Chapter 9. Confronting Ableist Texts: Teaching Usability and Accessibility in the Online Technical Writing Classroom

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Abstract: This chapter examines a series of integrated, pedagogical activities for addressing ableist structures, accessibility, and usability issues in the online technical writing classroom. By examining this specific case, this chapter provides a unique perspective on both integrating and teaching usability and accessibility principles in the online technical writing classroom, which has implications for OWI and PTC practitioners. The pedagogical process studied includes a description of the institutional context, the integration of Borgman and McArdle's (2019) accessible and strategic OWI principles from the PARS model, and the iterative design and revision of the online technical writing class via modeling, scaffolding, and other pedagogical strategies. This chapter extends the conversation regarding the complicit nature of technical writing classrooms in reinforcing dominant perspectives by offering an intentional pedagogy that resituates and reframes traditional PTC concepts, such as usability, and ties it explicitly to human-centered elements of accessibility, ableism, and equity.

Keywords: online writing instruction, online technical writing, ableism, usability, accessibility, iterative design

I began my academic career first teaching online as contingent faculty, only shifting to the classroom several years later. Thus, my pedagogical development has been influenced by industry experience as a technical writer and software trainer, by my experience as an online graduate student for the entirety of my master's program, and by the limited body of online teaching scholarship that existed at the time when I made the shift to university teaching (Ko & Rossen, 2003; Warnock, 2009). Indeed, each of these influences informed my approach to, comfort with, and interest in teaching online writing instruction (OWI). This passion and experience led me to a tenure-track position at Central Washington University (CWU) where I teach six out of eight yearly classes online. In the English Department, our most successful program is the Professional and Creative Writing B.A. that has over one-hundred and thirty online majors compared to just forty face-to-face majors; the degree can be completed fully online, in-person, or a combination of the two, but students must declare their modality as online or on-campus at the outset of the program. As an assistant professor

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of professional and technical writing, I teach more online sections of ENG 310 Technical Writing than any other course, so I focused my initial OWI redesign efforts on this course.

Several years and iterations of teaching ENG 310 were necessary for me to develop a pedagogically sound approach to addressing ableist texts, accessibility, and usability issues in the online technical writing classroom. During the redesign, I drew extensively on Hewett and DePew's (2015) guidance for integrating OWI principles alongside the digital pedagogy projects infused in my courses. (As a side note, I had the wonderful opportunity of being mentored by Dr. DePew during my doctoral studies.) Often, technical communication and professional writing instructors are tasked with teaching technology skills; however, as Walton (2006) posits, technical communication students must also learn how technologies should support human dignity and human rights and focus on the cultural and personal implications on a consumer's life. Likewise, in my classes, I want students to understand the cultural and personal implications of their documents, and the designs of those documents, on differently-abled bodies, and I also want my courses to provide students with strategies for addressing ableist practices.

In this chapter, I annotate a series of scaffolded assignments and discussion board activities intended to prepare students for the major projects in ENG 310; these annotations thereby highlight the accessible and strategic design elements that are embedded in the course and are informed by Borgman and McArdle's (2019) PARS model (personal, accessible, responsive, strategic). It takes several weeks for students to understand concepts such as usability, readability, accessibility, and universal design—common concepts in the disciplines of professional writing and OWI—but these concepts are resituated or reframed in my courses as essential to achieving usability, equity, and accessibility beyond the classroom. Jones (2016) argues that the field of professional writing and communication, "can be complicit in reinforcing which perspectives and whose experience are valued and legitimized" (p. 342), so a conscious pedagogy is necessary to infuse the human-centered elements of accessibility and equity into the technical writing classroom to avoid reinforcing and codifying such inequitable practices.

Therefore, this chapter demonstrates key aspects of the PARS model used in an online technical writing class, a class which has specific implications for OWI practitioners and the growing body of OWI scholarship. This chapter also contributes to the broader conversation about usable, accessible, and inclusive design in the composition classroom, thereby placing several academic fields or communities of practice into conversation with one another (e.g., technical communication, OWI, and composition studies). Finally, this chapter has specific implications for scholars and practitioners of professional and technical communication (PTC) because it offers metacommentary on both integrating and teaching usability and accessibility principles in the online technical writing classroom through modeling, scaffolding, and other pedagogical strategies.

Institutional Context

Central Washington University (CWU) is a small, geographically isolated, regional institution with a growing online student population. My primary teaching responsibilities as a tenure-track professor occur online, and I was chiefly hired to expand the department's online course offerings in professional and technical writing. Similar trends of growth in online student enrollments exist in other programs across campus, so even our service courses, such as ENG 310 Technical Writing and ENG 311 Business Writing, are most often scheduled in a fully online, asynchronous modality. I have taught ENG 310 for nearly fifteen years, including my time at CWU, so the iterative design aspects of the course, from a usability and student-centered design perspective, have been quite extensive and intentional (Greer & Harris, 2018).

One of the challenges of creating an accessible and strategic course design was to introspectively find ways to align the departmental or disciplinary goals (externally imposed) with my own pedagogical goals for the course (internal positioning). In the case of ENG 310, for instance, I was aware that none of the course outcomes explicitly addressed usability or accessibility, so it was necessary to strategically build these aspects into the major assignments and projects. As an additional challenge, the status of ENG 310 as a service course means it uniquely serves English and non-English majors as a required or elective course in thirteen different academic programs, most notably for business, engineering, teacher education, theatre design, and natural sciences programs. My goal became guiding students beyond the surface level understanding of usability and access that often pervades the technical communication classroom by integrating accessibility aspects into the course content as well as the course structure; this integration included a careful analysis of the learning management system (LMS), of its natural affordances, and of available system modifications for addressing accessibility concerns.

As Oswal and Melonçon (2014) point out, discussions of access are generally resisted in academia, and universal design (UD), and usability conversations taking place among industry professionals and PTC scholars often omit educational contexts. In my experience, these issues are even more frequent for online classrooms for which LMS and other technology platforms are already predetermined, hence requiring instructors to be intentional, strategic, and proactive in course design if they hope to build accessible, inclusive, and anti-ableist learning spaces. The hidden political agendas of course management systems have been addressed by other scholars and activists (Bjork, 2018; Oswal & Melonçon, 2014), and I extend these discussions with a critical examination of the Canvas LMS and its accessibility merits and of how the design of such systems can impede student success and create access barriers.

As part of CWU's institutional context, I was able to attend professional development opportunities for online teaching, which thankfully included courses in universal design (adapted through the framework of student-centered design for learning), creating accessible syllabi, and building accessible and inclusive cours-

es, thus leading to CWU's institutional certification for Master Online Teacher. I am grateful to our Multimodal Education Center (MEC), and the MEC's Director Chad Schone in particular, for offering such specialized training and for politicizing the educational platforms and pedagogical practices that continue to reify ableist systems of power. Much of my training and intentional redesign work was focused on ENG 310, the results of which I discuss below.

Strategic and Accessible Design

The accessible and strategic course design elements examined in this chapter are drawn from Borgman and McArdle's (2019) PARS model. I begin with strategic design because it lays the foundation of the entire course, serving as a framework for the accessibility aspects of the course. According to Borgman and McArdle (2019), in strategic course design, "you're creating a user experience for your students (the users) and you need to consider/plan for all of the elements of this experience in order to make it successful" (p. 72). My own pedagogical experiences have aligned with this definition of strategic design, and I also find that advanced, intentional planning is essential for accessible course design and iterative course revisions, which is a key component of user-centered design. In short, accessibility is easier to achieve when it is strategically incorporated into the course at the initial design phase.

Accessibility can be defined in several ways, but I draw from Borgman and McArdle's (2019) definition of accessibility which involves two main aspects: accessible structure and accessible content. Borgman and McArdle (2019) define accessibility as "the little things that instructors do that impede students" (p. 37), and accessible course design asks instructors "to use materials, software, websites, or tools that are not blocked via pay walls, international laws, hardware students might not be able to afford, or any other requirements that eliminate students and their ability to participate at a level necessary for success" (p. 36). This definition of accessibility attends to structural issues in a course, which is understandably pertinent in the online classroom due to the reliance on interfaces and screens. It is Borgman and McArdle's (2019) extended definition of accessibility to include accessible content that raises the stakes for OWI practitioners. As the authors state, "It takes time to learn about creating accessible *materials* for students with diverse abilities and it takes time to create an online course that meets the needs of a diverse student population" (p. 36, my emphasis). I use this expanded definition of accessibility in this chapter, thereby identifying the strategic approach used to incorporate accessibility into both the structure and content of ENG 310.

Strategic and Accessible Structure

As previously stated, ENG 310 is an introductory level course that serves a number of majors, so effectively modeling accessible and inclusive design was necessary through my own pedagogy and key pedagogical genres, such as the syllabus

and assignment prompts. I also needed to better understand the constraints and affordances of the Canvas LMS with regard to accessibility merits, including any strategies or applications that could be used to overcome barriers to access. Table 9.1 identifies the third-party tools, indeed a multifaceted approach, I used to achieve a strategic and accessible course structure for ENG 310. This table captures the most useful and prominent accessibility features for each program based on the instructor's personal experience but is not an exhaustive list.

Table 9.1. Third-party tools for strategic and accessible course design*

Accessibility Tool	Accessibility Features
Panopto	Screen reader support with structured headings Video captions and transcription: automatic and manual Automatic file conversion: from video to audio RSS feeds for video and/or audio files
Blackboard Ally	Automatic file conversion: HTML, PDF, electronic braille, audio, ePub, Beeline Reader Accessibility score for each file: uses clear percentages in color-coded format (red to green) with suggestions for improvement Accessibility report for the entire course: identifies lowest scoring files and those that are easiest to fix
Adobe Acrobat Pro	Standard features: structured headings, captions, alternate text for images, detects scanned text Acrobat Pro's Make PDF Accessible Tool: wizard that automates some steps and walks you through items that need attention Acrobat Pro's Check and Report Accessibility Tools: checks the document and produces a report with suggested accessibility improvements
Microsoft Word	Standard features: structured headings, captions, alternate text for images MS Word's Accessibility Checker: checks the document and produces a report with suggested accessibility improvements MS Word's Readability Statistics: outputs a readability report using several readability measures/formulas to address accessible language

** This figure captures the most useful and prominent accessibility features for each program based on the instructor's personal experience but is not an exhaustive list.*

To serve as a model for students in accessible design, I took great care to use structured headings, captions, alternate text for images, and varied activities to attend to multiple learning styles, as advocated by usability and accessibility scholars in OWI (Borgman & Dockter, 2018; Borgman & McArdle, 2019; Oswal & Melonçon, 2017). I also varied the types of student-instructor interactions by providing both written and audio feedback, video lectures, and a required one-on-one conference that is the newest addition to the course in response to ESCALA's professional development training for inclusive, culturally-responsive pedagogy

at an emerging Hispanic Serving Institution (HSI). The required synchronous conference, for instance, was yet another opportunity for formative assessment to gauge student's understanding of course themes and expectations for major projects, which has since led to an unexpected increase in communication with students via email and overall higher grades in the course. It also provided an opportunity to personally connect with students and address any barriers to success, which students would often be reticent to share over email.

As Borgman and McArdle (2019) posit,

> Accessible instruction is about more than setting expectations and making you and your course materials accessible to your students, it's also about creating a community of inclusion in your course and inviting students with all levels of ability to interact with you in a way that works for them. (p. 40)

Even though the major projects were identified before the class begins, the activities and interactions were strategically designed with accessibility in mind through opportunities for optional group work, integration of multiple learning styles, examples of student work for each major assignment, and themed discussion activities about accessibility and confronting ableist structures. In short, I had started to move toward an ideology of inclusion, which starts with the tenets of accessibility and participatory design as asserted by Oswal and Melonçon (2017).

I also attended to structural accessibility components using the tools available in the Canvas LMS. Canvas provides several third-party accessibility programs, such as Panopto and Blackboard Ally, both of which provide screen-reader support and limited file transcription-and-conversion services to students. Panopto includes video captions that can be configured to be integrated automatically or via manual file upload; the video recordings are automatically converted to audio files which can be shared individually or published as an RSS feed for bulk sharing. I also used Panopto for assessment purposes, which appealed to different learning styles by providing feedback in alternate formats, such as a screencast for essay feedback or a podcast for feedback on new media projects. For example, when I used Panopto for video feedback, the file shared with the student was complete with captions and a transcript—operating as both a model of accessibility (for students) and as a natural outcome of accessible pedagogy. And while Canvas has its own proprietary audio and video feedback capability, neither tool attends to accessibility aspects such as automated captions, audio transcript, and screen reader support, which is why an interrogation of the LMS system is so essential to strategic and accessible course design.

Blackboard Ally is another strong tool for strategic and accessible course design. It automatically converts written files to several alternative formats for expanded accessibility support for students (e.g., HTML, ePub, and audio). Additionally, Blackboard Ally runs an accessibility check on all instructor files uploaded to Canvas—such as the syllabus, assignments, and supplemental readings—and scores each file based on its use of structured headings, alternative image

tags, and other file attributes. One outcome of using the Blackboard Ally feature has been that online instructors at CWU were given access to the full version of Adobe Acrobat Pro because accessible document elements, like structured headings, are only guaranteed to be preserved when converting files using the full (i.e., paid) version of Adobe Acrobat Pro. (We are still advocating for the software on our personal computers, especially for those of us who teach nearly exclusively online.) The institutional goal is to achieve fifty percent accessible content in each course, but I personally strive for ninety percent or higher—a numerical value I can now make sense of thanks to Blackboard Ally and that I can improve upon thanks to Panopto and Adobe Acrobat Pro. So, I strategically designed the course by uploading assignments in advance to allow myself enough time to address any accessibility issues that could occur, and I announced Blackboard Ally features to students at the start of each quarter, thereby demonstrating Borgman and McArdle's (2019) elements of strategic and accessible course design.

Strategic and Accessible Content (or Examining Your Discussion Board Activities)

The second aspect of a strategic and accessible course is the critical examination of course content. In ENG 310, I focused my redesign efforts on the weekly discussions because I wanted them to become more active, lively, and focused learning spaces because they are always where most student-to-student interaction takes place. In order to create that space, I had to ask some tough questions of myself about the way the class discussion genre functioned, generally speaking, and how I envisioned it functioning in this particular course. Specifically, I approached the class discussion space as a "contact zone" (to borrow a term from Pratt, 1991) that could either work to dismantle or reinforce systems of oppression and overt discrimination.

Table 9.2 shows the weekly discussion topics and activities for a 10-week online, ENG 310 Technical Writing course. Pedagogical goals and accessibility aspects were captured from the researcher's initial course design notes, and the iterative design process was informed by student feedback and university-based training opportunities.

As Cherney (2011) points out in "The Rhetoric of Ableism," ability is a social construct, and ableism is a social practice that is learned over time, and both are reinforced by those around us. Cherney calls on us to name ableism because doing so reveals its systems of power, thereby allowing us to reform those systems and take political action. In response to this call to action, I examined the "norms" of the online classroom, such as the discussion genre because of its assumed stability and appeal to traditional pedagogy that can potentially blind us to its inherent political structures. As is often the case, online discussion is usually limited to a sort of normalized "read and respond" practice, which arguably values written literacies over visual or auditory literacies, thus privileging certain bodies over others. In contrast, I wanted students to begin visualizing the discussion board as a hands-on lab of

sorts, where they could practice and model accessible and inclusive document design strategies. Indeed, such a change required the rejection of an ideology of normalcy in favor of an ideology of inclusion (Oswal & Melonçon, 2017).

Table 9.2. Weekly discussion topics and activities in ENG 310*

Week #	Discussion Topic or Activity	Pedagogical Goals	Accessibility Aspects
1	Introduction + Contextualize TW in their careers	Reflection, Community Building, Disciplinary Identity, Research	Positionality, Inclusion
2	Cognitive Approach to Readability: How Readers Actually Read Documents	Reflection, Community Building, Scaffolding	Positionality, Privilege, Inclusion, Usability, Audience-centered
3	Information Design & Usability Testing of Everyday Instructions	Personal Experience, Scaffolding, Community Building, Visual Literacy	Positionality, Usability, Inclusion, Power, Ableism, Audience-centered
4	Use Readability Measures in MS Word on the Instructions Project & Share the Results	Hands-on Activity, Reflection, Scaffolding, Community Building	Positionality, Privilege, Power, Inclusion, Usability, Ableism, Audience-centered
5	Explain a Technical Process using a flowchart (from the instructions project)	Hands-on Activity, Reflection, Compare Contrast, Community Building, Scaffolding, Visual Literacy	Positionality, Power, Usability, Audience-centered
6	Research the Code of Ethics and Ethics-related case or incident from your field	Research, Reflection, Disciplinary Identity, Scaffolding	Positionality, Inclusion, Audience-centered
7	Proposals and Progress Reports, Academia vs. the Workplace	Reflection, Disciplinary Identity, Scaffolding, Compare/Contrast	Positionality, Audience-centered, Usability
8	Use the Accessibility Checker in MS Word on the Occupational Report & Share the Results	Hands-on activity, Reflection, Scaffolding, Community Building, Visual Literacy	Positionality, Privilege, Power, Usability, Ableism, Audience-centered
9	Presentations and Avoiding Death by PowerPoint	Visual Literacy, Reflection, Community Building, Scaffolding	Positionality, Inclusion, Power, Usability, Ableism, Audience-centered
10	Looking Forward. Looking Back: Personal Growth	Reflection, Community Building, Disciplinary Identity	Positionality, Privilege, Power, Usability, Inclusion

** Pedagogical goals and accessibility aspects captured from researcher's initial course design notes and iterative design process informed by student feedback and university-based training opportunities.*

Table 9.2 captures the planning process used for scaffolding the weekly discussion activities leading up to the two major course projects, including my explicit attempts to incorporate accessibility aspects. I made the process of scaffolding largely public and visible so that students could work together building a sense of community and consensus with regard to identifying ableist texts and practices. Another pedagogical goal of strategic and accessible course content is to increase student interaction and engagement by requiring different, and often overlapping, modes of critical thinking—reflection, hands-on exercises (kinesthetic learning), community building, and disciplinary identity to name a few. These modes have implications for OWI practitioners and PTC scholars since strategic, student-centered course design always includes several active learning domains (Altay, 2014) that must be effectively balanced by the instructor to enhance student learning: *cognitive*, or knowledge acquisition; *affective*, or changing attitudes; and *psychomotor*, or helping students gain new skills in a discipline.

As a PTC and OWI scholar, I must always determine the distribution of active learning domains across the entire course design depending on the alignment between course outcomes and my pedagogical goals for the course. In the case of ENG 310, some of the psychomotor activities included using specialized features in MS Word (e.g., readability statistics, accessibility checker, table of contents generator, structured headings, etc.), but I was equally concerned with students' cognitive understanding of course content and their affective learning domain as it related to accessibility issues and a more general understanding, and appreciation, of technical writing in their respective disciplines.

Extended Discussion Board Example

Figure 9.1 shares a popular discussion activity in the class that required students to run MS Word's Accessibility Checker against a draft of their occupational report and discuss the results with classmates. This discussion board activity was meant to gauge a student's current epistemological state with usability course themes and confront practices leading to ableist texts in terms of structure. Some common discussions between students and opportunities for improvement included adding alternative text for images, improving text contrast (foreground/background), and using MS Word's heading feature so that it appeared to screen readers—issues that were discussed from an accessibility and human advocacy perspective.

This exercise may seem simple enough for PTC scholars and practitioners, but it is a highly engaging activity for new participants seeking entry into our discourse community. The activity simultaneously engages students in all three active learning domains—cognitive, affective, and psychomotor—because the assignment frames other activities and assignments in future weeks of the course and is fundamental in changing students' individual perceptions of accessibility and their active role in dismantling ableist structures.

This discussion activity, likely aided by its public nature, forced students to confront their ableist design decisions in a thoughtful, purposeful, and meaningful way. To be specific, I witnessed first-hand as students became aware of the 3P's: positionality, privilege, and power (as defined by Walton et al., 2019) as they composed and revised their documents. As stated by one ENG 310 student (shared with permission):

> This was a great week of learning for me as I wasn't aware of the accessibility tool before this week, and it's clear that I made several embarrassing assumptions while designing my text for readers [**positionality and privilege**]. The accessibility check is an excellent, important resource . . . I want to assure *equity* of readability in the media I create, and that will require *taking steps* to assure everyone, particularly those with *different abilities*, can read it in their preferred way [**power**]. (my emphasis)

The Accessibility Check feature in Microsoft Word is a helpful tool to measure the level of accessibility and usability merits in your document and the items that can be improved. For example, you may have attempted to include descriptive headings and subheadings in your occupational report, but unless you've used MS Word's structured headings feature, the document is NOT accessible. In other words, your document still has an ableist structure: it is not *accessible* or *usable* because it is not *readable* or *scannable* for your intended audience.

Our **call to action** this week is to use this opportunity to improve the accessibility merits of our work by removing any ableist structures that might still exist.

1. Run MS Word's Accessibility Check feature on your report draft.
2. Post a screenshot of your results to discuss with the class.
3. Questions to consider this week: What do the results show in terms of the accessibility and usability merits of your report? How does this activity relate to other accessibility themes in this course (usability, readability, accessibility, universal design, avoiding ableist structures, etc.)? How and where can you improve the accessibility merits of your report (before the final draft is due)? How might you see yourself using the accessibility tool in the future?

The initial post is due **Thursday**. Two responses on or before **Sunday**.

Figure 9.1. Abbreviated version of a hands-on Discussion Board activity in an online, 10-week version of ENG 310 Technical Writing. The complete assignment links to instructions for locating the Accessibility tool in MS Word and for taking screen-shots.

This student, coincidentally, is a major in the B.A. in Professional and Creative Writing, but this reflection is representative of the call-to-action that many students took up in response to the explicit teachings against ableists structures in this course. Students were simultaneously aided by their classmates in their pursuit of solutions to improve the accessibility merits of their final reports, as

they all worked toward a shared goal of infusing anti-ableist practices, inclusion, and equity into the online technical writing classroom.

Conclusion

I write this piece as a scholar of PTC, practitioner of OWI, and interested party in student-centered design for learning. And, most importantly, I write this piece as a disabled woman of color, living with a chronic illness and mild vision impairment, who has experienced my fair share of inaccessible and exclusionary online course content as a student. It is my belief that an accessible course is an inclusive course, and instructors focused on inclusive course design have already started the necessary and important work of dismantling systems of oppression.

As Borgman and McArdle (2019) share with readers, "what we were doing in our online courses was architecting an experience for our students and for ourselves" (p. 3). The strategies discussed in this chapter for accessible and strategic design are advocating for just that—architecting an experience. To architect anything, it seems, takes a lot of research, planning, and patience, which is what this chapter calls us to do as practitioners of OWI and PTC. I recognize that institutional training in accessible course design is not as widespread as it should be, which speaks to the need for educational reform and increased professional development opportunities for faculty, even if those opportunities exist beyond the walls of the academic institution we call home.

However, we have an imperative to do so—to reach beyond our institutions for training and support—because failing to do so means the very spaces where we attempt to liberate students, so to speak, could be silencing their voices and reifying oppressive power structures. This chapter outlines my own personal attempt at confronting ableist texts and exclusionary social practices so that the notion of accessibility becomes embedded in the core fabric of the course rather than discussed or treated as an after-thought. I have learned that in order to teach accessibility, the assignments must address the rhetoric of ableism in a coordinated manner alongside practical strategies for overcoming systems of oppression. I must be explicit, intentional, and strategic in these efforts because it is only through the use of rhetoric that "we can reform ableist culture" and move toward political action (Cherney, 2011).

Final Thoughts and Application

This chapter draws on Borgman and McArdle's (2019) accessible and strategic elements of the PARS approach to encourage readers to think strategically about creating accessible courses and learning experiences with their students. In the spirit of this edited collection on practical OWI strategies, I would like to identify some key implications of this chapter to aid readers in both integrating and teaching accessibility in the online classroom.

- Strategic design begins with accessibility. As other scholars have already stated, incorporating accessibility later in the class is more difficult than to just begin with it at the outset (see Table 9.1 for strategies on building accessibility into the fabric of the course).
- To successfully integrate and teach accessibility requires intentionality on your part. And this intentionality will take time (i.e., student feedback and the student-centered iterative design process [see Greer & Harris, 2018]). You must learn to respect and value this process as you do the writing process.
- This new pedagogical approach often requires you to challenge ableist practices and ableist systems of power at your institution, in your department, and within your own classroom. For institutions to ignore access and accessibility issues is not uncommon, so you need to prepare for resistance.
- Educate yourself on the politics of the interface (Bjork, 2018; Oswal & Melonçon, 2014). Technology is not apolitical, which means that your institution's LMS plays a role in reinforcing political structures such as race, class, gender, and ability. You will have to expose them and to teach your students to do the same.
- Consider using a grid or matrix to strategically plan your accessible course design. Doing so will help reveal connections between course outcomes, your unique pedagogical goals, and the accessibility aspects you want to feature in the course (see Table 9.2).
- Evaluate your pedagogy for its accessible and inclusive merits. Some effective practices for strategic and accessible course design include modeling (both of your own and student's work), scaffolding, varying your student-professor interactions, and valuing different learning styles (through varied assignments). This list is not exhaustive, and you are encouraged to seek out specialized training and professional development opportunities when they become available.
- Familiarize yourself with the active learning domains (cognitive, affective, psychomotor) and how they are represented in your overall course outcomes (Altay, 2014). You may need, for example, to shift some of the smaller, privately assessed assignments to the public discussion forum to increase learning, engagement, or to better address one of the three active learning domains.
- Critically examine how you use class discussion, and other routine genres, in your online classroom and whether class discussions can be revised to be more inclusive and accessible. Some strategies for varying class interaction include reflection, hands-on activities (kinesthetic learning), and community building exercises (see Figure 9.1).

- Don't be afraid to blend synchronous and asynchronous activities and assignments, as they make sense for your classroom, in order to create a "community of inclusion" described by Borgman and McArdle (2019). Students will embrace the change if you give them valid reasons.

This list of key implications offers a starting point for those instructors new to accessible and strategic course design or those who are currently undergoing the iterative redesign process. These practical strategies are intended for OWI and PTC practitioners but could likely be useful in other contexts as well, such as online training and development classes, due to the increasing significance of accessibility issues in educational spaces.

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