THE INSTRUCTIONAL DESIGN TRAINER'S GUIDE

AUTHENTIC PRACTICES AND CONSIDERATIONS FOR MENTORING ID AND ED TECH PROFESSIONALS

EDITED BY JILL E. STEFANIAK
AND REBECCA M. REESE

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The Instructional Design Trainer's Guide

Authentic Practices and Considerations for Mentoring ID and Ed Tech Professionals

Edited by
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11 Inclusive Online Courses

Universal Design for Learning Strategies that Impact Faculty Buy-In

Amy Lomellini and Patrick R. Lowenthal

Chapter Overview

Record numbers of diverse students are enrolling in online higher education. As a result, institutions find themselves challenged to meet the needs of students with disabilities, English language learners, non-traditional learners, and those without consistent access to the technology required for online learning. Instructional designers have the potential to support institutions to meet this challenge by helping faculty implement inclusive course design strategies, such as Universal Design for Learning (UDL), in the online courses that they develop. Unfortunately, most graduate programs lack courses in designing accessible instruction in general or more specifically on effective ways to address common misconceptions surrounding accessibility. This chapter explores the historical approach to accessibility and proposes a shift to a social model of disability focusing on shared responsibility for inclusive course design. The chapter analyzes common faculty misconceptions about accessibility and presents effective ways to connect process to practice by providing strategies for instructional designers to have difficult conversations that can ultimately garner increased faculty buy-in for UDL-based initiatives.

Guiding Questions

1. What do instructional designers need to know about accessibility and Universal Design for Learning?
2. How can instructional designers start conversations about accessibility at their institutions?
3. What strategies can instructional designers take to address misconceptions about accessible course design?
4. How can educational technology and instructional design graduate programs help prepare instructional designers to address diverse student needs and design inclusively?

Case Study

Jamie recently graduated with a Master of Educational Technology degree and landed a job as an instructional designer. Jamie has the basic technical knowledge to create accessible instructional materials; however, Jamie is unfamiliar with managing difficult conversations about accessible course design. Faculty often express feeling overwhelmed with the thought of accessibility, the perceived extra work, and

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confusion over their responsibility when working with students with disabilities. While Jamie can fix some of the accessibility issues, Jamie thinks a better solution is to create a culture where everyone is invested in designing accessible online courses. But where should Jamie begin?

Jamie's story is common among instructional designers. In this chapter, we will explore accessibility-related scenarios that instructional designers like Jamie may face and provide evidence-based strategies on how instructional designers might respond in similar situations.

Higher education has a diverse student body than ever before (Hartsoe & Barclay, 2017; Izzo et al., 2008; LaRocco & Wilken, 2013). As such, faculty increasingly find themselves, as Izzo et al. (2008) explain, "challenged to recognize the impact of multiculturalism in the classroom, embrace a broad age range of students, and address the needs of students with disabilities" (p. 60). This challenge is daunting because most faculty are subject matter experts who were never taught how to teach, and even those with some background in teaching have little to no experience with supporting a diverse student body or designing accessible instruction (Linder et al., 2015; Izzo et al., 2008). Further, as content experts who are traditionally rewarded and promoted for scholarship, many faculty report that they simply do not have the time to attend training and/or to develop expertise in accessible course design (Trinkowsky, 2015).

Increasingly institutions of higher education employ instructional designers (IDs) to help faculty design and develop blended and online courses (Decherney & Levander, 2020; Kim, 2015). These instructional designers not only play critical roles in the design of online courses, but also as resources uniquely poised to collaborate with faculty to create online courses that are accessible and usable by the most possible students. However, we contend that few graduate programs in educational technology/instructional design adequately prepare students on how to design accessible online courses or how to have difficult conversations with faculty about the importance of designing accessible courses. Developing expertise like this is critical for instructional designers because many faculty have misconceptions about the importance of designing accessible online courses (Tobin & Behling, 2018). Thus, the purpose of this chapter is to explore some common misconceptions about accessible online course design in higher education and to provide potential strategies IDs can use the next time they find themselves working with a faculty member who may be unfamiliar with inclusive design strategies.

Background

Historical Approach to Accessibility in Higher Education

Most faculty tend to think of issues about accessibility as the responsibility of the office of disability services found on most campuses (Tobin & Behling, 2018). Centers like these began to emerge on campuses during the late 1940s and early 1950s (Madaus, 2011). These centers developed a process of supporting students with disabilities that was rooted in the medical model of disability where students have to provide medical documentation to apply for accommodations (Singleton et al., 2019). The medical model argues that disability is a problem that needs to be fixed within a person's body (Thornton & Downs, 2010, p. 72). With this type of model, students are required to initiate requests by self-disclosing details about their disabilities to faculty and disability services professionals every semester. In many ways, this process has remained unchanged for decades. However, COVID-19 has further complicated this process with the majority of courses being moved into some type of remote or online format (Legon et al., 2020). Students in need of accommodations on most campuses have found it harder than ever to make medical visits to obtain the proper medical documentation sometimes needed to request the accommodations they need.

This medical model, which essentially views a disability as an individual student's problem, we posit is simply ineffective and outdated. The model's reliance on requesting accommodations is problematic because most students with disabilities choose not to self-identify that they have a disability or need an accommodation for a myriad of reasons (Izzo et al., 2008; Roberts et al., 2011). Further, according to the World Health Organization (2020), disability is now thought to stem from the interaction between a person's health and any number of environmental factors, thus aligning more with a social model of disability that shifts the onus of accessibility from any individual onto the environment. In the social model, disability becomes another part of a person's diversity and not something negative that needs to be fixed (Thornton & Downs, 2010). Given this perspective, supporting all learners and designing accessible online courses requires shared responsibility among students, faculty, disability support professionals, instructional designers, and higher-level administrators (Singleton et al., 2019; Tobin & Behling, 2018).

Modern Approach to Accessibility in Higher Education

One popular framework that can assist in designing more accessible online courses is Universal Design for Learning (UDL). UDL is a conceptual framework developed in the 1990s by the Center for Applied Special Technology (CAST) intended to optimize teaching and learning for all (CAST, 2020). In the following section, we provide a brief overview of UDL.

Universal Design

UDL stemmed from the architectural concept of Universal Design that emphasized how certain designs such as curb cuts can benefit not only people who use wheelchairs but also others (e.g., people on bicycles, or using shopping carts, and rolling luggage) (Tobin & Behling, 2018). Universal Design gained popularity because it coincided with major historical events in the United States such as deinstitutionalizing people with disabilities, the U.S. civil rights movement, and subsequently Section 504 of the Rehabilitation Act of 1973, and the Americans with Disability Act (ADA) of 1990. In fact, Tobin and Behling (2018) argue that today, 25 years since the ADA, "we seldom think twice about the universal design that surrounds us" (p. 2).

Universal Design for Learning (UDL)

The creators of UDL posited that curriculum is the problem that needs to be addressed, not a person's body (Tobin & Behling, 2018). Thus, they strived to apply the principles of Universal Design to learning. Aware that no two students learn the same, they were interested in providing students with choices that could improve their learning. They built on the idea of planning for variability and created what we know today as the UDL guidelines.

UDL consists of three main guidelines that "offer a set of concrete suggestions that can be applied to any discipline or domain to ensure that all learners can access and participate in meaningful, challenging learning opportunities" (CAST, 2020, para. 3). The three main guidelines are multiple means of engagement, representation, and action and expression. UDL moves beyond merely ensuring access to content like many accommodations. Instead, UDL emphasizes both supporting and challenging learners (Gronseth, 2018). When learning is designed with variability in mind from the start, UDL can reduce the need for individual accommodation and improve learning for all students including those with and without disabilities (Tobin & Behling, 2018).

UDL was adopted faster in K-12 than in higher education (Tobin & Behling, 2018). This could be in part because of the lack of enforcement of accessibility laws and procedures compared to K-12 education (Seok et al., 2018). In addition, K-12 teachers have been trained on how to make accommodations and modifications for students with disabilities, while most higher education faculty have not been similarly trained (Seok et al., 2018). Instructional designers in higher education, thus, find themselves in a unique position to be able to address this gap and find ways to implement UDL in online course design and improve the accessibility of the online courses colleges and universities offer. But to make this a reality, graduate programs need a stronger focus on training future instructional designers in UDL, accessible course design, and strategies for working with faculty and administrators.

Instructional Designers and Accessible Instruction

The field of instructional design began in the twentieth century and gained popularity during World War II with training designed for the military (Larson & Lockee, 2014). Since that time, the field of instructional design and specifically the role of instructional designers has changed and grown. Instructional designers today do not simply design instruction. Instead, they often take on a variety of roles, including "facilitators, mentors, trainers, collaborators, reviewers, and mediators, and more likely some combination of those" (Miller & Stein, 2016, para. 6). However, despite taking on these different roles, the job of an instructional designer still centers around designing instruction – instruction that since the COVID-19 pandemic, is more often than not offered in a blended, remote, and/or online learning format.

Designing instruction in a blended, remote, and/or online learning format requires instructional designers, more so than in the past, to have different competencies, including skills in making content and courses accessible to students (Park & Luo, 2017). In fact, common quality assurance frameworks such as Quality Matters, the Open SUNY Course Quality Review Rubric (OSCQR), and California State University Quality Online Learning and Teaching (QOLT) all focus to some degree on accessibility and UDL (Baldwin et al., 2018; Baldwin & Ching, 2019). However, despite this increased focus on accessible course design, we have found that many instructional designers are not prepared to address the kinds of questions and misconceptions surrounding accessibility that they may face when working with faculty and administrators. The following sections of this chapter will explore some of these common misconceptions and provide evidence-based strategies instructional designers can use as they continue to support faculty, administrators, and their institutions as a whole design accessible blended, remote, and online courses for all students. However, we will first start with a case to help ground our discussion in practice.

Professional Practice Revisited

No One in my Course has a Disability

When working with a faculty member, Jamie stressed the need to make all content accessible to students with disabilities. The faculty member, though, questioned the need for this. The faculty member claimed that they would know if a student was disabled and added that students cannot have a disability in this field.

The number of students reporting a disability in higher education has risen from 11% in 2010 to 19% in 2015 (National Center for Education Statistics, 2019). The most reported category of disability in higher education is learning disability (Gladhart, 2010). Learning disabilities along with many other disabilities – such as psychological, attention deficit hyperactivity disorder (ADHD), and deafness – are largely invisible. This suggests that faculty cannot rely on seeing or knowing which students have a disability, even when teaching face-to-face.

Research has shown that students with disabilities are taking online courses (Roberts et al., 2011) and most faculty have been notified of a student accommodation request at least once (Gladhart, 2010). Some suspect that more than half of all students are facing other types of invisible barriers to the successful completion of courses – such as having family commitments, grieving a loss, demanding work schedules, and mental health challenges (Tobin & Behling, 2018). English learners and students relying on mobile devices face additional barriers to online learning (Bergey et al., 2018; Magda & Aslanian, 2018). The effects of COVID-19 have likewise exposed inequalities in internet access, technology availability, and home environments conducive to effective learning (Basham et al., 2020). In other words, it is almost impossible to know who may have a disability or any other factors affecting student success. Therefore, faculty need to assume that some of their students will have a disability or other barriers to success and therefore should design accessible online courses from the start.

Instead of focusing on students' disabilities, instructional designers like Jamie could focus on the inherent variability in all students' background knowledge, experiences, and current situations. UDL principles are based on improving course design for all learners, including those who may not have disabilities or those who are ineligible for accommodations. For example, optimizing relevance by designing authentic learning can make it more engaging and motivating for all students (CAST, 2020; Quality Matters, 2018). Any strategy to reduce barriers in the online environment will benefit all learners, regardless of their situations.

There is Nothing I Can Do If Students Don't Disclose a Disability

While working with Jamie, a professor expressed a desire to ensure their content is accessible but felt they needed to wait until a student discloses a disability to act. This perspective equates accessibility with retroactive accommodations, or "making one change, one time, to help one person" (Tobin & Behling, 2018, p. 5) and is very common in higher education.

Research suggests that most students with disabilities choose not to disclose their disability (McAndrew et al., 2012; Schelly et al., 2011). Potential reasons include a lack of understanding of the processes, convoluted requirements including extensive medical documentation, feeling uncomfortable interacting with faculty or disability services professionals, fear of being stigmatized by faculty and peers, and a desire to start college without labels experienced in earlier educational settings (Roberts et al., 2011). It is likely that some students are struggling to be successful and not necessarily seeking support.

Faculty often become frustrated trying to meet the "needs of an increasingly diverse and technologically expectant student demographic" (Izzo et al., 2008). Instructional designers like Jamie should weave UDL and accessibility into all phases of course design and faculty consultations so that it becomes ingrained in the process rather than something addressed retroactively at the request of a student with a disability (Linder et al., 2015). For example, Jamie could focus on how representing content in multiple ways, such as providing short videos with captions and the accompanying slides could benefit all learners. Research suggests that students today use slides to take notes, enable captions to improve their focus in noisy environments, and listen to the audio while driving to work or school (Kumar & Wideman, 2014; Morris et al., 2016; Tobin & Behling, 2018). Using this strategy, Jamie can illustrate how planning for variability can support diverse students including those with and without disabilities.

Accessibility is Not my Job

While working with Jamie, an instructor reported feeling overwhelmed by their teaching responsibilities on top of their full-time job. The instructor viewed accessibility as beyond the scope of their teaching responsibilities and something that should be addressed by the Office of Disability Services.

Ensuring that all students can effectively use instructional content and achieve learning objectives is the purpose of teaching. It is everyone's responsibility to ensure online learning strategies are beneficial and sustainable for students with all types of disability (Fichten et al., 2009). Building in accessibility from the start can serve a wide range of students, even beyond those eligible for accommodations. Designing multiple ways for students to perceive materials, engage with content, and express knowledge aligns with good teaching practices that support all learners. Linder et al. (2015) recommended positioning accessibility as pedagogy instead of something extra for individual students.

Connecting Process to Practice

Now more than ever, faculty are being asked to forget how they were previously taught and to transform their teaching strategies to better align with best practices for designing online courses. They are being asked to learn new technologies, incorporate new instructional strategies, be sensitive to copyright issues, and address accreditation concerns in addition to thinking about UDL (Singleton et al., 2019). In addition, many faculty teaching online courses are adjuncts with other full-time commitments, lower compensation, and less time to design quality online courses (Singleton et al., 2019). These concerns make the relationship between faculty and instructional designers like Jamie of utmost importance in the design of quality online education. When faculty and instructional designers work together, it creates "an optimal environment for developing rich, dynamic, and interactive online courses" (Puzziferro & Shelton, 2008, p. 119). This collaborative relationship relies on faculty to provide subject matter expertise and instructional designers to provide design and pedagogical expertise (Halupa, 2019). With faculty members looking to instructional designers for support and guidance, what can IDs do to encourage the integration of UDL guidelines in online courses?

Reframe Accessibility and UDL

The negative association with accommodations can often turn faculty off to incorporate UDL principles. Shifting the focus away from disabilities removes the stigma and avoids the misconception that no one in their class has a disability or that they need to wait for student requests for accommodations before acting. Instead, UDL can be reframed in a more positive way. For instance, Tobin and Behling (2018) suggest reframing UDL as a mobile-friendly strategy that can improve student engagement through "anytime, anywhere interactions" (p. 9). Similarly, Singleton et al. (2019) found that avoiding terms like "accessibility" and "UDL" and replacing them with "improving student learning" or using "inclusive design choices" can be a more successful approach when working with faculty (pp. 223–224). Another strategy could involve focusing on best practices for quality course design. Most quality assurance frameworks (e.g., Quality Matters or the Online Learning Consortium's (OLC) Scorecard) emphasize multimodal and accessible instruction.

Start Small

After carefully considering the language used to discuss the topic, it is important to streamline the process by narrowing down the number of things faculty need to address in their courses (Singleton et al., 2019). Even with a positive reframing of UDL, the number of changes and possible ways of approaching the topic can lead to a sense of paralysis that results in no action (Linder et al., 2015). For example, captioning course videos is one of the most common requirements that faculty think of when contemplating accessibility. This is often a painstakingly time-consuming project, especially for long videos, and can reinforce faculty's misconceptions and negative views on the topic. Tobin and Behling (2018) suggested a "20, 20, and 20" approach in which strategies can be implemented in 20 minutes, 20 days, and 20 months (p. 108). Start small by identifying areas where students often have questions and content is presented in only one way. A common example would be when PowerPoint slides are posted to the learning management system (LMS). Tobin and Behling (2018) refer to this common practice as "both single-stream and also cryptically incomplete without the professor's explication of each bullet point" (p. 110). Adding a short video would not only present content in another way, but it could also be more engaging for all learners. Another example would be to review how students are expressing their knowledge. Could students submit an audio comment instead of a written response? Could they create a chart or diagram to compare and contrast perspectives on a topic? If writing a paper is essential, could the assignment be broken down into manageable parts such as an outline and/or a draft to receive additional feedback from peers and the instructor? Encouraging students to express themselves in a variety of ways often involves less effort from faculty and can be an easier starting point for incorporating UDL strategies. Eliciting student feedback after a UDL-based intervention can help encourage faculty that their efforts will result in positive student attitudes and outcomes in the course (Singleton et al., 2019). Embedding similar small steps throughout the course development process is more effective than addressing accessibility at the end of the process (Singleton et al., 2019).

Faculty Development Training

Working with faculty one-on-one is an initial step toward changing an institutional culture to one that prioritizes accessible course design. Once one faculty member has had a "UDL aha moment," it is often easier to get them on board and involved in spreading awareness across the institution (Tobin & Behling, 2018, p. 141). Developing a partnership with faculty who are successfully utilizing UDL strategies can be a way of inviting other faculty to share similar successes. Designing faculty development initiatives that involve UDL and accessibility throughout the process will allow instructional designers to reach a wider audience while modeling best practices. Keeping in mind the importance of reframing mentioned earlier, workshops and courses focused on diversity or quality online learning may draw more attention than ones with disability or accessibility in the title or description (Tobin & Behling, 2018). Research showed that faculty who received training had more confidence in their knowledge and ability to implement UDL strategies more often in their courses (Izzo et al., 2008; Schelly et al., 2011). Faculty often cite UDL as a topic they want to learn more about (Izzo et al., 2008). Integrating UDL into currently existing faculty development workshops, webinars, courses, and consultations can be a starting point to bring awareness and sensitivity to faculty who may be new to these types of strategies (Fichten et al., 2009). Administrative support and incentives for faculty who implement UDL and make their courses more accessible can further exemplify an institutional commitment to quality education for all learners (Gladhart, 2010; Singleton et al., 2019).

Shared Responsibility and Institutional Support

Leadership support for any initiative is essential for buy-in and allocation of resources. For example, Tobin and Behling (2018) suggest appealing to institutional leaders by emphasizing the potential impact UDL can have on "student retention, persistence, and satisfaction" (p. 11). All personnel involved with course design at an institution should receive training in UDL to increase adoption campus-wide (Tobin & Behling, 2018). For UDL initiatives and training to increase adoption, they need to be shared among a group of people from a variety of backgrounds at the institution. They should also focus on learner variability and not just on students with disabilities to gain a wider support base (Tobin & Behling, 2018). Typically, disability service providers spearhead UDL initiatives but these initiatives can and should also come from instructional designers, faculty, and students. Tobin and Behling (2018) even recommend taking a team approach with an action plan and realistic timelines (Tobin & Behling, 2018). Having clear guidelines and policies in place can reinforce an institution's commitment to supporting all learners through quality education (Gladhart, 2010).

Suggested Activities for Instructional Design Programs

Graduate programs in educational technology and instructional design often lack courses focused specifically on accessible course design and effective strategies for addressing accessibility-related misconceptions. To address that gap, we recommend for programs to include at least one course in their curriculum focused on accessibility as well as to integrate instructional activities focused on accessible course design as well as effectively collaborating with faculty in multiple courses. The following are a few examples of activities that could be integrated into any instructional design course:

- Employ accessible content principles (e.g., proper heading structure, logical hyperlinks, and sufficient color contrast) when creating instructional materials (e.g., when designing a syllabus or creating a presentation);
- Identify and discuss where accessibility should be addressed in popular instructional design models and processes;
- Role play collaborating with faculty and subject matter experts, with a specific focus on responding to common accessibility misconceptions;
- Develop a proposal for a faculty development initiative or training that utilizes a strategy for reframing accessibility and UDL;
- Conduct accessibility-related research.

Finally, faculty should strive to model accessible course design in the courses they design and teach.

Conclusion

Higher education continues to see an increase in diverse learners and a demand for high-quality online courses. To remain competitive, institutions need to find easy-to-implement strategies to meet the needs of most learners. It will take a cultural shift away from the medical model of disability that views students' bodies as the problem and toward a model that puts the focus on the online learning environment. While typically championed by disability service providers, we contend that instructional designers can further promote UDL and facilitate the shift to a more widely accepted focus on learner variability. Sharing responsibility and obtaining buy-in from leadership can make a seemingly large job more manageable. This new responsibility will lead to instructional designers like Jamie sometimes having difficult conversations with faculty who believe that students in their courses do not have disabilities, or that there is nothing they can do until a student self-identifies, or that accessibility is not their job. If appropriately trained for these topics in graduate programs, instructional designers can reframe UDL in positive terms and convince faculty to implement small, impactful changes. Instructional designers can start to make online learning more inclusive and equitable for all learners. Bringing awareness by modeling best practices in faculty development training and incorporating UDL throughout the course design process can result in further buy-in.

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