projects, or other mechanisms for displaying one's understanding and skill. While in some cases the manner of assessment is directly aligned with learning objectives for the course, in other instances it is simply a means of evaluating the student's learning and it may not necessarily matter in which way the student demonstrates that they have successfully met the learning objective. Arguably the core concept that students spoke to, when addressing aspects of inclusivity related to assessments, was not one particular type of assessment versus another, but rather the allowance for student choice in the means by which they displayed their mastery. Each of

the comments below came from students identifying aspects of courses they took that they perceived to be inclusive.

> *Letting students choose a written or oral assignment, depending on which was more comfortable for them. [This gave] people like myself (an older senior citizen student) the same chance to succeed as younger students.*
>
> *—A part-time student community college student who identifies as Caucasian, female, and 55+ years old*

> *The teacher would not care what format we chose to do our assignments and participate in taking class notes about discussions, or in filling out papers for the class; as long as we completed our work in an efficient way for us.*
>
> *—A private university student who identifies as White and female*

> *In a seminar English class, a professor would come up with fun ways to process the readings as a group. We put one of the characters on trial and decided if she was innocent or guilty (an intense debate!) and we completed open-ended "response" projects to share with the class that prompted discussion. One student recorded a dance that represented a character's development over the course of the book.*
>
> *—A public university student who identifies as White, non-binary gendered, and pansexual*

In his courses, Derek has made an attempt to be both more varied in his assessments and, where possible, provide options for student choice in how they are assessed. As an example, in a first-year seminar course that he teaches, students explore the human condition through various artifacts including science fiction literature, historical events with sociopolitical context, music, film, and more. Initially, part of the course asked students to write a single paper that melded their understanding of these various artifacts and how they informed the student's own definition of what it meant to be human. While in a number of ways this process worked well, in the papers Derek saw how the writing skills of some students interfered with their ability to showcase what seemed to be interesting ideas and deep critical thinking on the topic. While Derek believes written communication to be a critical skill for college students to develop, it was not necessarily the main learning goal of this class or this assignment, as he was more interested in their ability to think critically and develop communication skills in a variety of manners. As such, he modified this portion of the class to replace the paper, and instead have a series of shorter reflections throughout the semester using a web-based tool known as Padlet, where students post digital "sticky notes" on a digital class "white board."

The first assignment asked the student to write their reflection; the second asked them provide either a drawing or a haiku; the third asked them to create a meme using an image from the Internet; the fourth asked them to record a short video of themselves talking about their ideas; and the fifth was a free-choice reflection using any of the past means or a new mechanism of their choosing. At the end of the course, the merging of these various artifacts and the students' thinking around them still occurred, but in a fully open-format project, where Derek was happy to give some potential suggestions, but allowed the students to decide how, ultimately, they wanted to showcase their critical thinking on the topic. The students could work independently, in pairs, or in small groups, and they could create a written piece, an art piece, a baked good, a performance, or anything else they decided, so long as they could justify how it met the learning goals of the assignment. Student feedback, through course evaluations, anecdotally in conversations, and his own observation of the process and outcomes, was all quite positive about this implementation and is something Derek hopes to build on in the future, and take into some other courses where appropriate.

Specifically related to examination-based assessment, one of the students interviewed in our study spoke to a mechanism that they found to be particularly inclusive; what they referred to as an "open exam." The student describes it, and their feelings around the format, as such:

> *The exam itself was open … two weeks before the final exam in this class [the instructor] literally gave us a copy of what the exam would look like. They printed out the exam, and they gave it to us and said, "This is what your final looks like. You will have … five days to let me know if you find any issues with this exam, and I will um adjust it accordingly." And then, four or five days before the final exam, we'll have a review session where we're all literally holding the final exam in our hands and talking about what each question is. And I think that sounds super crazy and radical. It definitely did to me the first time I heard it. But believe me, when I say that was the best exam I've ever taken, and not because it was super easy, because it was [actually] super hard. That exam was just as hard as any other exam I've ever taken in college, but I knew what was on it. I knew what it was going to be, so it was not stressful for me thinking about …. It allowed me to actually review the things that are most important to the class from my instructor's point of view. When you do things like having an open exam, not only does it often help the students who have accommodations for their mental health issues, because it offers them more flexibility in how they study or how they take the exam. But then it also benefits everyone else like the people who maybe don't identify as having a specific accommodation. They're still going to have a more pleasant exam experience.*
>
> *—A public university student who identifies as White, non-binary gendered, and pansexual*

The "open exam" is one way to think about potentially making assessment more inclusive, though it admittedly will not likely work in all courses and in all situations. Another topic that was brought up in the student survey responses that relates to this idea of examinations is where a student identified "pop quizzes" as something that they found to not be inclusive, noting what they perceived as a high failure rate. The concept of "pop" (unannounced) quizzes is an interesting one, with supporters and detractors on each side of the issue. The idea behind pop quizzes is that they are a means to assess student knowledge at a given time that provides insight into if and how well the students are engaging with the material (commonly out of class) without being foretold that a quiz was coming and they should appropriately prepare. The thought is that if it is known that pop quizzes may occur within a course, it will be motivation for students to be "kept on their toes" and stay on top of their studies.

Indeed, there are some studies which indicate that pop quizzes can lead to positive performance results in certain courses (Cicirello, 2009; Kamuche, 2007; Willyard, 2010). However, in a number of ways, pop quizzes seem to be almost the opposite of the "open exam" described above. And conducting an online search of "pop quizzes" will yield a large number of opinion articles, from students and instructors alike, expressing negative aspects of pop quizzes, questioning their true efficacy, how they do not allow for students to set their own pace and process for learning, and the added stress they place on students. Further, it is not difficult to imagine a scenario where the unexpected arrival of a quiz may have a negative impact on an individual who is neurodivergent, who thrives in situations where there is more structure and routine.

To counter this, some instructors have found creative ways to leverage the potential benefits of unannounced quizzes, while minimizing some of the disadvantages, including using ungraded pop quizzes, either anonymous or not, or pop quizzes that allow students to earn bonus points (Agrawal et al., 2021; Carter & Gentry, 2000; Khanna, 2015). One particularly interesting study examined a Psychology course of 140 students, who either had graded pop quizzes, ungraded pop quizzes, or no quizzes, and compared their final exam scores. The students with the ungraded pop quizzes performed the best of all groups, and also felt positive about having the quizzes as part of their course (Khanna, 2015). This potentially shows a pathway for instructors who are interested in leveraging the advantages of pop quizzes, while also doing so in an inclusive manner that mitigates some of the potential disadvantages.

Reflection Questions

- Consider a course you have taught or are planning to teach.
    a What format of assessments did, or will, you include?

b If there are only one or two forms of assessment, is there an opportunity to include a broader variety of ways students demonstrate their learning?
c For any one particular assessment, is there an opportunity to provide the students with choice, to select the format that they prefer to demonstrate their learning?

- What are your personal thoughts around the idea of pop quizzes?

Incorporating Student Voices Is Critical

The second major theme that came from student responses about ways that their instructors were or were not successful in creating inclusive class sessions was the importance of students not just being passive members of the class during a given day, but their knowledge, perspectives, ideas, questions, and opinions being incorporated as a core characteristic of the course. This can be seen in some of the student comments made around aspects of courses that were not perceived as inclusive, including:

> *It was [the instructor's] way or the highway.*
> *—A community college student who identifies as White and male*

> *[The instructor] didn't ask for us to participate.*
> *—A public university student who identifies as White, male, and 35–44 years old*

> *[The instructor was] just continuously lecturing without getting everyone involved.*
> *—A public university student who identifies as Hispanic, male, and 25–34 years old*

Alternatively, involving the students in the course, especially through diverse means, was seen as an inclusive practice:

> *In my business writing course, my professor makes sure he includes everyone while he is teaching so he could gauge every individual's progress.*
> *—A community college student who identifies as American Indian/White, female, and 35–44 years old*

> *[The instructor] ensured that students were able to engage in a way that felt comfortable to them, which meant that participation could be the times you raised your hand, your questions, and also written reflections on classes and forum posts. It ensured that students who found it harder to*

concentrate in real-time had the opportunity to express their thoughts without feeling pressured to speak in class for the sake of speaking.

—A small, private liberal arts college student who identifies as White, agendered, and pansexual

If not getting students involved and incorporating their voices within a class session can lead to it not being perceived by the students as an inclusive space, then what are specific means to incorporate student voices and how can they best be implemented? Students spoke to a variety of options, including whole group discussions, which was described in the "Teaching Approaches" section, but also more specifically around ways to procure student questions and how to ask questions of the students, both with and without the use of technology.

Procuring Student Questions

Providing space and opportunity for students to ask questions, to help clarify or extend the course content, was seen as an inclusive practice.

In my history class we were encouraged to ask questions about the content or if we were confused.

—A private university student who identifies as White, female, and first-generation

[The instructor] allow[ed] students to ask questions [to] make sure everyone is up to speed.

—A small, private liberal arts college student who identifies as White, male, and 35–44 years old

Everyone was given the right to ask questions or interrupt in my psychology class.

—A private university student who identifies as Asian and female

In my chemistry class last semester my professor would make sure everyone's questions were answered before moving on to another topic and did not exclude anyone.

—A private university student who identifies as White, female, and first-generation

However, as discussed more holistically in Chapter 3 about how to create a welcoming environment, the tone by which those questions from students were received and responded to also influenced the student perception on whether the practice was inclusive or not. For example:

[The] professor made every question asked seem like a good question.
—A small, private liberal arts college student who identifies as Caucasian and female

While students who felt demeaned, embarrassed, or unsafe in asking questions noted these as practices that were not inclusive.

[The instructor] just boringly lectured and kind of demeaned students for asking questions.
—A small, private liberal arts college student who identifies as White, male, and first-generation

Being made to feel embarrassed by teachers if I didn't agree with their point of view, in front of the class. They made me feel somewhat humiliated and not really interested in asking more questions. When I spoke to one teacher about this, she seemed very dismissive of my feelings.
—A part-time community college student who identifies as Caucasian, female, and 55+ years old

There are some specific avenues for acquiring questions from students in an inclusive manner. Sometimes this can be as simple as changing the phrasing by which questions are requested. Rather than asking questions like "Does this make sense?" or "Any questions?", which have an implication that it should make sense and someone asking a question is falling behind, altering the prompt to "What questions do you have?" can frame the moment in such a way that there is an expectation that there will be questions at that point, and you as the instructor just want to find out what they are. However, this still does require students to identify themselves as having a question.

Other classroom assessment techniques can remove this barrier, by allowing students to ask their questions anonymously (Angelo & Cross, 1993). This could include "Muddiest Point" activities where students write down their questions on paper or index cards, which then can be reviewed either in class or out of class by the instructor and responded to. This can also be done in a more technologically advanced manner, by having anonymous surveys built into your class's learning management system, using Q&A (question and answer) features on freely available online tools where students can use devices like smartphones, tablets, and laptops to share their questions. In asynchronous online courses, many of these same tools can be used. Alternatively, in Derek's online teaching where discussion boards serve as a main interaction point of the class, students not only respond to instructor-created questions, but also are required to ask a question of their own. These student-created questions can either be geared at clarifying a

challenging topic they are examining or extending the conversation in a meaningful way. While student peers are often tasked with responding to these questions directly, it also lets Derek as the instructor have a better picture of challenging concepts and learn about the interests of the students in the class related to their weekly topics.

Reflection Questions

- Do you directly invite student questions in your classes? What language do you use, and what implications might that language have?
- What is a way that you could request questions from your students in your particular class that could increase the number of questions you receive while decreasing the anxiety some students might feel in asking those questions?

Asking Students Questions

In addition to collecting questions from students, it is a common practice in college classrooms for instructors to ask questions of the students in the class, as either a formative assessment tool or just to assess student understanding of a particular topic. Students shared their thoughts on what worked, including involving all students and not just a subset, and providing positive feedback.

> *[The instructor] was inclusive by not selecting favorites, and asked all of us questions.*
>
> *—A public university student who identifies as Caucasian, female, bisexual, first-generation, and 25–34 years old*

> *The teachers gave us compliments and good feedback when we [provided] a good response.*
>
> *—A small, private liberal arts college student who identifies as White and male*

Meanwhile, some of these same concepts can be seen in the features of courses that were not considered inclusive by students, including calling on specific students and then reacting negatively if the student answers were incorrect.

> *Calling on students and mak[ing] them feel stupid.*
>
> *—A small, private liberal arts college student who identifies as White, male, and 35–44 years old*

My management professor gives everyone popcorn questions about the chapter and is extremely rude to those who do not know the answer.
—A small, private liberal arts college student who identifies as White and male

"Cold-calling," the practice of calling on students directly without warning, also sometimes called "Random call," is alluded to in both of these student quotes ("popcorn questions" is an engagement strategy where one student gets questioned, responds, and then questions another, which generally doesn't end until everyone has been "popcorned"). Whether that negative experience is more attributable to the "extremely rude" reaction of the instructor, or the nature of all students being expected to participate is not clear; both are likely contributing factors based on the responses.

In some ways, cold-calling inherently seems like it would be an inclusive practice, as one of the goals is to incorporate student voices across the classroom community. Indeed, data shows that when volunteers are asked to respond to questions, males are more likely to answer questions, and that implementing random call enhanced both the overall and voluntary participation of women in the class (Dallimore et al., 2019; Eddy et al., 2014; Waugh & Andrews, 2020). Further, in at least one study, random call also has been shown to increase voluntary engagement, attendance, and pre-class preparation over time (Broeckelman-Post et al., 2016; Waugh & Andrews, 2020). However, there are also studies which suggest that cold-calling increases student anxiety, may impact the students' ability to cognitively engage, and that some students may be more likely to face this anxiety based on their personal background (Cooper et al., 2018). To this point, modified versions of cold-calling that seek to maintain the benefits while also mitigating the inequities based on anxiety have been developed, such as "warm-calling," which provides students with both advance warning and the opportunity to opt out of sharing in front of the class (Metzger & Via, 2022).

In asynchronous online courses that rely heavily on written responses and discussions, it is often imperative that students respond to questions posed by the instructor. However, these courses also generally allow for more significant time between when the student first reads the question and when they need to respond, which theoretically reduces the performance anxiety that may be present during a live, in-person course. Still, depending on the course topic, there may be questions that students feel more or less comfortable answering for a variety of reasons. To this end, to enhance inclusivity and equity in Derek's own online teaching, he implements a course plan where there are multiple questions presented, and students are required to answer at least one of the questions, but not necessarily all. Further, the student responses are hidden from other students until a specified release time, at which point they can be viewed by all. This enhances equity and

inclusion, by allowing students to answer the question of their choosing at their own pace and with their own process (prior to the specified release time), and not have to worry about other students "taking their answer" before they get the chance to respond.

The development and use of live-polling technologies in in-person courses has been a pathway that keeps the personal accountability of cold-calling, but actually allows for the incorporation of more student voices and what is likely a better picture of student understanding of a topic across the classroom population in real-time, as all students have the opportunity to respond to each question, even in large classes (Atkins, 2018). Moreover, polling is often done anonymously, which can take the burden off of students who are anxious about their responses. Further, live-polling can be successfully implemented in live online courses and in hybrid/hyflex courses, where some students are present in-person and some online (Phelps & Moro, 2022). Clickers were one of the first classroom response systems widely adopted, but advancing technology and the commonality of smartphones, tablets, and laptops in the student population has moved most of the live-polling done in classrooms to situations where students bring their own device to engage (Duncan, 2006; McGivern & Coxon, 2015; Sarvary & Gifford, 2017). There are a variety of basic and gamified live-polling tools freely available on the Internet, or available in fuller forms through paid subscriptions, as well as options built within various learning management systems. While being able to gather responses from an entire class at once clearly has benefits for inclusion and equity, one potential area where live-polling could be not inclusive and equitable is if there is differential access or ability to utilize the devices needed to submit responses. As such, it is critical that the instructor is aware of student access to the required devices.

One version of polling that seeks to avoid this potential pitfall is Plickers (Wood, 2017). Plickers is a polling process where students have unique printed cards that they hold up and rotate appropriately to designate answers, and the instructor is the only one who needs a device capable of detecting these responses. In addition to helping overcome the potential issues of access to technology across one's students, this platform has also been cited as being a useful tool for students with disabilities, by allowing them to answer in a private voice without calling attention to them if their response is incorrect (Mahoney & Hall, 2017). However, Plickers is limited to multiple-choice or true–false style questions, it can take some time for an instructor's device to visually detect each student response in a larger classroom, and modifications would need to be made for those with visual or motor skill impairment. Like Plickers, most live-polling systems allow the option of anonymous response collection, if desired, providing a potential benefit for neurodivergent and individuals with certain disabilities. Beyond these technology-based live-polling tools, there are also low- and no-tech

options like using differently colored index cards to respond to multiple-choice questions. While some of the benefits of anonymity may be lost in these cases, it does help overcome barriers students and classrooms may have in terms of equitable access to the technology needed for online polling.

However, even these theoretically inclusive tools can also present barriers for some students. One particular student, who identified as having a visual disability, noted in their interview how live-polling and game-based learning activities that were timed and required visual cues were difficult, or even impossible, for her to participate with in real time. Nevertheless, within this context the student remarked on how her instructor was able to include her in a beneficial way by providing the polling questions in advance of class.

> *We were going to do … live active participation in some polls … and [my instructor] shared them with me ahead of time, so that I could put up my [responses] virtually, so I could have time to do it. And [while] in the moment where everyone got like a minute … I still got to share my opinion, but I didn't have the time crunch. It was at my own pace, which was really nice.*
>
> *—A student with a sensory disability who identifies as White and female*

This student also went on to acknowledge that when live-polls were used in classes, in addition to having time in advance to respond to the polls, keeping the visual aspects of the polls relatively simple was beneficial, rather than having too many graphics and visuals.

This all goes to show that incorporating student voice is important to students feeling that they are included in the daily activities of a course in an equitable way, and that while there are better ways to ask for and pose questions, responses, and opinions, that knowing the diversity of students in the class is a key.

Reflection Questions

- What are your personal feelings about cold-calling? Is it something you utilize in your classes, and what information do you have on how your students respond to it?
- Think about the potential barriers and brainstorm ways that you could incorporate the voices of students with the following:
    a Visual impairment
    b Hearing impairment
    c Motor impairment
    d Autism spectrum disorder
    e Other impairments or disabilities you have encountered in your student population

Appropriate Structuring and Management of Class Time

How the instructor navigates and uses the class time was another theme that was addressed by multiple students when speaking to experiences they had in a class's daily activities that were either successful or not successful at being inclusive.

Starting the Class Session

Some students spoke to how the manner in which the instructor began a class was important to their feeling included. In some instances, the way the course was begun was directly related to the class topic or the day's expectations:

> *[The instructor] would lay out expectations clearly for each class/rehearsal, and ensure each student had at least the minimum knowledge to succeed.*
>
> *—A part-time public university student who identifies as White, male, bisexual, and first-generation*

> *If there's [new] language you're teaching … and there are words that you just expect people to know … just assume no one knows. That way everyone's on an even footing and it takes away from any embarrassment that someone might feel later that helps with inclusion for people to want to keep participating.*
>
> *—A private university student who identifies as African American, female, neurodivergent, and 25–34 years old*

The ideas of clearly stating the learning goals for a class, as well as providing the requisite vocabulary for understanding the day's course topics, are concepts embedded within UDL principles (García-Campos et al., 2020; *UDL: The UDL Guidelines*, n.d.). This allows for students with differing background knowledge and experiences to have a more equitable opportunity to succeed in the learning that is intended to take place during the class session. James Lang provides four additionally useful means of starting a course in his 2016 article in the *Chronicle of Higher Education* including open with a question or two, asking what was learned last time, reactivating what was learned in previous courses or life experiences, and potentially writing some of the above down (Lang, 2016).

Other students spoke about mechanisms for beginning a class that were not directly related to the course subject matter, but set a tone for the day that was conducive to learning in an inclusive manner.

> *Have a meditation period prior to class. They helped me get into the mindset of wanting to learn and kept me engaged throughout.*
>
> *—A small, private liberal arts college student who identifies as Black, male, and demisexual*

> *I had a teacher that opened every class with a question. Like "What's your favorite movie?" [or] "What superpower would you have?" and this made the class feel light-hearted and fun.*
> *—A public university student who identifies as White, female, and bisexual*

Personally, Derek has used a strategy that was shared with him at an educational workshop where at the beginning of the semester the instructor collects information on the favorite songs or musical artists of each student in the class, and then compiles these into a musical playlist where one of the songs will be playing each day as students enter the class. Derek has received positive feedback from students on this approach, and has seen visible excitement when a student recognizes "their" song being played. This not only helps solidify each student's belonging to the class community, but also recognizes their individuality, and has a positive side effect of motivating students to arrive to class on time or even a few minutes early.

These comments speak directly to what was addressed in Chapter 3, creating a welcoming environment that fosters a sense of belonging for the students, by showing how this can be built consistently within every individual class session, and have a meaningful impact for the students on what happens in class that specific day.

Reflection Question

- Do you have a particular way in which you start your classes, before immediately jumping into the learning for the day? If not, what could you implement in the future?

Time for Learning Activities

Student learning is a core outcome of higher education, and presumably the goal of most class sessions is that learning will occur within that class time. However, as discussed previously, there are different mechanisms by which students may be doing that learning. One such aspect students in our study spoke to was related to the pace of lectures, and specifically related to the time allowed for taking notes.

> *[One example is my] Music History instructor who flew through the notes so quickly that about a third or more of the class wasn't able to write down what they needed to study, or the quality of their notes suffered dramatically.*
> *—A part-time public university student who identifies as White, male, and first-generation*

In my chemistry class the delivery of the material was very fast paced and often hard to keep up or ask for help.

—A private university student who identifies as White, female, and first-generation

In a course where lecturing is implemented to foster learning, allowing adequate time for both selecting appropriate information and actually writing that information are critical for student comprehension (Piolat et al., 2005). Further, studies show that note taking facilitates recall of factual material and the synthesis of new knowledge, leading to higher performance on exams, especially when those notes are reviewed after the class (DeZure et al., 2001; Kiewra et al., 1991). However, the pace at which an instructor moves through class topics has a direct impact on students' ability to take quality notes, as indicated in the quotes above and in the literature. Indeed, it has been reported that while most students typically write 17 to 20 words per minute, instructors present at approximately 110 words per minute (Boyle et al., 2015). Further, obstacles to effective note taking may be exacerbated for students with disabilities (Boyle et al., 2015; Maydosz & Raver, 2010).

There are a number of actions and supports that, depending on the particular class, may help alleviate some of the barriers to note taking that some students face. One of these is simply recognizing, and often slowing, the pace at which material is presented to students. This may be done by slowing the speed of speech or by incorporating intentional pauses where students can catch up or collaborate with a peer, which has been shown to improve student comprehension and retention (DeZure et al., 2001). Additionally, providing handouts of the material (including lecture slides if being used), outlines of the lecture as scaffolds for note taking, or even full instructor notes for the lecture have shown benefits in certain contexts. Technological tools, such as Livenotes or shared documents, can allow for students to cooperatively take notes in real time, which can both improve the quality of the notes taken and help alleviate the need for each student to record the entirety of the notes themselves (Kam et al., 2005). UDL guidelines would further suggest providing models or scaffolding tools to support students in development of their notetaking skills would be an inclusive approach to overcoming certain notetaking barriers (*UDL: The UDL Guidelines*, n.d.). Specifically, for those with disabilities, the use of the above strategies and tools like recording devices, note taking services/scribes, interpreters, and even classroom setup can be beneficial in supporting note taking (Boyle et al., 2015; DeZure et al., 2001; Maydosz & Raver, 2010; Tincani, 2004).

One student from our survey specifically spoke to one of their instructor's varied approach to note taking as an inclusive experience for them:

[My] Biology teacher provided many ways to take notes.
—A private university student who identifies as Hispanic, female, and first-generation

Beyond note taking during lectures, time allotment is also an important aspect of inclusive teaching in active learning approaches, whether they be independent, paired, or in small groups. A student spoke to this when they stated they felt their instructors were not successfully inclusive in the following way:

In Spanish [the instructor will] give us 2 minutes to complete an activity.
—A public university student who identifies as African American, female, and pansexual

This was opposed to the positive experience a student noted whose Cell Biology instructor would take time to walk students through the worksheets they were asked to complete in class.

Specifically related to group work, a common practice used to overcome the challenge of limited time in the classroom is to have that group work occur outside of the class meeting times. While this can be a reasonable approach in certain instances, one of the students we interviewed spoke specifically to challenges presented by group work occurring outside of class.

I've also had experiences in STEM-based classes where we have done group work outside of class time, and I think that kind of structure as a part of the course is not necessarily inclusive. One because of student schedules. It's often hard for people to connect outside of class time in order to accomplish the tasks that they need to do, and also just kind of the nature of a lot of these classes, or that … not everyone is necessarily willing to commit the same amount of work to those projects, especially outside of class time. And I think that makes it really challenging for kind of students who want different things out of the class to work together, and then a lot of times the burden falls on a few students to kind of get the work done, or else it doesn't get done at all. I found that in two classes this semester … it's definitely frustrating, and I feel like even when talking to [the] professor they just kind of are like, "Well, that's group work. That's what we're doing. And you just need to figure it out."
—A small, private liberal arts college student who identifies as White, female, and having an unspecified disability

In this response, this student identified challenges in group work generally, differing student motivation and commitment, and also specifically related to it occurring outside of class time. They went on to note that,

when the group work was more structured and guided by the instructor, this was beneficial, and that the ability of the instructor to check-in when the group work is occurring in-class is one particular reason why allowing time for group work to occur during class is ideal.

Reflection Question

- How do you navigate the challenges of limited time in the classroom, while still providing the necessary time for effective student learning?

Time for Critical Thinking and Sharing

Students also spoke to the need to allow sufficient time for critical thinking and discussion, when they mentioned classroom experiences they perceived as non-inclusive.

> *One of my [English] professors gives no time after [asking] "anybody have any questions?" for people to even raise their hand.*
> *—A public university student who identifies as White, female, and asexual*

> *During a biology undergraduate class, my biology professor would try to make us have in-class discussions but never gave us enough time for it (less than 5 min). So it felt counterproductive.*
> *—A private university student who identifies as African/Asian, female, and first-generation*

This is opposed to when an interviewed student mentioned:

> *[The] instructor then really did a good job of making sure we had discussion time. Not only was discussion allowed, but it was allocated a lot of time and it was a very purposeful process to make sure that everyone could speak up if they wanted to.*
> *—A public university student who identifies as White, non-binary gendered, and pansexual*

These quotes highlight the importance of both giving students time to think critically before needing to respond, and then allowing appropriate time for their response and discussion that follows. The concept of using "wait-time" to allow for student thinking prior to discussion was described in our previous book and has been recommended as an inclusive practice in numerous publications (Addy et al., 2021; Penner, 2018; Rowe, 1972; Tanner, 2013). Beyond this, specifically allocating time within a class session for meaningful critical thinking and discussion, rather than thinking of it as something to

put in where it fits, can enhance the likelihood of it being a positive inclusive experience, as opposed to the opposite.

Time for Breaks

As noted in previous chapters, especially in class sessions that extend beyond 50 minutes, the importance of incorporating time for breaks to allow movement, or to take care of other personal needs, was highlighted as an inclusive experience in the following student quote:

> *Structuring the class with breaks allowed students to stretch their legs, use the bathroom, have a snack, and change activity to ensure that students' attention could come back to the class once the break was up.*
>
> *—A small, private liberal arts college student who identifies as White, agendered, and pansexual*

Supporting this contention, another student's response regarding a class experience that they found to not be inclusive:

> *Making [the students] sit still the whole time without regard to people who struggle to stay in one spot for long.*
>
> *—A public university student who identifies as White, female, and bisexual*

Ending the Class Session

> *We always had a task to complete at the end that was easy, yet beneficial to our learning topic.*
>
> *—A part-time public university student who identifies as White and female*

Much like how instructors begin a class session can be important to its inclusive nature, how they end a session is also critical. UDL guidelines would recommend providing time for self-assessment and reflection on the learning, as a mechanism of equity and to help students develop skills in self-regulation and executive functioning (*UDL: The UDL Guidelines*, n.d.). This can occur in a number of different manners, from daily minute papers where students are asked to write down the most important things they have learned during the class session, submitting their muddiest point, having a short task for students to complete, small group reviews, or having a brief guided discussion based on a relevant question for consideration (Angelo & Cross, 1993; Love, 2013; Tanner, 2013). While it can be challenging to preserve time at the end of a class session, practices like those mentioned above have been found to improve relationships and learning outcomes for students.

Reflection Question

- Do you have mechanisms for ending your class sessions? If not, how might you end them?

Timing in Asynchronous Online Courses

By their nature, in asynchronous online courses often there are not specified meeting times when the entire class gets together with their instructor. However, that does not mean that time management is not an important factor in these courses, only that it needs to be viewed a bit differently as students may engage with the material at their own pace. In situations where courses are constructive in nature, and have learning units confined to specific times and deadlines, each unit could theoretically be considered a class session. A number of the practices noted above can still be implemented. Strategies for successfully beginning and ending a unit, and for carefully considering the amount of time that students have to engage with learning materials, whether they be readings, videos, or otherwise, before being required to apply and respond, are all important.

A strategy that Derek has used to frame weekly learning units, is to record a short audio-visual welcome to the week, with a written transcript provided, which discusses what the class will be covering and how it relates to what was already learned. This allows students to understand the context of that week's learning goals and processes. Derek also provides an outline of a potential "plan for the week," which students can use to navigate the work that is expected to occur during that time frame, while acknowledging that each student has differing availability and schedules outside of the course, and that the plan can and should be modified to their needs. A challenge Derek previously faced in an online course that he taught was that some students would complete the work efficiently, while others would take large amounts of time completing the same work, or going further into the optional learning materials that Derek provided. To normalize this a bit, Derek now explicitly states what his expectations are for how long students should be spending on various learning activities, and encourages students to reach out to him if they find they are spending much more or less time, so that Derek can help them strategize and prioritize their learning, while still acknowledging that students might need differential amounts of time. Finally, while students interact with each other through discussion boards regularly within each week, Derek finds that one of the best ways to "close the loop" for a particular learning unit is for him, as the instructor, to provide substantial and meaningful feedback to each student on their work. This can be in the form of written feedback or, when possible and appropriate, even short, recorded audio-visual feedback, but regardless of format it is

important that students can observe that their work is being acknowledged. Clearly, this is more practical in courses with smaller class sizes as opposed to large courses or massive open online courses (MOOCs), so in those classes recording a short learning unit wrap-up may be a beneficial approach before moving on to the next unit.

Reflection Question

- If you have taught an asynchronous course, how have you navigated student time allotment when you do not meet as a class for specified sessions?

There Is No One "Right" Way to Conduct a Class, But There Are "Better" Ways

Examining the responses of over 350 students to our national survey asking them to provide examples of when their instructors did something well or not well with regards to inclusive teaching related to daily class activities, it became clear that there was no one right way for an instructor to conduct their class inclusively as responses varied from student to student, and even at times seemed to contradict each other. However, on closer examination, the themes above became apparent, and that oftentimes it was how a particular approach or activity was implemented that mattered, even more so than what that particular approach or activity was. And, in a number of ways, this is supported by the literature that has been shared above and the authors' personal experiences. With this in mind, three additional core contexts can be applied to the above themes, which speak to the "better" ways an instructor can conduct their courses, including: understanding the instructor's role in the class and class community, considering the impact of instructor personality and identity, and the importance of equity-minded flexibility within day-to-day instruction.

Understanding the Instructor's Role

Historically, the instructor's position in the classroom has been at the head of a hierarchical power structure, where the instructor makes the rules, determines what material will be presented, how it will be presented, and how students will be assessed. And commonly, in day-to-day learning, this meant an instructor in front of the class lecturing to students. As described throughout this chapter, inclusive instruction often shares some of this power with the students in the class, and this requires a re-envisioning of the instructor role in how they conduct their class sessions. Indeed, in 1993 Alison King coined the phrase "from sage on the stage to guide on the side"

to speak to this difference in instructor role, where the learning becomes student-centered and the instructor's role is more geared at facilitating students' interaction with the material and each other (King, 1993). This concept was shared in our student responses regarding what they found to be inclusive about how their courses were conducted, noting learning activities where the instructor wasn't the focus, but was willing to demonstrate, guide, or contribute as most appropriate.

> *Activities were often engaging and the professor was eager to jump into an activity or discussion with us.*
>
> *—A small, private liberal arts college student who identifies as White and male*

> *[The class was] mostly hands-on activities, but [the instructor] would always step-in if needed and demonstrate for the class beforehand.*
>
> *—A private university student who identifies as White and female*

Supporting this idea were the student comments that highlighted instructors who only utilized the "sage on the stage" role as non-inclusive practices; in one case, even when using a video documentary as a learning tool.

> *Some professors just lecture all class. I had one professor that put on a documentary, and then lectured over the documentary all class. It was too much and I couldn't focus on either.*
>
> *—A small, private liberal arts college student who identifies as White, female, and under the age of 18*

And extending this, a student specifically addressed how they believed the role of the instructor to be one of nurturing student engagement rather than simply lecturing, when they stated that the following was an experience that was not inclusive in an in-person, general education course:

> *[The instructor] did not vary activities, and when students sparked up a discussion (which is the point of these courses) did not nurture that conversation but kept enforcing his lecture.*
>
> *—A public university student who identifies as White, female, and first-generation*

Reflection Questions

- How do you view your role in the class, specifically related to in-class, day-to-day activities?
- How can you serve as a guide for your learners?

The Importance of Equity-Minded Flexibility

Complementing the concept of the instructor's role in the class as more of a facilitator of student engagement with the topic and skills being learned is the notion of the flexibility that the instructor should bring to the manner in which they conduct the class. The ability to adapt can and should be intentionally built into the design of the course, but also utilized in the moment of how the class is conducted. This flexibility is important both for ensuring equity in the course as well as nurturing student learning, as indicated in the previous quote where instead of the instructor being flexible enough to allow for student discussion, they defaulted back to their previous plan for lecturing. This can also be seen in additional quotes from students that referred to class experiences they found to be inclusive.

> *There was a lot of improvisation, as it was a jazz course, and [the instructor] did her utmost to ensure that all students felt comfortable playing alone in front of the group. If they weren't, she would often work with them outside of class time or simply not require them to play.*
>
> *—A part-time public university student who identifies as White, male, bisexual, and first-generation*

> *Classes are typically operated in an open forum type of situation. Each person is able to participate at their own comfort level.*
>
> *—A part-time public university student who identifies as White, male, and 45–54 years old*

> *One student pointed out that his religious holiday was not celebrated by the school. Our professor asked him if he would like the day off, and gave him extensions on deadlines.*
>
> *—A student who declined to provide demographic information*

In these quotes you can see an instructor demonstrating equity-minded flexibility, allowing students to participate as they are most comfortable, working with students to increase their confidence (outside of class if needed), and acknowledging the diverse backgrounds of their students and how that may impact their ability to be present in class and meet assignment deadlines. Other means of equity-minded flexibility converge with the use of varied approaches and the role of student choice in assessments addressed earlier in the chapter. One interviewed student, who identified as a female with an unspecified disability, spoke to this when noting how they felt included in a course where the instructor had created a particular assignment, but shifted that plan to allow for more student agency in choosing the format the assignment was completed in.

This was for fiction writing class … the prompt was originally just [to write] some sort of personal essay that you wanted to create. And a lot of people did a photo essay. People had the opportunity to do a video essay … speaking something more traditionally written, just kind of different opportunities for people to present the story that they were telling in whatever way was most comfortable for them, especially because these were specifically like non-fiction, personal anecdotes that people were sharing with the class, so that just made people a little bit more willing to share because they kind of got to choose what avenue they express that in.

—A small, private liberal arts college student who identifies as White, female, and having an unspecified disability

These student perspectives highlight that while it is certainly important for an instructor to have a plan for a course and particular class sessions, the ability to adapt as is most appropriate for the course and the student's learning in the course, was viewed by many as an inclusive practice that created equity.

Reflection Questions

- Think about a course that you teach or plan to teach. In what areas within specific class sessions, learning activities, or assessments could increased flexibility benefit your diverse student population?
- What specific challenges do you face as an instructor that can make flexibility in the class difficult? These could be related to course requirements, teaching experience, personal background, time in or out of the class, or other aspects.

The Influence of Instructor Personality and Identity

With all of the discussion on the diversity of our student populations, and the unique backgrounds and experiences that they bring to their courses, the diversity of the instructor and their unique personalities and identities are often not considered. At a broad level, instructor demographics can be considered. Based on a U.S. Department of Education study in 2021, of full-time faculty in degree-granting postsecondary institutions, there was a relatively even breakdown by gender, around 48 percent female and 52 percent male, though it is important to note that non-binary faculty were not reported. Further, nearly three-quarters of the full-time faculty were White (74 percent), with 12 percent Asian/Pacific Islander, 7 percent Black, and 6 percent Hispanic, with American Indian, Alaskan Native, and individuals of two or more races making up less than 1 percent (NCES, 2022). Less data is readily available related to the sexual orientation of faculty, but a 2022 report from the American Association of Medical Colleges noted that

approximately 3.9 percent of faculty identified as LGB+ (AAMC, 2022). While these diversity numbers have been increasing, overall diversity in the faculty ranks still lags behind that of U.S. college students. Further, the level of instructor diversity varies across academic disciplines. Beyond these demographic categorizations, each instructor does bring their own personality, identity, and background to a course and its teaching, and this individuality can impact both how they teach and how their teaching is received.

While students in our survey did not specify how the demographics of their instructors impacted their feelings of inclusion in daily activities, there were a few responses that may indirectly address these topics. Two students specifically mentioned non-inclusive experiences where their instructors made assumptions or did not recognize the breadth of diversity in their students and course material, an issue that is potentially exacerbated by a faculty community that does not adequately represent the student population.

> *[The instructor] assumed a single student background (White, American, English as a mother tongue, etc.), which left out students whose experiences did not match up with this and made it hard for them to contribute equally because of "insider knowledge" which one would know only if they had a history of education that focused on U.S. history and politics, had a sizeable grasp of U.S. political jargon, and had an understanding of American news stories in the past 15 years.*
>
> *—A small, private liberal arts college student who identifies as White, agendered, and pansexual*

> *The professor would only acknowledge diversity in the African American community and not other ethnicities such as Hispanic, Native American, etc.*
>
> *—A small, private liberal arts college student who identifies as White and female*

This speaks to how instructors navigate their own demographic background in the context of their course, and the impacts that has on their students' experiences. A mechanism to avoid situations like these would include the faculty sharing their own demographic background that they bring to the class, their unconscious and implicit bias, and how these shape their perspectives and understanding related to the course topics and approach to teaching about it. Then, inviting student voices, and welcoming them to share the same if they so desire, which can promote a more diverse set of ideas, thoughts, and perspectives around the course material.

The inclusive benefit of instructors sharing other personal connections that they have to the material, beyond demographics, was also addressed in one of our student interviews.

The best professor would be one that has a strong personality … and bring up small tidbits that they can relate the course that their own lives, so they feel [like] a little more human rather than an intimidating professor.

—A small, private liberal arts college student who identifies as Asian/Central Asian/Eurasian/European/White, transgendered, bisexual, and neurodivergent

So while every instructor brings their own personality, identity, and demographic background to each class they teach, leveraging those aspects while also acknowledging and incorporating a diversity of perspectives through the selected course materials and student engagement can support an inclusive experience for their students.

In online courses, particularly asynchronous online courses, sometimes one of the biggest challenges that can present itself is for an instructor to connect with students who may be thousands of miles away and completing classwork at various times. Indeed, one student who spoke about their online learning experience addressed this when they said a negative aspect related to inclusion was that:

[The instructor was] not personable.

—A community college student who identifies as White, female, and first-generation

This student's perspective could be the result of either the instructor not seeming "personable" or the instructor not connecting with this student (and potentially others in the course). Aspects of being approachable, caring, and invested in the students and their learning, are qualities that apply both to online and face-to-face courses. However, as noted above, if the issue has more to do with connection between the instructor and their students, then there are some challenges that are specific to the online format. Indeed, studies have shown that how connected a student feels to their instructor in an online course is positively related to their success in those courses and online programs (Jones et al., 2022; Joyner et al., 2014; Young & Bruce, 2011; Zajac & Lane, 2021). A common theme in a number of these studies that examine student–instructor connectedness in an online learning setting was the need for the instructor to be present. More specifically, factors that were most associated with student connectedness with their instructors were: contact with the instructor, that the instructor was responsive, and that they trusted their instructor to handle inappropriate interactions (Young & Bruce, 2011). Some specific strategies that have been shown to support this connectedness includes a video-based introduction, substantive feedback to student work, and using writing as a means of support (Diekelmann & Mendias, 2005; Martin et al., 2018). In addition to these strategies, ways

that Derek has sought to build connectedness between himself and his students in online asynchronous courses includes having a discussion thread devoted to personal introductions, which talk about personal interests and favorite hobbies, which both he and his students participate in, and can build on throughout the term. Additionally, offering the opportunity for one-on-one virtual meetings that last five to ten minutes, Derek has found to help "bridge the virtual gap." These meetings are certainly more manageable in courses with small class sizes, so in larger classes some of the other approaches noted may be more practical.

Reflection Questions

- What are aspects of your personality or identity (visible or invisible) that impact your teaching? What challenges might those present? Alternatively, how can you leverage those characteristics within your courses?
- If you teach online, what strategies have you used successfully to connect with your students? Or, if you have found that connection difficult, what can you try in the future?

Conclusion

In this chapter, we listened to student voices to identify what specific student experiences in the daily activities of how a course is conducted have impacted their perception of inclusion, and four major themes emerged: utilizing varied approaches can be beneficial, incorporating student voices is critical, time management matters, and that there is no one "right" way to conduct a class, but there are "better" ways to do so. These themes intersect, overlap, and complement each other in a number of places, and strategies for how to effectively implement them were provided both in face-to-face and online courses. Moreover, the themes found when analyzing student responses about the day-to-day activities in their courses also connected to those that were identified in Chapters 2 and 3, addressing course design and creating a welcoming environment.

In Part Two of this book, the focus will shift, building on what was learned from student perspectives on effective inclusive teaching practices here in Part One, to how instructors can interrogate their teaching practice, through self-reflection, observational feedback, and assessment and scholarship of teaching and learning projects.

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