

CREATING INCLUSIVE CLASSROOM ANDRAGOGY

Recommendations for Creating Inclusive Classroom Andragogy: Perspectives of Graduate Students with Learning Disabilities

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Abstract

Guided by principles of Disability Critical Race Theory (2013) and Universal Instructional Design (2006), the purpose of this study is to examine the structural inequalities in higher education that marginalize students with disabilities, identify the unique needs of graduate students with learning disabilities, and identify the ideal classroom characteristics that would reduce or eliminate the need for self-disclosure and accommodations. This phenomenological qualitative research study focuses on the voices of fourteen graduate students with self-identified learning disabilities to highlight the unique needs of graduate students and the areas for improvement. Participants shared their reason for self-disclosing and seeking accommodations, or not. They shared the differences between their undergraduate and graduate experiences. Participants also conceptualized an ideal classroom, based on previous experience, and shared those characteristics. Themes included the need for: flexibility, diverse ways of presenting information and assessing knowledge, structured courses with clear instructions and reminders, and an open and honest dialogue pertaining to disability. These characteristics directly aligned with Universal Instructional Design principles. The study also includes information about the benefits of disability and the experience of going through education during a global pandemic. To conclude, students provide direct recommendations for praxis to faculty who have students with disabilities in their classrooms.

Keywords: learning disability, graduate students, andragogy, Universal Instructional Design, DisCrit, social model

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From your example, I learn how I want to lead in the future. Your compassion for students, drive for equity, reciprocity to your communities, and belief in education are things I will strive to emulate throughout my career. I am so thankful for the opportunity to learn from you.

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Dedication

This dissertation is dedicated to the fourteen students who generously shared their stories with me. This project would not have been possible without your courage, openness, and desire for change. I am inspired by each of you to help make this world more equitable and supportive for students with disabilities. Disability can be a sensitive subject, and it is my sincere hope that your participation will reduce barriers and stigma for future generations of students. I also hope the findings and recommendations of this dissertation help you in some way, whether it be finding community, helpful advice, or empowerment. From the bottom of my heart, thank you!

Researcher's Positionality Statement

This research project was developed from my positionality as a graduate student with a learning disability, and an advocate for other students with disabilities. It was also shaped by my previous research, which studied the importance of specialized support services. After further analyzing my own ableism and biases, I realized that my conclusions were merely a band-aid for an inequitable system. My positionality and previous experience influenced the project from design to interpretation. My experience is limited because I chose not to self-disclose, but I still experienced and witnessed students who struggled in traditional classrooms despite accommodations, which served as the basis for this project. I also worked as a sign language interpreter and observed barriers with assistive technology, negative faculty bias, and most of all, I noticed that decisions were being made about these students without their input. Before each interview, I shared my positionality with each participant, so they were aware of my background, motivation, limitations, and plans for the project. I am currently working in higher education administration, and hoping to continue this path, it is my firm belief to work together WITH students to implement change.

This research certainly benefits me in my future as a higher education administrator. The participants have provided me with invaluable knowledge that I will utilize ethically and appreciatively when advocating for and implementing change. I plan to also share this knowledge with faculty and other higher education administrators, to promote widespread change. My hope is that this research will be reciprocal and help the students who participated in this research. By sharing knowledge, struggles, and suggestions, I hope students will find community and tools to help them as they continue in their educational or career paths.

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Recommendations for Creating Inclusive Classroom Andragogy: Perspectives of Graduate Students with Learning Disabilities

CHAPTER 1: INTRODUCTION

Students with disabilities are attending Institutions of Higher Education (IHE) at higher rates than ever before; however, IHEs are still utilizing ineffective, traditional classroom models that create barriers for students (Higbee, 2003). Traditional classrooms are often characterized by teacher-centric models, lectures, and single modality formats. Traditional models of higher education were created for individuals with hegemonic norms, and students who do not identify with those hegemonic norms are provided accommodations to assimilate (Annamma & Morrison, 2018). These accommodations have been instrumental in providing access to students with disabilities, but also create many barriers and inequities. Students continue to report many barriers including: difficulty accessing services and accommodations, negative bias from campus employees, and inadequate accommodations to achieve academic success (Black et al., 2015). These barriers stem from the medical model of disability, which conceptualizes disability as an inherent deficiency that needs to be fixed or accommodated. Despite the barriers, studies have emphasized the positive correlation of accommodations to student success in traditional postsecondary classrooms (Hutcheon et al., 2012; Schreuer & Sachs, 2014). However, Disability Critical Race Theory (DisCrit) researchers Annamma and Morrison (2018) believe it is important to focus on changing systems rather than what students need to be successful in dysfunctional systems. Given the numerous barriers that students with disabilities encounter, theories such as DisCrit and the social model of disability suggest a shift in classroom models rather than prescribing accommodations for traditional classrooms.

Students with disabilities have historically been marginalized and discriminated against, however, over the last century, many policies have worked to grant access to higher education. Although federal policies mandate accessible education, the existing barriers students face are correlated with high attrition rates. The United States (U.S.) Department of Education (2016) predicts two-thirds of students with disabilities who enroll will drop out before obtaining their postsecondary degree, which is twice the rate of students without a disability (Sanford et al., 2011). Students with learning disabilities (LD) make up 35% of students with disabilities and is the largest portion of students with disabilities (Hinz et al., 2017). In addition to commonly identified barriers, they face additional challenges such as misclassification, difficulty obtaining necessary documentation to allow access to ADA accommodations, and disbelief from faculty due to the non-visible characteristics of their disability (McCallister et al., 2014; Weis et al., 2012). The Americans with Disability Act (ADA) defines learning disability as a neurological disorder of processing and using language, often manifesting in difficulty with speaking, reading, writing, spelling, reasoning, recollection, mathematics, and social skills. Students with LD have normal cognitive functioning and the definition does not include intellectual, emotional, or sensory impairments. Students with LD have higher attrition rates from high school through graduate school (Weis et al, 2014). Reports show that students with LD are more than twice as likely to drop out of high school than their non-disabled peers (Rabren et al., 2013). Only 30.5% of students with LD progress to enroll in a postsecondary institution, which is roughly half of the rate of their non-disabled peers. Of those students, only 34% of those students will complete their degree at a four-year institution as compared to 51% of the general population (Bryd, 2018; Joshi & Bouck, 2015). Those statistics only reflect the students who are identified by the IHE as

having a disability and studies have shown that only one in four students with LD will self-disclose and seek accommodations (Bryd, 2018; Rabren et al., 2013).

Obtaining a postsecondary degree impacts other aspects of an individual's life and well-being. Economists and researchers have emphasized the correlation between higher education completion to higher employment rates and decreased likelihood of poverty (Denhart, 2008). Kraus et al. (2018) report that only 35.9% of individuals with disabilities are employed, and they make an average of \$10,000 less per year than individuals without a disability. Additionally, 20.9% of individuals with disabilities are living in poverty. In addition to economic stability and growth, completing a four-year degree is also necessary to attend graduate or professional schools, and only seven percent of graduate students report having a learning disability (Perreira & Richards, 2000). These statistics highlight the importance of supporting students with learning disabilities to create equitable classrooms that increase graduation rates and impact overall quality of life. Research focusing on these students' perspectives is imperative for learning how to best support them.

Statement of the Problem

Higher education policy and practice have been shaped by Eurocentric notions that devalue students with disabilities and lead to accessible, but inequitable classrooms (Annamma & Morrison, 2018; Norris, 2014). Federal policies mandate accessible education, however, students still report facing numerous barriers, which are correlated with high attrition rates (Montoya, 2009; Pyle & Wexler, 2012). Researchers suggest a shift in andragogic models to create inclusive classrooms and further research is needed to identify the student's perspective of what those models should look like.

A large gap in research needs to be addressed regarding graduate students with disabilities. Given that a large percentage of students drop out before obtaining their postsecondary degree, relatively little is known about the students who obtain their degree and engage in graduate education. The majority of research conducted on students with disabilities focuses on undergraduate students who were able to successfully navigate barriers to obtain accommodations and are recognized by IHEs as having a disability (e.g., Argwal et al., 2015; Black et al., 2015; Denhart, 2008; Plotner & May, 2017). Much of the research conducted to analyze the postsecondary attrition of students with disabilities focuses on undergraduate students' lack of preparedness, insufficient services, or the barriers to access necessary resources. Often research leaves out the perspectives of students who were not able to provide documentation, students who chose not to self-disclose, and graduate students with disabilities.

Structural inequality is defined as systems built on worldviews that marginalize individuals with non-hegemonic identities, such as ability status. Relatively little research has been done to examine the structural inequalities of higher education that create barriers and require students to rely on accommodations to ensure equity. Recent studies informed by DisCrit, Universal Instructional Design (UID), and the social model of disability, have worked to analyze the way institutions of higher education oppress students with disabilities by operating within a structure created by Eurocentric worldviews and the medical model of disability (e.g., Annamma et al., 2016; Norris, 2014). Contemporary theories suggest that change must occur by using inclusive classroom andragogy – the process of teaching adult learners. However, scholars state that a shift in mindset to a social model must occur before andragogy can be changed, and that change must be led by the voices of disabled students (Denhart, 2008; Morgado Camacho et al., 2017).

Purpose of the Study

The purpose of this study is to highlight the voices of graduate students with learning disabilities to lay the groundwork toward creating inclusive mindset and eventually andragogy. The study will analyze how structural inequalities have shaped the current system of higher education, highlight the unique experiences and needs of graduate students with disabilities, and conceptualize classroom models that would reduce or eliminate the need to self-disclose and utilize accommodations. This research will not address the pertinent impact of labeling children as disabled and placing them into special education, but that it is an important factor in adult outcomes including higher education attendance.

Theoretical Framework

This study is guided by the social model of disability framework (Matthews, 2009; Mole, 2013). The social model of disability proposes that society creates inaccessible environments that prohibit the participation of individuals with disabilities. Disability is not an inherent deficit, but rather disability is created by barriers put in place by society. The social model places the responsibility of creating access and equity on institutions of higher education (Mole, 2013). The social model shapes this paper with the fundamental idea that barriers, such as the need for documentation and self-disclosure, should be removed and replaced with inclusive andragogy.

This paper is also guided by the theory and tenets of DisCrit, which is a combination of Disability Studies and Critical Race Theory. DisCrit states that disability and race, along with other identities, are socially constructed and used to oppress individuals (Annamma et al., 2013). Historically, scientists attempted to prove that African Americans were intellectually inferior by using biased measurements and concluded that physical characteristics such as skin color were correlated with a lack of ability (Annamma et al., 2013). The ideology that individuals of color

are intellectually inferior and lack ability compared to white individuals has continued throughout history; assessments are still being used to disproportionately label students of color with intellectual and mental disabilities (Dolmage, 2017; Liasidou, 2014). This labeling is continuously used to further oppress individuals with other non-hegemonic identities. Although the present investigation is guided by DisCrit tenets, this study will also solely focus on students' disability identity and will not investigate the impacts of intersectionality, such as race, on equitable and inclusive education. DisCrit scholars Annamma and colleagues (2013) identify the following seven tenets, however, for the purpose of this paper, tenets three, four, five, and seven guide the literature review and recommendations for improvement.

1. DisCrit focuses on ways that the forces of racism and ableism circulate interdependently, often in neutralized and invisible ways, to uphold notions of normalcy.
2. DisCrit values multidimensional identities and cautions against singular notions of identity such as race or dis/ability or class or gender or sexuality, and so on.
3. DisCrit emphasizes the social constructions of race and ability and yet recognizes the material and psychological impacts of being labeled as raced or dis/abled, which sets one outside of the Western cultural norms.
4. DisCrit privileges voices of marginalized populations, traditionally not acknowledged within research.
5. DisCrit considers legal and historical aspects of dis/ability and race and how both have been used separately and together to deny the rights of some citizens.
6. DisCrit recognizes whiteness and Ability as Property and that gains for people labeled with dis/abilities have largely been made as the result of interest convergence of white,

middle-class citizens.

7. DisCrit requires activism and supports all forms of resistance.

The term disability often refers to a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment (Americans with Disabilities Act, 1990). This term is very narrow due to the normalized notions of disability. It is a term often used to marginalize individuals who do not fit traditional or hegemonic (socially dominant) characteristics of college students, and the ADA guidelines for accessing accommodations exclude some students from obtaining support. For this study to be inclusive, the term also includes students who elect not to self-disclose, students who are unable to “prove” their disability to receive accommodations, and students who might not self-identify as having a disability but would qualify for disability services.

CHAPTER 2: LITERATURE REVIEW

In North America, disability is viewed through a medical model. The medical model assumes disability is a defect or problem inherent within an individual to be fixed or cured, rather than the socially constructed idea of “norm” to which they are compared and the socio-cultural factors that may be related to that disability (Annamma et al., 2013, 2016; Goering, 2002). The association of disability as a medical phenomenon, and a deficiency, began with colonization and the Eurocentric ideals that followed (Lovern, 2008; Norris, 2014). Norris argued that prior to colonization, current models of disability did not exist in Indigenous North American cultures, and individuals who would be classified as having an impairment today were appreciated for their diversity and their unique contributions. Through colonization, European settlers brought with them emphasis on individualism, capitalism, and the idealization and preference for current hegemonic norms, which resulted in othering and devaluing people or groups of people with non-hegemonic characteristics or identities (Leonardo & Broderick, 2011). Thus, people with disabilities began becoming associated with being less than fully human, a burden, and contributing less to society/economics (Annamma & Morrison, 2018; Norris, 2014). These same Eurocentric ideals have shaped policy and practice for institutions of higher education.

History and Policy

Students with disabilities have been marginalized for decades, but many historic events, including the creation of federal laws, have created equal access to higher education. Prior to the mid-twentieth century, K-12 students with disabilities were viewed as unfit to attend school with the general population and placed into segregated, inferior classrooms (Madaus, 2011) until the groundbreaking passage of PL 94-142 or the Education for All Handicapped Children Act

(EAHCA) of 1975. The law guaranteed a “free, appropriate public education” to all children and young adults aged 3–21. Public Law 94-142 has subsequently been replaced with the Individuals with Disabilities Education Act and the Individuals with Disabilities Education Improvement Act to ensure educational opportunities of students with disabilities.

After World War I, many government initiatives were created to provide vocational training and education to veterans, including many who were disabled as a result of war. In 1944, the G.I. Bill helped fund veterans’ education, resulting in an influx of adult students with a wide range of disabilities. Veteran initiatives and numerous civil rights movements served as a catalyst for the creation of federal laws. In 1973, the Rehabilitation Act passed, prohibiting discrimination against individuals with disabilities by any federally funded program including, postsecondary education (Burke, 2006; Madaus, 2011; Steele & Wolanin, 2004). The Rehabilitation Act was the first civil rights decree specifically protecting individuals with disabilities. The Rehabilitation Act mandated all government programs to eliminate barriers and grant equal access for individuals with disabilities, which had a large impact on IHEs. Subpart E of the Rehabilitation Act specifically prohibits postsecondary institutions from discriminating in both recruitment and admission processes, and mandates equal access for all who are eligible. Individuals with disabilities are expected to be provided with appropriate services to meet their educational needs to the same extent of their peers who do not have disabilities (Madaus, 2011; U.S. Department of Justice, 2010).

Progress continued and in 1990, The Americans with Disabilities Act (ADA) was passed. ADA expands on Section 504 of the Rehabilitation Act to provide greater protection and access for students not only in postsecondary institutions, but all public and private agencies. ADA also highlights the institutions requirements and consequences for non-compliance, and states that

necessary accommodations must be provided for equal opportunity. The ADA Amendment Act of 2008 provided further protection for individuals by redefining and broadening the scope of disabilities to include mental and learning disabilities (ADA, 2008; Madaus, 2011; U.S. Department of Justice, 2011).

ADA and Section 504 of the Rehabilitation Act made huge strides to create equal access for people with disabilities, including students with disabilities. Many more students were accepted and enrolled into institutions of higher education; however, classrooms were not set up to support students with disabilities (Madaus, 2011). While laws such as the Americans with Disabilities Act and Section 504 were instrumental for access to higher education, access does not necessarily equate to equity. Laws such as ADA and Section 504 are founded in ableist historical legacy, and often left up to interpretation, creating a disconnect between policy and practice (Burke, 2006).

Current Practice and Barriers

Guided by the medical model that disability is inherently deficient, students with disabilities are prescribed accommodations to accomplish course requirements by eliminating or reducing disability-related barriers. Accommodations provide a level playing field, not an unfair advantage. To request accommodations made available by ADA, each student must self-identify their disability to their institution and their faculty, provide medical documentation demonstrating a substantial limitation, and coordinate with their faculty member(s) and disability services office to implement the accommodation for the course. The request process is challenging and results in many students choosing not to self-disclose and/or seek support, therefore unable to utilize any accommodations and supports (Lyman et al., 2016; Matthews, 2009; Rabren et al., 2013). Numerous studies have proven the necessity for accommodations in

the current system, yet students continue to express concerns and state that the process is riddled with many obstacles (e.g., Hong, 2015; Hutcheon et al., 2012; Schreuer & Sachs, 2014).

Documentation

One of the first major barriers that students face is obtaining documentation that demonstrates a substantial limitation in one or more major life activities. Medical documentation is required by ADA to receive accommodations. For students with learning disabilities, the deficient ability and major life activity is the process of learning. The necessary documentation often consists of intelligence and achievement tests. Practitioners typically utilize an intelligence-achievement discrepancy model to identify learning disabilities by comparing a student's intelligence scores with achievement scores. Students with LD can be identified as having normal intelligence scores paired with below normal achievement scores (Cahan et al., 2012). Numerous researchers have stated these tests and interpretation of results are subjective and inconsistent (National Joint Committee on Learning Disabilities, 2007; Weis et al., 2016). Additionally, assessments and doctor appointments can be expensive, potentially creating a financial barrier (Weis et al., 2016).

Negative Bias

If a student can obtain appropriate documentation, they face an additional barrier of self-disclosing their disability to the faculty in order to access and utilize appropriate accommodations (Black et al., 2015; Mole, 2013). Students with disabilities often experience stereotypical negative attitudes and skepticism of their ability to be successful in higher education (Agarwal et al., 2015; Annamma & Morrison, 2018; Lyman et al., 2016). These students stated that self-disclosure is the most substantial barrier that impacts their willingness to seek accommodations. The barrier of self-disclosure is particularly troublesome for students with

invisible disabilities, including learning disabilities (Matthews, 2009). For example, Jung (2002) conducted a study with six female students with chronic illness and found that all participants were uncomfortable with the necessity of being identified as disabled through the university to obtain necessary accommodations. Consistent with other research, the students spoke about the negative faculty bias that was a result of being labeled as disabled and requesting accommodations to succeed in a classroom that was not set up to adequately support them. Finally, Lyman et al. (2016) interviewed students who had disclosed their disability and noted higher education employees' lack of knowledge regarding disability, which may fuel negative perceptions and bias against students with disabilities.

Inadequate and Unavailable Accommodations

If a student is able to navigate the barriers to obtain appropriate documentation and has the courage to self-disclose to request accommodations, the prescribed accommodations are often insufficient for creating equity. To be in compliance with federal laws, IHEs are only mandated to create equal access and therefore often take a minimalist approach by providing the most affordable and easily accessible supports and accommodations (Montoya, 2009). Institutions provide common services such as extended test time, note taking services, quiet testing areas, assistive technology, and interpreting services (Pingry O'Neill et al., 2012). Lyman et al. (2016) interviewed students who had disclosed their disability and were eligible to receive services but chose not to utilize them. The participants mentioned common barriers such as the difficult process, negative faculty bias, and higher education employees' lack of knowledge regarding disability. In addition to the common barriers, they also indicated that necessary accommodations were not available and often not helpful. For example, assistive technology (AT) such as screen readers, captioning software, and speech-to-text, is heavily relied upon

because it is cheaper than human-based resources. However, AT resources are often not implemented correctly to provide adequate support. Coleman (2011) studied the use of AT and found that one-third of all devices are abandoned within the first year due to lack of training for users, and non-accessible features of the technology. Pingry O'Neill and colleagues (2012) studied the effectiveness of numerous support services and concluded that assistive technology was negatively correlated with graduation rates.

Additional Barriers for Graduate Students

In addition to the barriers discussed above, recent research has identified additional barriers that graduate students with learning disabilities face. Graduate school is marked by academic rigor and often consists of a large volume of reading, processing information, and producing content, which are often challenging tasks for students with learning disabilities (Montoya, 2009). The barrier of faculty bias is magnified because graduate students work closely with a faculty mentor who have a major impact on their academic success (Bethke, 2004; Montoya, 2009). Despite these added challenges, Teichman (2010) found that graduate students were even less likely to seek accommodations than in their undergraduate careers and experienced greater disbelief from Accessibility Services staff. Bethke (2004) states that given the barriers and particularly the necessary close relationship with graduate faculty, it is even more important for graduate programs to create supportive environments, so students feel comfortable disclosing. Relatively little research has been conducted on graduate students with disabilities and the additional barriers presented, in conjunction with the commonly identified undergraduate barriers, which highlights the need for further research to shift current practices.

Shift Toward Inclusive Andragogy

To reduce barriers that students with disabilities encounter, some educators have worked to create inclusive classroom environments by utilizing Universal Instructional Design (UID) principles (e.g., Black et al., 2015; Parker et al., 2007; Yuval et al., 2004). UID is a classroom model that adapts instruction to the unique learning style and need of each student. Its goal is to reduce barriers for all students, particularly those with disabilities, and create flexibility in accessing and assessing learning. UID consists of seven principles that should be implemented in every classroom (Palmer et al., 2002, pp 5-11):

1. Instructional materials and activities should be accessible and fair.
2. Instructional materials and activities should provide flexibility in use, participation and presentation.
3. Instructional materials and activities should be straightforward and consistent.
4. Instructional materials and activities should be explicitly presented and readily perceived.
5. Instructional materials and activities should provide a supportive learning environment.
6. Instructional materials and activities should minimize unnecessary physical effort or requirements.
7. Instructional materials and activities should ensure learning spaces that accommodate both students and instructional methods.

UID acknowledges that barriers to success are a result of inflexible classroom models rather than inherent deficiencies within the student. UID informs how classrooms should be set up both

physically and pedagogically to meet the needs of all diverse learners and create accessibility to build equity.

Recent studies provide evidence for the benefits of UID. Yuval et al. (2004) analyzed the effectiveness of the UID Project at the University of Guelph (Palmer et al., 2002). The project funded nine courses to either redesign their curriculum or enhance their existing curriculum using the UID principles. Evaluations of UID effectiveness included student questionnaires, classroom observations, and interviews with course faculty and students. Based on their results, the researchers reported that implementation of UID concepts increased with the development of the program, student self-efficacy showed a statistically significant positive correlation with increased level of UID implementation, and students reported feeling significantly more active and engaged in courses that had a high level of UID implementation (Yuval et al., 2004).

When UID principles are implemented in the classroom, students report positive results. Parker et al. (2007) created a hybrid course for undergraduate students majoring in teacher education utilizing Adult Learning Theory and UID principles in the design. Although the course was in a large lecture format style, the instructor(s) incorporated UID by making the curriculum and assignments practical and applied, encouraging students to be self-directed, promoting critical reflection, and creating a respectful learning environment that ensured all materials were equitable and accessible. Overall, students rated the course a 9.2 on a 10-point scale with 10 signifying an outstanding course. The researchers stated that this rating was a significant improvement from previous attempts made with the same topic but taught with different pedagogy (Parker et al., 2007).

Black et al. (2015) also focused on student perceptions and interviewed fifteen graduate and undergraduate students with and without disabilities regarding teaching methods that had a

positive impact on their learning. All participants, particularly students with disabilities, stated that the UID principles including: a) receiving class notes ahead of time, b) allocating class time to prepare assignments, and c) alternative material formats supported their learning and improved their engagement. In addition to positive UID feedback, participants rated most of the diverse instructional methods such as a) class or small group discussions, b) choice in assessments, and c) hands-on interactive activities more positively than lectures or videos. The researchers indicated that diverse learning methods and fostering a community of learners seem to reduce the stigma of disability and reduce the need to depend on accommodations (Black et al., 2015).

Classrooms designed with UID principles have proven to be effective for students, particularly students with disabilities (Yuval et al., 2004). One of the main reasons faculty report not using UID in their classrooms is lack of knowledge and training (Annamma & Morrison, 2018; Plotner & Marshall, 2015). Plotner and Marshall (2015) found that when training is provided for faculty, it results in a significant increase in the implementation and success of UID. Research (Plotner & Marshall, 2015) indicate that faculty would like to create inclusive environments, however, it is evident that there is a continued need for faculty professional development. The present study is rooted in the belief and findings of previous literature that faculty desire to create more inclusive classrooms for students with disabilities but lack the tools and training to implement UID. In addition, this study would like to contribute to the literature by providing graduate student insights into ideal classroom characteristics and provide faculty with the knowledge to improve their andragogy.

CHAPTER 3: METHODOLOGY

The methods utilized were guided by the theoretical frameworks and aimed to address gaps in the literature. This chapter details the methods used to explore the similarities and differences of postsecondary experiences of graduate students with learning disabilities as well as ideal classroom models that would reduce or eliminate the need to self-disclose and use accommodations. The following questions were used to guide the research and organize the findings:

1. What do students identify as their reasons for self-disclosing and requesting accommodations?
2. What do students identify as their reasons for not self-disclosing and not requesting accommodations?
3. Do graduate students identify unique needs or experiences that differ from their needs as undergraduate students?
4. How do graduate students with learning disabilities describe their ideal course, and how does it differ from what they have previously experienced?

This study embraces Denhart's (2008) belief that that change must be led by the voices of disabled individuals. The methodological design and research questions facilitate the purpose of highlighting the voices of graduate students with learning disabilities to lay the groundwork toward creating inclusive mindset and eventually andragogy.

Research Design

This qualitative research study utilized a phenomenological design with an interpretive approach. Creswell and Creswell (2018) state that qualitative research is characterized by conducting research in a natural setting, focused on participant's meaning from experience,

frequently has an emergent and fluid design, and data is interpreted by the researcher. A phenomenological design was selected because its purpose is to describe and understand common lived experiences such as ableism and barriers to higher education (Creswell & Creswell, 2018; Groenewald, 2004).

Data Collection

Recruitment

Prior to recruiting participants, the research design, recruitment procedures, and interview protocol were approved by the Institutional Review Board (IRB), Human Subjects Division. Students were recruited from a postsecondary institution on the west coast. To identify participants who have specific experiences with the phenomenon being researched, purposeful sampling was used. Participants were recruited who met the following criteria: a) self-identify as having one or more learning disability, b) enrolled in a master's or doctoral program at the institution or recently graduated at the time of recruitment. Students who are currently using accommodations, as well as students who self-identify as having a learning disability, but chose not to self-disclose, were encouraged to participate. Participants were not asked to disclose their disability category prior to the interview and were not disqualified if their disability did not fall under the commonly used definition of learning disability. For example, participants with Attention-Deficit/Hyperactivity Disorder (ADHD) were encouraged to participate. ADHD is related to learning disabilities, and often coexist, but is often not categorized as a learning disability despite its impact on the learning process (LDA, 2013).

Graduate students were initially recruited from Social Work, Education, and Disabilities Studies graduate programs. Students in these graduate programs are often engaged in social justice discussions, including disability justice, and therefore bring an advanced and invested

perspective. Participation was eventually expanded to all graduate programs, including science, technology, engineering, and math (STEM) programs due to low initial participation. The first recruitment email was sent on November 16, 2020. This date was chosen because it was prior to autumn quarter finals, which give students time to volunteer before or after the holiday break. The date was also near the end of the quarter, so first-year graduate students had at least one quarter of experience in their graduate program. Participants were first recruited via email through each departments' advising listserv, which is a mass email system to all students registered in those departments. Approximately two weeks later, a second recruitment request was sent to faculty advisors for those programs to share with students. To recruit more participants, a third recruitment request was sent approximately two weeks after the previous recruitment effort to an institution-wide graduate listserv.

In the recruitment email, students were informed of the purpose of the study, the positive impacts their participation could make, the research timeline, and instructions for volunteering. Participants could volunteer by contacting the researcher directly or filling out a Google Form that was provided in the recruitment email. The Google Form asked students to provide their name, contact information, scheduling preferences, and needed accommodations, if any. Multiple modalities for volunteering were offered to allow for maximum inclusivity and accessibility. The emails, documents, and Google Form were created with accessibility features to ensure usability for screen readers if necessary. Once a student volunteered, the informed consent, the research questions, and proposed days and times for the interview were sent via email. After agreeing upon a time, a Zoom link was sent via email. Email reminders were also sent to each participant 24 hours before each interview.

Interview Structure

Data collection consisted of one-time, semi-structured, audio recorded interviews lasting between 23 and 58 minutes with the median interview lasting 33 minutes. Interviews occurred between December 1, 2020 and January 19, 2021. This time selection was chosen because it spans the end of Autumn quarter through the middle of Winter quarter, giving time for new graduate students to assess their educational experience and allow time over the holiday break if that was most accessible for students. The interview was offered through Zoom, a videoconferencing software, to maximize accessibility and inclusion. The interviews occurred during the COVID-19 pandemic, which prohibited in-person interviews to occur. Interpreters or assistive technology were offered for any participant who required assistance to participate.

As soon as the participant and I were ready in the Zoom meeting, I asked for consent to begin recording. Once the Zoom meeting was being recorded, I went over the informed consent (Appendix A) to remind students of their rights as a research participant as well as the interview procedure. Participants were then asked for their verbal consent, in addition to the written consent they returned via email as a fillable PDF. Once consent was obtained, questions from the approved protocol guided the interview (Appendix B) and I asked follow-up questions for clarification when necessary. The interview began with an open-ended background question where students were encouraged to share as much, or little, about themselves as they felt comfortable. This approach was chosen to allow the participants to share any identities or experiences they chose without invasive or limited options. While it is important to note that intersecting identities may impact a student's experience, the participants intersecting identities will not be discussed in detail to protect their confidentiality. The next set of questions compared the student's experience in undergraduate and graduate school to explore the difference in needs, barriers, and disclosure decisions. The last set of questions asked for students to conceptualize

their ideal classroom environment and provide advice to faculty who have students with learning disabilities in their classrooms.

Immediately after the conclusion of the interview, each student was emailed a \$25 gift as compensation for their time and participation. The thirteen currently enrolled students were provided a gift card to the institution's bookstore, and the one recent graduate student was asked to choose what gift card they would prefer. Semi-structured interviews limited the number of participants and allowed for subjectivity, but this method was chosen for the increased flexibility and rich narratives that provide necessary insight into shared and differing experiences.

Data Processing

Following each interview, the audio was downloaded, labeled under a pseudonym, and transcribed. Transcripts for the interviews ranged from 8-17 single spaced pages and were transcribed after all interviews were conducted. To ensure reliability, member checking was utilized. The transcript and audio file were emailed to the participant to verify accuracy of the transcription. This also provided an opportunity for the participant to redact any information they did not want included in the study. Once approved by the participant, the data was coded into themes using an Excel code book.

Aligned with the procedure outlined in Creswell and Creswell (2018), the data was coded using an interpretive approach to categorize meaning from the data and find similarities or contradictions to previous findings. I utilized code clusters and sub clusters in a concept map format to interpret the data. Initial codes or themes were based on findings from previous research, described as "expected codes" (Creswell & Creswell, 2018, pg. 197). Initial codes or themes directly aligned with the intended purpose and research questions of the study. After the data was coded, student responses were separated into groups including program type, disability

category, disclosure status, and year in program to identify themes in those categories. To equally represent diverse perspectives, unexpected codes are noted in the clusters and analysis of the data.

Participants

The goal of the study was to recruit 10-15 participants. Twenty-nine graduate students initially volunteered for the study through the Google Form, or via email. Of these, three students determined they did not meet the inclusion criteria, five students did not respond to the scheduling email, and seven scheduled interviews were cancelled due to scheduling issues and unexpected circumstances. Thus, a total of fourteen graduate students who self-identified as having a learning disability agreed to participate in the study. Participants represented diverse ages, genders, ethnicities, educational backgrounds, and disability categories. The only demographic information being shared is the student's self-identified disability category, what year they are in their graduate program, program type, and if they chose to disclose their disability to their faculty or the institution. The pertinent background characteristics for participants are included in Table 1 and student summaries are provided below the table. Participants were given the option to choose their own pseudonym. One student chose their own pseudonym and thirteen elected for one to be created for them. For students who did not choose their own pseudonym, gender neutral pseudonyms and pronouns were used to ensure greater anonymity.

Participants included both students who utilized institutional accommodations, and students who did not. Eight students were enrolled in STEM programs, and six were enrolled in various humanities programs. Thirteen of the fourteen students self-identified as having more than one disability.

Table 1*Participant Demographic Information*

Participant	Disability	Program Type	Disclosure
Avery	Anxiety and depression	Humanities	Undergrad: No Graduate: Informally
Bailey	Cognitive processing disorder	STEM	Undergrad: Yes* Grad: No
Casey	ADHD and possible autism	Humanities	Undergrad: Yes Graduate: No
Dakota	Auditory processing disorder and memory recall challenges	Humanities	Undergrad: Yes Grad: Yes*
Devon	Dyslexia and ADHD	STEM	Undergrad: Yes Grad: Yes
Frankie	Anxiety and depression	STEM	Undergrad: No Grad: No
Jordan	Bipolar, PTSD, and OCD	Humanities	Undergrad: No Grad: Yes
Morgan	Memory and auditory processing disorder	STEM	Undergrad: Yes Grad: Yes
Peyton	ADHD and chronic illness	STEM	Undergrad: Yes* Grad: No
Parker	Hearing impairment, ADHD, and possible autism	STEM	Undergrad: No Grad: No
Raegan	Major depressive and ADHD	Humanities	Undergrad: Informally (once) Grad: Yes
Riley	Anxiety, depression, and ADHD	STEM	Undergrad: Informally Grad: Informally
Sophie	ADHD and an eating disorder	Humanities	Undergrad: No Grad: No
Taylor	Chronic migraines and PTSD	STEM	Undergrad: Yes Grad: Yes

*Indicates students who formally requested accommodations but did not receive them.

The following summaries of experience were generated by information shared by each participant during the interview.

Avery is in the first year of their humanities graduate program. They described themselves as a type-A student throughout their education but dealt with depression and anxiety as a result. In undergraduate school, they were unaware that depression and anxiety could be categorized as a disability and did not have the language to identify their struggles as such. They also acknowledged that they did not feel comfortable asking for help at that time. As an undergraduate, they did reach out for help on a few occasions, and did not receive much support. Now, they feel like they have more of an ability to advocate for their needs and they did disclose to their advisor in case the need for support arose. They are tentative about formally requesting accommodations due to possible implications of a ‘disabled’ label, but they are considering formally seeking support.

Bailey was diagnosed with a cognitive processing disorder in high school, but the documentation they received did not guarantee them accommodations, so they had to self-disclose to individual faculty when they needed support. They are a STEM student and received some negative bias from faculty and peers. Additionally, their institution’s disability service office did not seem to work closely with STEM departments and vice versa, so they had difficulty finding support. They are in the first year of their graduate program and really enjoying it. Bailey has not self-disclosed for fear of negative bias but would consider seeking support if they feel it is necessary. They also acknowledged that they are unaware of the process and who to contact at their institution.

Casey is in the first year of their graduate program. They were diagnosed with ADHD and are exploring the potential of an autism diagnosis. They attended a few different colleges and graduated from a small undergraduate institution with an extensive disability support program, which Casey described as “integral” to the ability to graduate. Casey did not know about the

accommodation request process at the second undergraduate institution they attended. During their second semester there, they were really struggling and when sought support, none was provided. When they transferred to their final undergraduate program, a faculty member suggested they seek accommodations. Casey met with the disability services department, was provided accommodations, and had a very positive experience. They have not formally sought accommodations in their graduate program and expressed concern regarding negative stigma and confusion about the request process.

Dakota was diagnosed with auditory processing disorder and memory recall challenges as a child and their mother was a large advocate for them throughout their K-12 education. They struggled in elementary and middle school but found “my groove and knew exactly what I needed to succeed” in high school. They formally sought accommodations before college courses began. Their undergraduate program had extensive disability support services and they helped immensely in their undergraduate program. Dakota is in the third year of their graduate program. They formally requested accommodations but did not receive a response from the institution. They did state that the individual faculty in their graduate program are supportive and provide accommodations if needed, but they have not needed to request accommodations so far.

Devon was diagnosed with Dyslexia in second grade and recently was diagnosed with ADHD. They knew they would need accommodations in college, so they began the process before classes started. To request accommodations at their undergraduate institution, they had to be re-tested, which was an unpleasant experience. They describe their undergraduate experience as “intense and competitive,” which presented difficulties from faculty and peers when utilizing accommodations. Devon is currently in the first year of their graduate program and obtained formal accommodations through the institution. They describe a largely positive experience but

did mention that their graduate program requires much more reading and memorization, which is difficult for them.

Frankie is in the middle of a highly competitive 1-year graduate program. Frankie struggles with depression and anxiety, particularly related to academics, but for many reasons does not feel they are able to seek help. Largely because the climate of a competitive STEM field, disclosure does not seem feasible. Their program involved a high workload, and it takes Frankie much longer to complete assignments, so they would fall behind and then feel as if asking for help would look like an excuse. Additionally, Frankie is uncertain about the process of obtaining documentation, and does not want to take up a 'valuable commodity' from people who need it more. Frankie has been able to succeed without accommodations, so they plan to finish their program without support. Frankie would like to help make it easier for other students to feel comfortable asking for support.

Jordan excelled academically throughout their educational career. They were bullied and found solace in school. They attribute success to some of the traits associated with their dis/abilities, although it came at a cost to their mental and physical health. Jordan is bipolar and deals with post-traumatic stress disorder and obsessive-compulsive disorder. They recall being able to forego sleep and consume large amounts of material to overachieve in school. Jordan has several graduate degrees, and in one of their master's programs, they were discouraged from seeking accommodations. When they were enrolled in a certificate program, they did pursue and obtain accommodations, yet faculty continued to deduct points for late work despite being prescribed that accommodation. They have not sought accommodations in their current program and does not plan to. They feel that program faculty would provide support if asked and they understand

their disabilities very well now and know what they need to be successful without formal support.

Morgan was diagnosed with memory and auditory processing disorder in high school. Morgan was struggling in a course when their teacher suggested they seek support. Once they were diagnosed and learned about their disability, they excelled academically, and gained admission into a prestigious and competitive college. Knowing they would need support in college, Morgan self-disclosed and officially sought accommodations. They did experience some barriers with individual faculty, but they had a fantastic experience with the disability services office at their undergraduate institution. Morgan just completed their graduate degree, and unfortunately, had a terrible experience with the disability services office, as well as some individual faculty. Morgan understands their disability and is a strong self-advocate, so they were able to persist despite the barriers.

Parker is hearing impaired in their right ear, has ADHD, and they are exploring a possible autism diagnosis. Disability services were not really offered or promoted at their undergraduate and master's institution. Parker remembers feeling shame about their disabilities. Due to the invisible nature of their disability, Parker learned how to manage their disabilities without having to seek support. Now, in their doctoral program, Parker is considering seeking accommodations because they fear they will not meet the strict deadlines of their program. Parker did mention that they are unsure how and where to seek accommodations and no longer has access to their disability documentation.

Peyton was diagnosed with ADHD as a child and in high school they dealt with chronic illness and an autoimmune disorder. They speculate that their chronic illness may be related to the lack of sleep and continuous stress due to ADHD during their K-12 education. Peyton did not

formally request accommodations through their undergraduate institution until they had a medical emergency and missed an exam while in the hospital. At that point, they contacted disability services for help, but did not receive support. Luckily, Peyton's undergraduate department allowed them to re-take the test. Peyton is currently in their first year of graduate school. They have not sought support since because they feel like they can achieve without it. They also noted fear of ramifications of a formal assessment and diagnosis. Their program has been very accommodating so far, but they hope the flexibility continues once in-person instruction resumes.

Raegan had severe social anxiety in high school, had their first major depressive episode as a junior in college, and was just recently diagnosed with ADHD. They attended an alternative high school and a very small liberal arts college. They had an extremely negative experience with a faculty member, which was discouraging and resulted in them internalizing their struggles. They did not seek accommodations, because they did not feel 'worthy,' nor did they know they were eligible for support. Raegan is in the candidacy portion of their doctoral program and is really struggling to meet deadlines. Raegan has exhausted their leave due to feelings of inadequacy. They did officially request accommodations through their current institution but was told that nothing could be provided at this point in their education.

Riley has dealt with depression and anxiety most of their life but was also diagnosed with ADHD their freshman year of college. As an undergraduate, Riley was an athlete and graduated from a very competitive STEM program. Riley did not seek accommodations due to the daunting process of obtaining documents and requesting support, but they were a strong self-advocate and requested support through individual faculty when needed. They quickly understood how their disability manifests and how they learn most effectively, so they were able to pursue without

formal accommodations. Their undergraduate program was small and the majority of faculty were very supportive. Their current graduate program focuses more on memorization, which is something Riley has struggled with. Their current institution also required an additional psychological evaluation before prescribing medications, but evaluations were suspended during the COVID-19 pandemic, leaving Riley without necessary medications for months. They do not plan to seek formal support through the institution after that experience.

Sophie has always struggled with their ADHD but was only recently diagnosed. They utilized various maladaptive coping mechanisms to persist through their undergraduate education including physically exhausting themselves and isolating themselves from distraction. They acknowledged that undergraduate school was better for their ADHD because their schedule was very rigid but was not appropriate for their physical or mental health. Sophie attended a small college for undergrad and was able to tailor their schedule to courses they knew they would succeed in, so they did not feel the need to seek accommodations. They are currently in the seventh year of their graduate education and do not plan on seeking accommodations despite struggling with the rigid timelines of their program.

Taylor started getting chronic migraines in middle school and has had multiple concussions. Their migraines are so intense that they are incapacitating and have lasted up to two weeks. Taylor's undergraduate program was small, so they felt comfortable asking individual faculty for support. Their parents were big advocates for support, so Taylor sought formal accommodations at the end of their freshman year. They experienced difficulty obtaining the necessary documentation, but the disability support program was very supportive after that. Unfortunately, some of the large-lecture faculty were not accommodating, but the majority of other faculty

were. They are currently in the fourth year of their graduate program. They did seek support and received accommodations in their graduate program, in case they needed them.

Ethical Considerations

Disability status and experiences related to disability can be a very sensitive subject. Ensuring confidentiality was a crucial ethical consideration for this study. The Human Subjects Division approved the study and classified it as ‘exempt status’ due to the minimal risks to participants. Despite the ‘exempt’ classification, many measures were put in place to ensure student’s confidentiality. Pseudonyms were used for each participant. The participants had the opportunity to choose their own pseudonym or allowed me to choose one for them. One student elected to choose their own. For the thirteen participants that allowed me to choose one for them, I specifically chose androgynous names to ensure further confidentiality. When the transcripts were emailed for member checking, a potential pseudonym was also sent for their approval. Additionally, since most graduate programs are small, the participant’s graduate programs and much of their demographic information is not disclosed in this research. All data was saved on a password protected computer and backed up on an encrypted drive.

CHAPTER 4: FINDINGS

Findings are categorized to answer the research questions that guided the study as well as additional observations that arose. This chapter identifies the reasons that students chose to self-disclose their disability to their institution or not, their perceptions on the differences between undergraduate and graduate education, and their ideal classroom characteristics. Additionally, an unexpected and prevalent theme arose about the benefits of disability, which will also be highlighted. Participants approved the use of direct quotes. Filler words such as “like” and “you know” were removed, and brackets, dashes, and ellipses were only used to provide clarity and improve flow.

Disclosure

Self-disclosing one’s disability status is the first step in seeking support, but this is often regarded as the largest barrier for students (Hutcheon et al., 2012; Matthews, 2009). To further explore this barrier and elevate the voices of students who did not navigate it, students were asked to share their rationale and experience with disclosure. Students chose to disclose, or not, for various reasons. The number of participants in each disclosure category is depicted in Table 2. The distinction was made between self-disclosing and seeking formal accommodations those who self-disclosed to their faculty but did not seek formal accommodations in their undergraduate and/or graduate programs. It is understood that if a student formally sought accommodations, they also self-disclosed. It is important to note because of the additional barriers involved in the formal accommodation process. It is also important to note that just because students formally disclosed does not mean that they were provided accommodations. As noted in the methods chapter, three students formally disclosed in either their undergraduate or graduate programs and did not receive accommodations for various reasons including lack of

eligibility or documentation, unavailable services, and uncommunicative disability services office.

Table 2

Disclosure Categories

*Disclosure	# of Participants
Sought formal accommodations in both their undergraduate and graduate programs	4
Did not self-disclose or formally seek accommodations in either their undergraduate or graduate program	3
Sought formal accommodations in their undergraduate program, but did not self-disclose or seek formal accommodations in their graduate program	3
Did not self-disclose or formally seek accommodations in their undergraduate program, but formally sought accommodations in their graduate program	1
Informally disclosed through their faculty in both their undergraduate and graduate programs	1
Did not self-disclose or seek formal accommodations in their undergraduate program, but informally self-disclosed in their graduate program	1
Informally disclosed in their undergraduate program and formally sought accommodations in their graduate program	1

**Note.* The distinction between self-disclosure and requesting formal accommodations is made because of the additional steps required to receive accommodations. Not all students who self-disclose or seek accommodations receives supports.

The students represented a diverse range of disclosure statuses and rationale and themes emerged related to disability type, age of diagnosis, and prior experience. Students with chronic illness and traditionally defined learning disabilities were diagnosed before college, and each of them disclosed and formally sought accommodations in college. Students with ADHD and mental health disabilities were less likely to disclose and were more likely to express fear of stigmatization. Disclosure rationale in graduate school is noted in the findings.

Reasons to Disclose

Some of the common reasons that students chose to disclose included: they knew they would need accommodations, their parents or faculty encouraged them, they felt comfortable self-advocating, and they had clear documentation. Dakota, Devon, Morgan, and Bailey were diagnosed with traditionally defined learning disabilities before college, had documentation, and parental advocacy. Many of whom received accommodations acknowledged their privilege in terms of documentation and prior experience and expressed that they sought accommodations because they knew they would need them. Dakota shared their reasons:

My mom has always been my biggest cheerleader, and an advocate and when I when I got accepted to [undergraduate institution], she had done a huge amount of research search on Disability Services and college, so she was basically put it in my lap and was like 'here, apply'. So that was kind of why I applied, but it was also like I knew that college was going to be much harder than high school, and just being able to have that safety net of, like, 'oh, I actually do need extra time on this assignment'. And then going into grad school, by that time, I didn't really need all that many accommodations. I just I wanted the safety net of it in case I did, so I did apply.

Similarly, Devon said:

I knew ahead of time that I wanted to have the accommodations in place if I needed them, and so, while it was a process, I was able to get that done before getting into the stressful environment. I think that would have been really stressful if I had gotten there and been like 'Oh, I need this,' and then trying to do that, all while falling farther and farther behind in school. That would have been a nightmare.

Bailey, as a few of the other students were, was hesitant to consider themselves disabled. But their mother was an educator and advocated for them to get tested and they formally sought accommodations in their undergraduate program. Morgan also had a faculty member who encouraged them to get tested and request accommodations. Morgan felt very comfortable self-advocating and had a wonderful experience with the disability services at their undergraduate institution and said, “I wouldn’t have been able to graduate pre-medicine [without it].”

Taylor suffered with chronic migraines since middle school and noted similar reasons for disclosing and seeking support. Taylor said:

In high school, my parents were really huge advocates for me, they talked to administrators when I went through my concussions and so they're like, ‘hey, you should probably reach out and get some people that are on your side and [who] will be there for you’. I felt very comfortable reaching out to people and saying, ‘hey, just so you know, probably going to miss like up to a week or two of class at some point. I'm going to be contacting you’, so I would say that I was incredibly privileged because I had those small communities... My first year I had a migraine that last two weeks and I had to miss class every single class for two weeks.

For the students who self-disclosed and used accommodations, I asked if there were times that they did not ask for accommodations, and many of the students did not seek accommodations in courses that were too large or did not feel it was necessary. Riley self-disclosed to many of their faculty but mentioned, “If they didn't directly ask, or if it was a really big class, I didn't say anything unless I found that I needed to.” Bailey also echoed similar reasons by saying, “There were classes that I decided, ‘oh, maybe I'm not going to do this or ask the professor for accommodations’ and that was usually based on whether I really thought I

needed it.” The experiences from these individuals contradict previous research that alludes to negative faculty or peer bias as the most important factor when determining not to self-disclose in individual classes. It is important to note that the majority of the students in the study had negative interactions with faculty and or peers when self-disclosing, but this will be discussed in the next chapter.

Additionally, four students who disclosed in their undergraduate programs, elected not to disclose or seek accommodations in their graduate programs. Three of the four students did not disclose because they were fearful about the potential implications for their future careers and graduate studies. Two of those students were specifically cautioned not to disclose by peers who had negative prior experiences.

Bailey did disclose in their undergraduate program, as previously mentioned, but they did not disclose in graduate school because they “didn’t want them to think that I couldn’t cut it.” Bailey also added: “At this point in my life, I can function pretty well without the accommodations.” Casey echoed similar concerns as Bailey. Casey disclosed and had formal accommodations in their undergraduate program because their faculty encouraged them to seek support. They had a positive experience in their undergraduate program, but did not seek support in their graduate program for various reasons:

I was honestly worried about it because it's such a small program. And I don't know the culture of everything. If all the professors know that I have ADHD, or that I have other stuff going on, is that going to impact how they are rating me? And potentially, if I did want to continue on to do the Ph.D. program, would that impact my chances for that?

Would that impact my chances of getting a job?... I broached the subject with my advisor and about accommodations and how that would be received, and her response was, like,

‘oh, um, yeah, I think we have maybe had a student once before who had accommodations. I'm not sure. Yeah, no, I don't know’. And so I left that conversation just kind of crying and feeling like that wasn't something that I could do.

In their undergraduate program, Peyton did not initially seek accommodations because they did not need them, until they missed an exam because they were in the hospital. When they sought support, none was provided. Peyton now informally seeks support for their autoimmune disorder but was cautioned not to disclose that they also have ADHD. Peyton said:

An informal mentor that I was spending a lot of time with was basically like, ‘listen, I just need to tell you that when I disclosed that I had ADHD, and people in the department found out about it, it got really bad’ and they started getting taken a lot less seriously and having a lot of trouble. So she was basically like, ‘you know, it's great that you feel comfortable with it, and it's fine to talk about it with people that you know you're close with, but you shouldn't just broadcast it because there are people here that aren't good about it’ and I've had other people say other things of like ‘I have a learning disability and I was told by the department not to tell anyone what it was’, and stuff like that... I've never gone formally through anything. I'm honestly scared to have any records of it.

Fear of negative bias is one of the major reasons that students did not disclose, even if they had previously disclosed and had positive prior experiences. This finding indicates the importance of institutional culture and the impact it can have on a student's comfort or willingness to disclose.

Reasons Not to Disclose

Students with ADHD and mental health disorders were less likely to disclose. Reasons for not disclosing included: not identifying as disabled, unaware of their disability, fear of stigma, did not need them, and some students were even warned not to. Four students stated that

they did not view themselves as disabled, or that their disability was not bad enough to seek support, including Sophie who said: “So I think in terms of [identifying] as a grad student with a learning disability, that’s always been kind of like fraught for me...my own experiences of neuro-divergence are kind of mild in comparison.” Parker also never sought accommodations because they did not consider themselves as disabled, in addition to feeling embarrassed and no longer having access to their documentation.

In addition to being initially unaware of their disability, Avery expressed fear of stigma as another reason for not self-disclosing:

I couldn't even have in that time of my life, put into words what my mental health was, or probably even defined mental health... I wasn't as outgoing, I was really introverted, and I didn't have the means to say, ‘I need an extension on this’ or ‘I need help with this assignment.’ I think a lot of times when you're in undergraduate school, you look at that as like, ‘well, I never received these services before, so I'm not qualified to receive it now’ and ‘I don't want to be taking away from others’ or ‘I don't want to appear weak or, you know, any negative adjective that could be applied.’ So, one question I've been toying with recently in terms of being honest with myself is, like, do I sign up for something that puts some kind of label on my application that maybe someone would look at down the line and would have a negative experience with, or look at me in a different way?

Similar to Avery, Frankie also expressed uncertainty about using resources and fear of stigmatization:

There are definitely people who have it worse than me, so I don't want to be taking up - this is a valued commodity... it didn't feel necessarily right to take up those resources

given that, you know, a mental health kind of disability is less [severe] than [other disabilities]. I think one of the biggest things is I never really presented myself as having a disability...I think a large part of being in a competitive STEM field is that imposter syndrome is another compounding thing, and disabilities are just another thing to add to that. I think that is probably one of the main reasons why I haven't really sought out any sort of help is because of the cultural implications of it as well. I think there is still some sort of un-spoken judgment from professors that I've seen.

The fear of stigma and consequences of being labeled as disabled initially impacted Jordan's decision to seek help, but Jordan also recalls warnings they received not to disclose:

There were rumors that the way, generally, the university handled this was to put students on leave of absence and just never really let them back in. So, it really became clear to me, at that point, that declaring my particular condition to the Office of Disability was not an available option for me. Again, this was never taught to me formally, so I just opted to not really dig in any further and essentially what that meant is that I had to go through school all my life dealing with the effects of these conditions and I was really never able to access accommodations.

At a different graduate institution that Jordan later attended, a faculty member encouraged them to seek support, but that resulted in a negative experience, so they no longer request help:

So I finally agreed to request accommodations at [other graduate institution] and it kind of, sort of backfired, because while the teachers absolutely recognized my accommodations they continue to take points off my grades because of a different deadline. So eventually I just stopped following the accommodations myself and continued doing what I was doing before. Currently I have not requested

accommodations at the [current graduate institution]. I haven't felt like I need to do it so far, but I'm also pretty sure that I'm not observing all the things that I need to observe to keep my health in the right place.”

Students with mood disorders and ADHD were the least likely to disclose in either their undergraduate or graduate program due to fear of stigmatization; however, a few of these students chose to disclose later in their educational careers and highlighted the catalyst for their decision.

Three students who did not self-disclose in their undergraduate programs later disclosed and sought help, either informally or formally, in their graduate programs. All three students had different reasons for seeking support later in their academic careers, however, all three students were diagnosed later and better understood their disabilities in graduate school. Raegan struggled with mental health during their undergraduate programs, and said:

I never thought about disability services. I didn't think of myself as someone who either deserved that or would fit into that category. I had no idea – I for a very long time felt like I was unworthy of even considering disability as something I could deserve, because it was – I was like, ‘oh I am just depressed...that just means I am not good enough to be here.’

Raegan was later diagnosed with ADHD in their graduate program, which served as the catalyst to seek help. Raegan said:

I will say that because I had had a neuro psychological evaluation beforehand, the experience was really a lot easier for me with that in hand, so I will say that I think if I had not had this really clear official documentation that I would not have felt nearly as a comfortable or even empowered in asking for accommodations.

Both Avery and Frankie indicated that encouragement from faculty was the reason they self-disclosed. As highlighted above, Avery did not fully understand their disability in their undergraduate program but feels much more comfortable advocating for themselves now. They also disclosed to their advisor, who has been very supportive.

Confusion About Process

An unclear process for requesting accommodations at their institution resulted in quite a few students deciding not to seek support. Five students, including three students who had formal accommodations in their undergraduate program expressed confusion and uncertainty about the request process at their current institution. Not only was there confusion about the process, but a few other students who requested accommodations at this institution did not receive support. More detail about barriers such as unavailable and inadequate accommodations will be discussed in the next chapter. The commonalities about confusion is important to point out because it highlights the impact of institutional climate. Regarding disclosure, the following students expressed uncertainty about how to disclose at their current institution. Casey, who successfully navigated the process at their undergraduate institution said, “I think also the [current institution] looking at their disability accommodations form on the website, it's kind of confusing. And I'm like, what can I request, what can I not request?” Similarly, Bailey also had formal accommodations in their undergraduate program, and although confusion about the process was not their main concern, they said, “If I wanted to, I have no idea how I would go about it.” Although Morgan did officially request accommodations but did not receive adequate support. When first trying to navigate the process, they said, “First of all, I didn't even know where the disability center was. I didn't know how to access it. It was not promoted.” This observation is concerning because all three students were able to successfully navigate previous processes but

experienced more barriers at their current institution. Additionally, Riley informally sought accommodations through the faculty in each of their programs but did not formally seek accommodations because “it always seemed lengthy to fill out an application and to prove that I do have a disability that needs accommodation - that process was always so daunting that I never did it.” Institution climate and awareness (or lack thereof) about disability and available supports may be impacting student’s willingness to self-disclose and seek accommodations.

Graduate School versus Undergraduate

Relatively little research has been done to investigate the different needs of graduate students compared to undergraduate students with learning disabilities. Initial research shows that graduate school is substantially different in terms of content and rigor and stresses the importance of advisor roles (Bethke, 2004; Montoya, 2009). Additionally, graduate programs often involve independent research and writing requirements. It is still unclear what graduate students need regarding support after they progress past the point of coursework since supports are only required to be provided in classrooms. During the interview, students were asked to compare the difference between their undergraduate experience and current graduate experience to determine if their needs had changed. Nearly all the graduate students stated that their graduate needs and experience were vastly different from undergraduate, but contrary to previous literature, seven students actually indicated that graduate school was easier for various reasons. Those students felt that graduate school was easier because the curriculum was more focused, and they had a better understanding of their disability and needs as a student. Dakota stated:

Graduate school is so much more precise about what exactly you’re studying, and you want to study those things, so it is easier to write that paper and study for that test,

whereas in undergrad, there was a lot of requirements that you had to take even though you did not want to. I am not much of a science person, so I would probably need a lot more support in those classes than I would in my psychology classes.

Casey and Bailey felt similarly, and Bailey also acknowledged that their experience in undergrad made it easier to navigate barriers in graduate school.

I think my needs have changed because I'm no longer prioritizing the grade, I'm prioritizing the knowledge I am learning from it. And I just think I have a lot more experience having gone through four years of undergrad and then having worked in a lab. I'm better able to navigate challenges.

Students who were diagnosed before or during their undergraduate education and were able to navigate the barriers had prior experience to help guide them through their graduate programs.

Avery explained:

I think in graduate school, now that I am older and knowing more of my mental health issues, I think it is helpful for me to see when things may be on the horizon, whether I am feeling a certain type of mood or shift coming on and I think that's different than my undergraduate experience.

Jordan expressed similar feelings, "I am at a place in my life where I have been on the treatment for a long period of time. My conditions are checked, well taken care of, I understand them."

Although many students contradicted previous research and indicated that graduate school was easier for them, common themes about doctoral education requirements, managing multiple demands, and the importance of advisors arose, which aligned with previous literature.

Doctoral Education

Students who expressed the most difficulty in their graduate programs were in the final years of their doctoral programs and working on their exams and dissertations. Most accommodations are focused on support for classrooms, particularly for undergraduate students, and doctoral students in the present study indicated that support does not exist for students who have completed their academic requirements. The self-directed nature and multiple deadlines proved difficult for students, particularly for students with ADHD. Raegan has struggled with the self-directed work and explains their frustration with the graduate school structure:

There really isn't a structure or way that accommodations can be applied to the graduate experience past the point of classwork. The lack of deadlines and the lack of an environment that stimulated my thinking has made it difficult to maintain a sense of external motivation, a sense of purpose, and a sense that I am capable. It has become a lot more difficult for me to see myself as legitimate, as a scholar, as a graduate student because I no longer feel like I am able to have the sort of continuous and structured reminder of being in the classroom and feeling like I can perform to the classroom. The expectation of graduate students and the kind of work we're supposed to be producing, are that we should be able to do it fairly isolated – we're supposed to be able to produce work on our own and it shouldn't be a struggle because we are supposed to be good at that.

Sophie experiences similar frustrations in terms of deadlines and lack of structure:

It is self-directed in graduate school. And in undergrad, you have a lot of structure, even if it doesn't feel that way. So, I think that in terms of support for people, I think that in graduate school the assumption is that you have to be completely self-sufficient and if

you are not, then you haven't fully grown up. The timelines of my graduate program are not sustainable for someone with greater barriers to education than me, and they are not sustainable for me either.

Parker is even considering seeking support for the first time because they are concerned about doctoral program deadlines:

I constantly worry that I may not meet deadlines – I may not meet my milestones because a lot of it is on my own. There is no structure right now.

Most doctoral students are not in academic classes but must produce academic work on top of usually teaching and juggling other demands. Taylor states:

I often find myself now not formally seeking accommodations because I am not taking any classes right now. It is just different expectations. I have weirder deadlines. You are not just taking classes to fulfill your degree requirements; you're doing a lot of other things.

Multiple Demands

Most of the participants agree that graduate students are required to juggle multiple demands. Frequently, undergraduate students have financial and/or familial support to assist them through their education. Avery stated that juggling multiple demands in graduate school makes it more difficult and recalled, “when I was an undergrad, I was fortunate enough to not really have to work or to have to juggle a bunch of different jobs in order to make ends meet.” Additionally, Peyton and Frankie are students in competitive STEM majors and identify additional demands and cultural expectations. Peyton stated:

When I was an undergrad, I was transitioning from being a kid to an adult. I have a full life...and I feel like in grad school, there's an interesting thing in academia where it's like

everyone's living their lives, so you know that they have someone, and every once in a while someone had kids, but people just kind of pretend it's not happening. They are proud to say that they worked all weekend, and they worked on holidays, and they want to seem like science is their entire life. Now it's like this is supposed to be my entire identity and that's not how I work.

Frankie also stated that the competitive nature of STEM was difficult to juggle. Frankie is in a research-based one-year master's program, so they do not necessarily feel like their needs have changed since undergrad because they were required to take on a heavy workload since their junior year:

From my junior and senior years, I was practically a graduate student, because I was teaching every quarter, taking classes, and leading several research projects in my lab, so the responsibilities, comparative from what I've heard from standard undergrad experiences, were way disproportionate. Overwhelming research responsibilities related to my thesis that have little to no mentorship, and then on top of that, deadlines and associated things related to grants, so high pressure that I am responsible for to provide for the lab. Those two things don't work well, especially for a grad student who is also taking classes.

Advisors

Since graduate students are [supposed to be] working closely with their advisors or mentors, the importance of the faculty advisor relationship critical to the success of graduate students, but even more so for graduate students with disabilities (Bethke, 2004). Many of the participants confirmed that their advisor relationship impacted their experience as a graduate

student. A negative experience with an advisor can certainly create another barrier for students to navigate, such as Frankie's experience:

The mentorship support is highly variable. If you have someone in an advisor position who offers to be your mentor, then you expect that the mentorship role is actually fostering a positive career outlook and relationship, but that hasn't necessarily happened, so that's made this entire process more difficult.

However, a positive experience can reduce the barriers, as Taylor describes:

One of the reasons I chose [current graduate program] was because of my faculty advisor. She is wonderful and she believes in work-life balance. My advisor is really supportive, but I could see how students could get lost if they don't have a support system like I have in my advisor.

Raegan may be struggling with self-directed work but having a negative experience with advisors could be detrimental. They acknowledge the role that advisors play and stated, "I think I gravitated toward those faculty members who I felt were understanding and respected me in spite of the struggles that I've been going through."

Findings aligned with previous research and confirmed that graduate school is substantially different in terms of content, demands, and relationships with advisors. Findings in this study also aligned with Teichman's (2010) study, that graduate students are less likely to disclose, but for different reasons. Students indicated that in many respects, graduate school is easier because they learned to navigate the barriers in their undergraduate education, the content was more enjoyable, and they were able to prioritize learning over grades. Students certainly experienced barriers, disbelief, and unavailable or inadequate support, as highlighted in previous research, but also indicated many positive characteristics about graduate programs.

student input into the curriculum. Nine students expressed the need for less frequent lectures, or pre-recorded lectures that they could watch before class and discuss during class. If lectures were necessary, four students specifically indicated the need for more frequent breaks or the ability to move around the room or step out of the classroom if necessary. Ability to move around the classroom was most common for students with ADHD. Dakota explains:

Having flexible seating and less rigid rules about how you can sit - if students need to stand, why can't they just stand? Or if students need to pace a little bit, but they're still listening, why would that be an issue? So just being able to move around having flexible seating.

Participants also expressed the need for diverse formats of instruction that acknowledges different learning preferences. This included the desire for fewer tests and more project-based assessments of learning. Project-based assessment were considered by participants to be the most impactful for learning. This was a theme across disability category and program type but particularly salient for students with traditional learning disabilities. Devon stated:

I wish that there weren't tests and I think it's more beneficial to have long-term projects, so you can kind of build on what you've done, and see where you're going, and you can have as much time as you want.

Another apparent theme across all categories was the need for structure and clear instructions. Having a structured syllabus that indicates a clear plan for the term, detailed instructions about assignments, and even examples of assignments are important for helping students proactively plan. Riley mentioned, "I like where things are very systematic, very laid out - this is what we're getting through, this is where we are in the course, and this is where we're going, so I can see the big picture." Similarly, Jordan expressed,

What I find the most useful is to have a clear calendar of everything that is going to be due for the class (for the entire duration of the term) with the specific deadlines and with the specific requirements for each assignment.

The last commonality was communication. In both the ideal classroom characteristics, and the advice to faculty, which will be discussed in the recommendations chapter, participants highlighted the desire for open and honest communication about disability. This was a commonality across disability category, but particularly important for students with mood disorders such as depression and anxiety. Students felt that they would be more willing to self-disclose if faculty were open about their own struggles, normalized disability, provided instruction on how to seek support, and asked students how they can provide support in the classroom. Three students explicitly stated that the small blurb about disability support, which is required to be included in all syllabi, was insufficient for creating an open and inclusive environment. Those students also had previous experiences where faculty specifically discussed disability in the classroom, asked for input to shape the class, and shared detailed information on what support was available and how to request accommodations.

All students relied on previous experience when determining their ideal classroom environment, whether that experience was good or bad. Avery reflected on the culture of classrooms during the COVID-19 pandemic and expectations that have been stressed to faculty. Higher education administration has emphasized the need for compassion and flexibility to help students get through this unprecedented and trying time. Avery stated:

I think a lot of the strategies I've seen some of my teachers use this quarter have been really good indicators of what we should always expect to see in classes or what should be always the standard.

Avery stressed the importance of communication and availability. They shared their negative experience from a previous graduate program in which the faculty provided very little support and did not answer their emails when asking for support. Like many students, Peyton emphasized the need for recorded lectures and more discussion-based classes based on difficulty they had in previous classes. They stated:

The professor didn't post any slides, didn't post any homework, didn't give you anything other than the lecture, so I was completely out of it and I was so stressed the day of the exam...I think the best thing for getting through class is to not have everything be only in lecture. I know they want to give us reasons to go to lecture, but if you only mention the homework in lecture, if you only talk about the exam in lecture, if you don't post the slides online, I am going to miss 80% of it because I can't hear that well because I am too ADHD. Making sure that we have access to that information in many different ways is the most helpful thing – reiterating it for people that lose stuff the first couple of times.

Morgan's main suggestion was to make assessments project-based because they better reflect knowledge and students can learn as they go through the process. Morgan had negative experience with tests that do not adequately reflect their knowledge or learning:

The way testing was done was obviously not conducive to what I knew or understood, but I think that's indicative of many people with learning disabilities. I feel like a 15-question multiple choice test with one short answer, where if you don't get it 100% right you get no points is not good for someone with a learning disability.

If tests were necessary, Morgan mentioned the benefits of re-grades:

I think that there should always be opportunities to do re-grades, so that you're learning the information, and then you're essentially being rewarded for providing a better product than what you turned in.

While some students drew inspiration from positive previous experiences, many of the participants experienced barriers that correlated with their suggestions for the future.

Flexibility, diverse instructional and assignment formats, clear structure and instructions, and openness are all characteristics that students identified in their ideal classroom. When instructors are creating curriculum for these courses, implementing easier characteristics such as structured and clear course information, flexibility with physical space including virtual options, and open communication not only help students with disabilities, but it benefits all students. Many of the participants indicated that they did not request accommodations in courses that it was not necessary for, so incorporating these characteristics could reduce the need to rely on accommodations.

Benefits of Disability

An apparent theme that arose when interviewing the participants is the unique skills that students with disabilities possess. Rather than focusing on negative characteristics, many discussed the benefits of their disability. Casey will be working with people with disabilities and views their personal experience as beneficial for their future career. They said:

I personally feel like people with disabilities have the most to contribute to helping [other] students with disabilities and being able to empathize with what they're going through...I would say that we are an asset because we have extra set of skills that we had to learn in order to operate in this environment and, therefore, we have extra knowledge

that other people don't have. We should be seen as a resource within the classroom for just how everybody can learn better and learn in different ways.

Similarly, Morgan states that students with disabilities are an asset:

Just because there is a diagnosis of a disability does not mean that we are any less capable than anyone else. In fact, we're probably more capable because we are a certain type of brain style. We are not linear, so we can bring more to the table than you could probably imagine.

Morgan points out that students with disabilities have more resilience and grit than students without disabilities. Jordan acknowledged that certain characteristics of their disability enabled them to succeed academically, although some of the behaviors were maladaptive. They said:

I was able to use some of the traits that come with the combination of these things to really succeed in school. [Being] Bipolar, it was very easy for me not to sleep for long periods of times and over perform. As someone who was obsessive compulsive as well, I could really focus on absorbing large amounts of information in a short period of time.

Jordan stated that these traits are beneficial in graduate school and believes there are more students with disabilities in graduate school because of those traits. Sophie highlights some of the benefits of ADHD including: "building community at the drop of a hat and maintaining several different projects at once." Riley also pointed out benefits of ADHD including being very creative and being able to remain calm and focused during crisis situations.

The findings produced by this study are significant because many of the results contradict previous findings, provide new insights, and fill gaps in the existing literature. Reviewing the literature, only one study asked students to conceptualize their ideal classroom environment (Morgado Camacho et al., 2017). Additionally, very little research has been done about

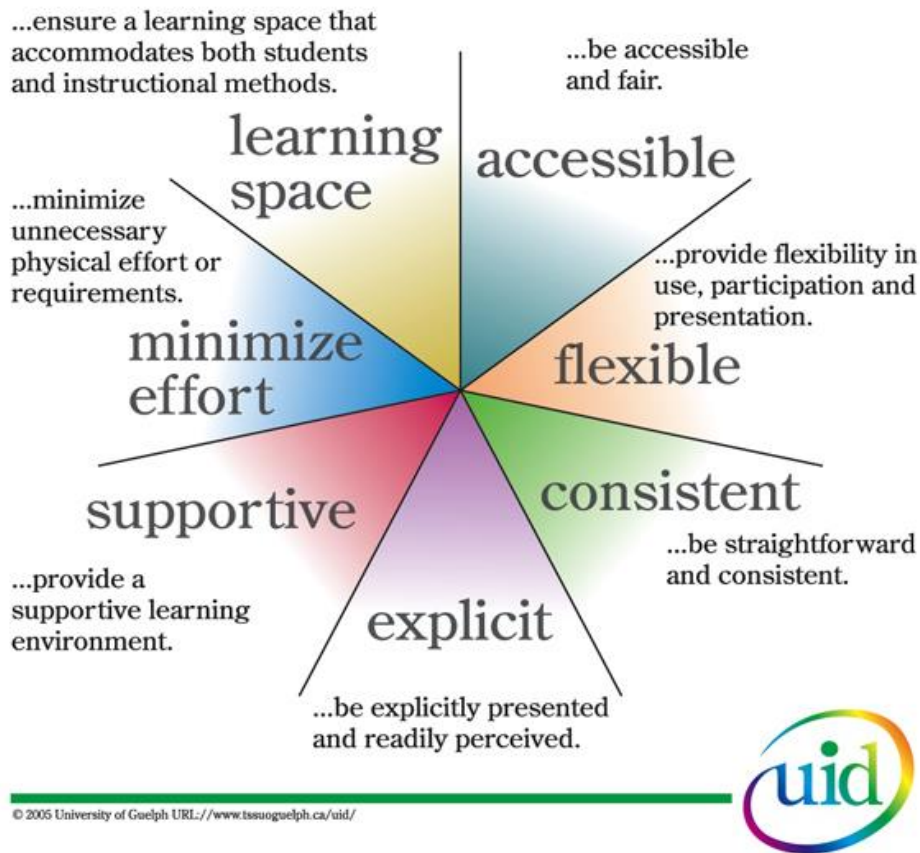
beneficial characteristics of different disabilities and the attributes that students with disabilities bring to classrooms and communities, yet it was an unprompted and apparent theme throughout the data. Finally, this study helps fill gaps in the literature by researching the unique needs of graduate students with disabilities, who are less visible in the literature compared to undergraduate students.

CHAPTER 5: DISCUSSION

The main purpose of this study was to identify classroom characteristics for graduate students with learning disabilities that might reduce or eliminate the need to self-disclosing and request accommodations. The study also sought to better understand previous experiences of graduate students with learning disabilities, reasons the students chose to self-disclose their disability or not, and any differences in need when comparing their undergraduate and graduate education. The findings revealed themes that will be discussed in this chapter including the alignment or conflict with previous research and the significance of the results.

Ideal Classroom Characteristics and UID

The ideal classroom characteristics that students identified, directly align with best practices and the Universal Instructional Design framework (Figure 2) (Palmer et al., 2002). Universal Instructional Design focuses on changing classrooms rather than accommodating students to fit within an inequitable environment. As the participants described their ideal classroom characteristics, it reinforced the idea that UID benefits all students, and should be considered best practice. Students stated that they would be more engaged in courses with these characteristics. Aligned with previous research, Yuval et al. (2004) also found that student engagement as well as self-efficacy significantly increased after courses were redesigned to incorporate UID principles. Flexibility in participation and presentation is apparent throughout the participant's responses. Allowing multiple ways to attend, multiple ways to present knowledge, and utilizing diverse instructional methods, rather than just lecture, are important components of flexibility. This also ensures that learning spaces accommodate students with diverse learning preferences and needs.

Figure 2*7 Principles of Universal Instructional Design***Instructional materials and activities should...**

Note. Reprinted from the Universal Instructional Design Implementation Guide (<https://cer.jhu.edu/files/uid-implementation-guide-v6.pdf>). Written by Jaellayna Palmer and Aldo Caputo and designed by Doug Schaefer. Copyright 2006 by the University of Guelph. Permission granted by the University of Guelph, 2021

Many students expressed the need for clear and consistent instructions with a calendar outlining the entirety of the academic term. Previous research has indicated that perceptible and readily available information is important for students with disabilities as well as students without disabilities (Black et al., 2015). Participants strongly indicated that structure and providing examples help students adequately plan so they do not fall behind, particularly for students who take longer to read or write papers. Reminders about assignments in multiple

locations (e.g., in lecture, online, via email) is crucial to ensure that information is readily available. One of the UID principles emphasizes the importance of minimizing unnecessary physical requirements (University of Guelph, 2006), which Casey spoke directly about:

I took a stats class in person last year at [current graduate institution] and she handed out the homework, like she printed it for you, which was very helpful because I didn't have to print it for myself, which was another barrier for me. I am just thinking through these extra steps...who are they helping and can we reduce any of them?

The participants may or may not have been previously aware of these principles, but each of them highlighted characteristics of UID principles. Black et al. (2015) pointed out that often disability in education is prevalent and students often have more than one disability so it is crucial to analyze current practices and implement all of the UID principles to “alleviate some accommodations that may be inappropriate and create a more inclusive learning environment” (p. 16).

Current Practice and Barriers

Previous research describes the barriers created by the current model of higher education. To obtain formal accommodations through the institution, students must meet with the disability services office and provide formal medical documentation. If they are approved for accommodations, students often need to then self-disclose to the faculty to have them implemented in the classroom. Often, those accommodations are insufficient for creating an equitable learning environment. Directly aligned with the research, participants experienced barriers with the documentation process, negative faculty and peer bias, and inadequate or unavailable accommodations.

Documentation

The first barrier to navigate is the documentation process. Previous research points out medical appointments and testing procedures required to obtain necessary documentation is expensive and often subjective (National Joint Committee on Learning Disabilities, 2007; Weis et al., 2016). Students who went through this process to obtain accommodations described their experience. Devon stated:

I had to get retested for that right before college, which wasn't super fun because it was two full days of being like, 'Let's look at all of the places that you aren't great and then throw you into an environment where you don't know anyone', I was like, 'yay'. But I got approved for accommodations and so my first semester as a freshman I went through all of that and then had to do that every single semester afterwards.

The students who were able to obtain documentation, including Devon, pointed out their privilege. Morgan mentioned, "I had the privilege to pay for the diagnosis. It is so expensive. There are so many people out there that don't have the money to do it." Having, or not having, prior documentation impacted many students' decisions to seek support. Even though Raegan struggled throughout their academic career, they did not disclose and seek support until the end of their doctoral program because of the documentation barrier. They said:

I will say that because I had had a neuro-psychological evaluation beforehand, the experience was really a lot easier for me with that in hand, so I will say that I think if I had not had this really clear official documentation that I would not have felt nearly as a comfortable or even empowered in asking for accommodations.

Finally having documentation empowered Raegan to seek accommodations, but the process of even obtaining documentation and seeking support prevented many from receiving formal accommodations, including Riley who said:

I just never chose to take the time because it is - it always seemed lengthy to fill out an application and to prove that I do have a disability that needs accommodation - that process was always so daunting that I never did it.

The barrier of paying for and obtaining the appropriate documentation was an apparent barrier for students and negatively impacted their decision and ability to seek formal accommodations.

Negative Bias

Annamma and Morrison (2018) state that many students with disabilities, particularly invisible disabilities, experienced stereotypical negative attitudes and skepticism of their ability to be successful in higher education. Any student who wanted accommodations in their classes had to navigate an additional barrier of self-disclosing to their faculty. Many of the participants experienced or were warned not to self-disclose because of negative comments from faculty. Additionally, using accommodations, such as separate testing facilities or using assistive technology, sometimes created awkward situations or negative bias. Some negative bias was not explicit, but rather explained as a feeling. Devon said:

Most of my professors were fine to help me accommodate. I definitely got the feeling that some professors were curious if I really deserved it – that either my intellect – they’re like “you’re either smart enough that you don’t need this, or if you really do require this extra time on your exams then maybe you’re not smart enough to cut this class.”

Some of the bias, however, was explicit, including this experience that Morgan had with faculty when they asked to use mnemonics on an exam:

Because I was pre-medicine at the time, he was like, “How do you expect to be a doctor if you can’t remember anything? I don’t care what you use, but you really need to think about your career.”

In graduate school, Morgan received more explicit negative bias from a faculty member:

I came to him to ask questions on an essay I had written and we just had taken an exam, and I knew that I did pretty well on the exam just based off how I felt, and so I came in and I was asking him questions on the paper (because I didn’t want to talk about the exam), and he was like “It looks like you did well on the exam – you did better than your other cohort members, it must be because you have extra time.”

Despite encountering negative bias and an unwarranted amount of skepticism about their ability, Morgan was an honors student and graduated early. Raegan shared a similar experience when a faculty was skeptical of their disability. Regan recalled this experience impacting their self-efficacy and interest in seeking further support:

When I first started experiencing major depression, I started having issues turning things in on time, I showed up late to class several days because I could not stop sleeping, etc.

When I tried to tell [the professor] – after he got angry at me for showing up late and not apologizing to the class – when I told him I was experiencing depression he told me that I couldn’t be experiencing depression because he didn’t see me showing that in my demeanor. So I was basically accused of lying.

Riley also remembered a negative experience they had with a faculty member that resulted in them transferring out of the class:

The professor I had would call me out in class multiple times – it was probably a 25-student room, and he would say, ‘[Riley], are you paying attention?’ multiple times. And

I went to him at the end of the first class and said, ‘Hey, I just want to give you a heads up, I have ADHD. I cannot look at you, the entire time. If I’m looking at you, the entire time, I’m not paying - I can promise you I’m not paying attention,’ and he said, ‘Oh, absolutely. Not a problem,’ and continued to do it for the next several classes. So I transferred out of his course and went back to a professor that I was familiar with and who was familiar with my ADHD.

Negative bias and skepticism from peers are also a factor. When using accommodations, students had to then self-disclose to peers. Morgan mentioned:

I am an open person, but you know, it is not ideal that everyone in the class knows, and then when you disappear for a test, they care about you, so they are like, “Where did you go?” and it is like, “Yeah, I had to go to the disability center.” It just doesn’t feel great.

Devon also experienced the same need to explain to their peers along with other barriers to self-disclosing:

At [undergraduate institution] we had to go in person to a meeting at the beginning of each semester to get these forms, and then you have to bring the forms to each professor and meet with them, and you both signed a copy so that they understood what your accommodations were, which in theory is good that you both have met, but in practice it made the beginning of the semester really stressful, because you have to find time to meet with the professor. A lot of times, I would try to do it right after class, but then you're going up and talking about your learning disability in front of the classroom, and people are like, “Oh, why did you have to stay after and talk with the professor?” and it's like, “oh, well, my brain just doesn't work”. And I make jokes about it because I'm mostly comfortable with it and the humor also just makes me feel more comfortable, like I don't

take it too seriously. But I did have to explain to a number of my classmates why I was doing it.

Although students tended to have positive experiences with faculty, it is clear that negative bias still exists and impacts a student's decision to seek support.

Inadequate and Unavailable Accommodations

Many who sought accommodations indicated that accommodations were not available, and if they were provided, they were often not helpful for many reasons. This supports the findings reported by Lyman et al. (2016). Lyman et al. (2016) interviewed students who did not use the accommodations formally provided to them and found that, in addition to the common barriers previously mentioned, participants stated that many accommodations such as AT were not helpful. A few participants indicated that when they sought support, it was not provided to them including Casey who said:

I didn't really know anything about the process or how any of that worked and then towards the end of my second semester when I was really, really struggling and I tried to kind of talk to my professors and talk to the different services about the fact that I was struggling and that I thought I needed help, they were kind of like, well, 'too late for you, now.' You know, they were like, 'we don't - we can't really help you at this point.' So that was definitely frustrating and I didn't feel like I was supported at all there.

Avery also sought informal support and recalled:

When I felt like, 'okay, I do need to take a step forward and ask for this kind of help and see what kind of services they can provide', not only to have a late response, but just not get a response at all is pretty detrimental.

Similarly, Peyton had a medical emergency and was not accommodated:

I start getting this severe abdominal pain, and I thought I was having appendicitis, so I left to go to the ER and ended up missing all of my exams. So that was the only time that I really tried to deal with the school accommodation system, where it was like, okay I was literally in the hospital, they thought I was dying, I missed all my exams, ‘Can you let me retake this exam that I took half of?’ And the guy said no.

Raegan also officially requested accommodations but was told that accommodations were not available for graduate students who were past the point of coursework. Providing accommodations to students who have not officially registered and provided documentation is not required by law but might be an important consideration for disability services offices.

Aligned with previous findings, when students were provided accommodations, particularly assistive technology, they were often unusable or not helpful (Lyman et al., 2016; Yuval et al., 2004). Devon explains why their accommodations were not useful:

I also had the ability to have the text-to-speech software - seems super helpful, but I ended up not really being able to use it because my major was mainly like physics, math, and chemistry, and the text-to-speech software doesn't do great with compounds or equations. And so it could get one sentence, and then it would be really weird formatting of speech, and then it would like get half a sentence, and really weird formatting of speech. So, I ended up not really using that just because it didn't read the textbooks I had very well. Technically I had the accommodation that I could video record lectures, um, but I didn't really know how to go about that because I don't think I had storage on my phone to just sit there and record it for an entire time, plus that would have felt really awkward I think for me, and for classmates, and for the professor. So, while I had the accommodation, it didn't feel accessible.

The findings highlighted that after navigating the multiple barriers to receive support, the accommodations were often not provided, not useful, or singled the participants out, creating negative faculty and peer bias.

Campus Climate and Confusion about Process

It appeared that the disability services office and the accommodations provided were worse at the current graduate institution students attended. Three students who had great experiences with their undergraduate services expressed concern about their current institution.

Dakota said:

Going into grad school, by that time, I didn't really need all that many accommodations. I just wanted the safety net of it in case I did, so I did apply for services, but I actually never heard back from them...so I don't actually know if I have services or not...the service center could have been a little bit more approachable, because it was hard to figure out what exactly I needed to send in to get accommodations, and I basically just took my evaluation and handed it to the people at the front desk and that was it. Nothing came of it.

Morgan initially did not even know where the center was. When they found it, they went in to ask for help and the person at the front desk said, "Oh sorry, I am just a student – I don't really know what's going on." When they finally met with an employee, Morgan felt the process was very "paternalistic" and that their input was not solicited as part of the process. Morgan was provided the accommodation of note takers, which was important for them, but when no one volunteered, they were not provided an alternative. Morgan also described their experience trying to utilize testing accommodations through the disability resource office:

I did end up taking a couple of tests there. It was really disgusting – the room was cold, like actually cold, and the people were sick, like coughing and sneezing, and it was just not a good experience at all.

All students were able to successfully navigate previous processes and all of them expressed that their undergraduate disability services office was instrumental in their success. This is important to note because the culture of the institution's disability services office impacts a student's experience and has the potential to create more barriers (Montoya, 2009). The unavailable and unapproachable culture of the current institution negatively impacted these participants.

Students experienced numerous barriers with documentation, negative bias, and accommodations themselves, which supports the DisCrit and UID theories that preemptively implementing commonly used accommodations would reduce the barriers and be beneficial for all students.

Education in a Pandemic: Barriers and Benefits

In March of 2020, institutions of higher education were shut down and switched to remote instruction in response to the COVID-19 pandemic. Given the relatively new situation, little research has been done about the pandemic's impact on students, particularly those with disabilities. Scott and Aquino (2020) asked higher education professionals to identify amplified barriers during the pandemic and the professionals reported that students with disabilities experienced greater barriers with the transition to online learning. They found that students with disabilities experienced greater barriers accessing needed technology, using accommodations, and accessing health services.

Additional barriers have been identified for students with certain disabilities such as chronic migraines (Chugani & Houtrow, 2020). Prolonged use of screens trigger migraines, which is an additional barrier that Taylor mentioned: "Now it's a little different because we're on

screens all the time. So, I have daily headaches, which is not great.” Researchers have also noted that access to healthcare and mental health services is limited during the pandemic, disproportionately impacting students with disabilities (Chugani & Houtrow, 2020; Twardzik et. al., 2021). This is an additional barrier that Riley experienced. Riley entered their graduate program and moved near the institution during the pandemic. They needed access to healthcare to refill their ADHD medications, so they contacted the institutions mental health center. They described the numerous barriers they faced when seeking support:

They were not willing to prescribe [medication] without a full psychological evaluation... I had taken a written test multiple times, I had a history of diagnosis, a history of prescriptions from multiple doctors, and they refused to refill my medications. With COVID, everything was shut down. It took me months, and I was struggling...I told them “I need this medication to function, like I’m trying [to get an appointment], here are all of my emails, but no one is open to give me a psych eval at this moment in time.” And they were like, “Tough. Sorry.”

Participants certainly indicated that they experienced some of the barriers mentioned by other research; however, many participants actually indicated the benefits of online instruction, particularly the increased flexibility. Peyton has ADHD and an autoimmune disorder and describes how they benefit from the new educational format:

Since everything is remote, it’s worked really well for me for health reasons like chronic illness. Everyone has been super extra accommodating this year. I don’t think the pandemic is a good thing, but I personally benefitted from everything being online because it takes me two to three hours to get out of the house in the morning, but it takes me 30 seconds to open my computer and get on Zoom class. Zoom is really good for me

because I can be knitting or whatever, and no one can tell, but in class I never felt comfortable doing that.

A few students also indicated that they are asking for fewer accommodations because they are being automatically provided, such as Zoom transcripts for notes, recordings of lecture, and extensions. Devon mentioned, “With everything being on Zoom now, it’s a lot better because most professors record their lecture, so that’s been really helpful for me.” With increased flexibility, Peyton expressed hopefulness that some of the supports will remain in place after the pandemic:

I feel like we are at a tipping point of like, we had to do all of this online accommodation, so everyone learned how to make it work. And there’s people this doesn’t work for, but I really want to encourage faculty to think about what needs to be in person, and what we can do online, and what options we have for a mix of both.

Twardzik et al. (2021) acknowledges the barriers created by the pandemic but expresses similar hope that the flexibility and increased accommodations will continue in education after the pandemic.

Benefits of Disability

I believe the most important theme to discuss is identified benefits of disability. Much of higher education operates on the medical model of disability, which views disability as an inherent deficit that needs to be fixed or accommodated. There are many studies (e.g., Hen & Goroshit, 2012; Holzberg, et al., 2019) that focus on what students with disabilities lack, such as self-advocacy skills, rather than what insights and skills they have that help them excel. When reviewing previous literature, very few articles were found that explicitly discussed any benefits to disability. One study done by Dangoisse et al. (2019) sought to understand the challenges that students with disabilities face when transitioning from high school to college. Similar to the

experiences shared by graduate students in the current study, their participants with disabilities also indicated that their background with their disability better prepared them for college when compared to peers without disabilities. Unfortunately, the benefits most researched were the benefits of medication for people with ADHD and mood disorders, highlighting the prevalence of the medical model of disability. The findings of this study are still significant because students share ways to harness characteristics of their disability and use those to their benefit. Positive characteristics included resilience, creativity, and over-performance. These perspectives are important for changing the medical model narrative. They point out that disability is not an inherent deficit, but actually presents many benefits to education and beyond.

CHAPTER 6: RECOMMENDATIONS AND LIMITATIONS

Plotner and Marshall (2015) report that the majority of faculty want to make their classes more inclusive for students with disabilities but lack the tools to do so. To provide faculty with applicable suggestions and to align with DisCrit principles, students were asked to share their recommendations to faculty who have students with disabilities in their classrooms. Table 3 shares direct advice from students to faculty and highlights supports that are easily implemented into classrooms.

Recommendations for Praxis

Table 3

Participant Advice to Faculty

Participant	Advice to Faculty
Avery	I wish that there was more exchange of information between faculty about those kinds of techniques that work well with students... I think it would have been beneficial for me, maybe in the beginning of my undergraduate years, to hear 'students with this dis/ability would qualify for these services.' I wonder if there is something that could be incorporated into every teacher's beginning curriculum that normalizes seeking help. I wonder if that would be something that would erase the stigma, a little bit.
Dakota	Yeah, I guess the first thing I would say is all disabilities are different - just like that thing of, you know one person with autism, you know one person with autism, it kind of goes the same for learning disabilities. You know, one person has dyslexia. The next person might have dyslexia, too, but they're not the same. And so you can't make any assumptions about how that person learns and the best thing you can do is offer your support of, like, "hey, what do you need from me to be successful in this class?" instead of being like, "here are your accommodations that may or may not help you." So just like asking how they can support you.
Casey	I would say that we are an asset because we have extra skills that we have had to learn to operate in this environment. So, we have extra knowledge that other students don't have and can be a resource in the classroom about how everyone can learn better and learn in different ways. I think it is really

important to have more open conversations, especially in the college environment. People always talk about diversity and inclusion, and you really can't have that unless you're openly talking about the needs of people with disabilities and asking them for what they want and need and how they can be more included, so I think it's really important.

Jordan

It's very difficult to ask for help. It can be it can be very embarrassing, and it can be a little bit demoralizing because you don't want people to think that you're trying to find ways not to do the same work that the rest of the class is doing. So, a big advice is to ask teachers to constantly make clear that if students need accommodations, regardless of whether or not they have any particular disability, that accommodations can be sought. There has to be a point where academic rigor stops being equated with lack of flexibility. If academic rigor has to do with disciplined learning, discipline is something that has to be responding to the individual students and not something that is pre-set, because it is going to change from student to student, just like it's going to change from teacher to teacher. So, openly have these conversations and openly remind everyone in the class that the teacher is open to conversations and that accommodations are always an option in that there is flexibility without watering down the rigor, is always a good thing.

Peyton

Do more with conversation than just a copy and pasted blurb in the syllabus. Just talk to your students. Even if you don't know that they're disabled, if you just say like "I want to be better at this," and people can kind of tell you. There's a lot of students that they're scared to ask for the things that they know they deserve. Saying 'I care,' is different than having the copy paste thing in your syllabus because the school requires - it is very different from saying "Hi, I'm trying to do this and this and this, but if you need anything specific let me know and we can work it out." Or having a Teaching Assistant with office hours they can talk to if they're scared to talk to the professor. But just asking them what they need, because you're never going to think of everything - they know what they need.

Sophie

If they feel comfortable, being upfront about their own struggles is a good way to make someone feel less like a 'fuck up.' If a student is struggling to turn things in on time, it is helpful to check in on them and maybe write them a timeline (acknowledges that is a lot of work for the instructor). And contextualizing what stuff is in the program is important. I think that there's a tendency in graduate programs to frame the program benchmarks as, like, "if you don't do well on this, or if you feel like you're struggling with this, then you're just not cut out to be in this program and you shouldn't be an

academic”, when in fact, they are arbitrary measures for something that is supposed to be helping you learn.

Taylor

I would just tell them to be compassionate. I think that compassion can go a long way and shows students that you care. But also recognize that students are in other classes and you might not be their favorite class or their top priority class, which is not saying that your class is unimportant, but you know there's other classes, and also their performance in your class might affect their performance in other classes or vice versa. So yeah, just recognizing that students are dealing with lots of different things, and so their performance may have other consequences in other classes.

Devon

I'd strongly encourage them to have an open dialogue with the student, because the student knows what works best for them at this point. Or if they don't, it's nice to have that open dialogue to figure out what works best for them, and be like, “Did that work? Did that not? How do you want to adjust it?” I've also never had a professor show an interest in my learning disability, which I think they're probably trying to do out of respect of, like, “Oh, if we just don't talk about it then I'm not making a big deal.” Like, you don't want to point out somebody's disability out of like - not trying to make them feel less than, but if somebody was like, “Oh, that's really interesting. How does that work for you? How does that inhibit you? Are there any benefits to it? Tell me how you view things because of that?” and they really tried to engage with me, I think that would be a positive experience. That could also be horrifying if somebody was really ashamed of their disability, but just having that open dialogue about like, “What works for you. Do you want to talk about it? How is my class interacting with your learning disability?” That would be really nice conversations to feel like I could have with the professor instead of taking a bunch of their time and being a hindrance to them.

Riley

I would say every disability manifests differently. I think when you're asking those questions: “How do you learn best? How do you test best?” I think that's really powerful. “How do you communicate?” I think is really important for whether you have a learning disability or not, because especially at these high levels and most high levels of education, most of us have been dealing with this for a significant amount of time, so we kind of know what works and what doesn't. And so I know you can't accommodate everything, but I think that is a huge step forward and just knowing. I also think it's important, for [faculty in] those higher-level education classes, to be somewhat versed in what these learning disabilities look like and how they manifest.

Raegan	I would tell them to encourage your students to be open to finding resources and if you feel and see that a student is struggling, be willing to set aside a portion of the time that you're meeting with them to go over a plan with them - if they're willing, of course. But tell them that you're willing to work with them on a plan that will make it possible for them to feel like they not only can succeed, but they actually belong in your program.
Parker	Be accommodating and listen to student's needs. Don't ask for documentation if not needed. Trust students when they self-disclose.
Morgan	Just because there is a diagnosis of a disability, that does not mean we are any less capable than anyone else; in fact, we are probably more capable, because we are a certainly style of brain functioning and we can bring to the table more than you can imagine. Students with disabilities have resilience and grit.
Frankie	I think being patient and not having any judgment are two biggest things. Their engagement with the class does not necessarily correlate with their learning ability, or their interest in your class. I think that's one of the biggest reasons why I didn't seek out accommodations was when I was drowning underneath a million assignments for a class, that gave me even less incentive to reach out to the professor, because then [the faculty] would be like, "Oh, this person is not doing my classwork and now they're looking for an excuse to get out." So, I almost failed these classes because of an unwillingness on my part to reach out for help. So, I think it's important for [faculty] to maintain these sorts of nonjudgmental states and levels of acceptance, so that other students feel willingness to at least reach out for help in some way.
Bailey	Be flexible in working with their students. Faculty should be aware that students have the right to be in the classroom and the right to accommodations.

The main suggestion for faculty is to ask students what works best for them. Students highly encourage faculty to reach out to students if you see them struggling and frequently look for opportunities to create an open and supportive dialogue. Additionally, they are encouraged to become familiar with common disabilities, how they manifest in the classroom, and the

beneficial characteristics of disabilities. The final observation is to think about why barriers exist, if they are necessary, and how to reduce or remove those barriers.

Limitations

Many limitations including generalizability, disclosure, and data collection during the COVID-19 pandemic factored into this study and served as the basis for my future research suggestions. First, findings cannot be generalized to the larger student population because of the single location and small size of the study sample. Additionally, students were not asked to disclose their disability category prior to the interview and were still included in this study even if their disability did not fall under a typical learning disability diagnosis. Students may self-identify as having a learning disability but may have a related disability that is not commonly categorized as a learning disability. Each student felt that their disability interfered with learning, and therefore they were included. Having students self-identify their disability rather than providing documentation allows for the possibility of reduced validity, but I purposely chose to allow for self-identification to maximize inclusivity and hear from students who are often excluded from research. Additionally, most participants identified as having more than one disability, complicating the experience specific learning disabilities. I also acknowledge that most students with disabilities have other intersecting identities that impact experiences of marginalization and oppression, they were not discussed in this study.

During the creation of the study, the COVID-19 pandemic began, which restricted interviews to virtual formats and could have impacted the availability and engagement of students. The challenging circumstances also has the potential to impact student's answers to research questions given the abrupt switch to sustained remote instruction. It was not my

intention to explore the impact of the pandemic, but many students discussed their experiences, which was highlighted in the discussions chapter.

Suggestions for Future Research

Intersectionality, or the overlapping of multiple marginalized identities, greatly impacts a student's experience. This study did not thoroughly discuss the importance of intersectionality due to the small sample size and single institution studied because it could pose a risk to confidentiality. Protecting students' identities was the utmost importance, however, intersectionality was apparent throughout the study. Many students with non-hegemonic backgrounds expressed greater difficulty seeking support. Some of the students mentioned cultural norms as a barrier to seeking support, and some identified their gender as an additional barrier. It is crucial to more deeply investigate how multiple identities affect experience, disclosure, and ideal classroom characteristics. Future investigations should also be done across the United States and possibly in other countries to identify the impact of cultural norms.

Another important area for future research is potential accommodations and supports for doctoral students who have progressed past the point of coursework and are working on exams and dissertations. This study's findings highlight that independence as well as lack of guidance and stimulation were significant barriers for doctoral students at the end of their education programs. It is still unclear what supports could be provided outside of the classroom to help students with disabilities complete their final degree requirements.

Finally, most research on the topic of disability is deficit based. The type of research that is conducted, and the language used when talking about disability, greatly impacts the culture on the subject. To better align with the Social Model of disability, I strived to highlight how institutions of higher education create the barriers that students face. I recommend further investigating how disabilities can be beneficial, because disability itself is also often discussed as

a barrier to education rather than a benefit. Many of the participants stated their disability was beneficial in many ways. A few participants believed that students with disabilities are more common in graduate school because of the positive characteristics of many disabilities and learned perseverance in a system that was not set up to support them. I recommend further investigation of the positive manifestations of disability and if those characteristics are desired in graduate admissions. Does it correlate with a higher frequency of attendance for students with disabilities? It is time to start normalizing disability and discussing the benefits over barriers.

CHAPTER 7: CONCLUSIONS

Annamma and Morrison (2018) stated their belief that it is important to focus on changing systems rather than what students need to be successful in dysfunctional systems, and that is what this study aimed to do. This study sought to understand the unique experiences of graduate students with disabilities and identify ideal classroom characteristics that could reduce or eliminate many of the currently experienced barriers. Students identified ideal characteristics that directly aligned with Universal Instructional Design principles including flexibility, accessible and clear instructions, diverse formats of instruction and assessments, minimizing unnecessary requirements, and support from faculty. These characteristics were generated from participants' positive and negative prior experiences. Most of the students experienced the common barriers of documentation, negative bias, and inadequate or unavailable accommodations.

While many of the findings aligned with previous literature, there were some new discoveries made that contradicted previous findings, particularly about the benefits of disability and graduate education. Half of the participants indicated that their graduate education was easier because they were more aware of their disability and they were studying content they were interested in, rather than general education requirements. Participants in doctoral programs highlighted the difficulties with self-directed, post-coursework requirements – planning for and meeting deadlines was particularly difficult for students with ADHD. Additionally, formal accommodations are not available or provided for students past the point of coursework, which in turn highlighted the importance of advisors. One of the main conclusions from this study is that disability is not a deficit that needs to be fixed or accommodated; it is merely a different way of learning and manifests in many positive characteristics.

The purpose of research is to become more knowledgeable about a topic to advocate for change and the participants in this study indicated many areas for improvement. Reciprocity is crucial for ethical research – the students generously shared their experiences and expressed hope that it would inform future praxis. At the conclusion of the study, participants were asked to share one piece of advice for faculty who have students with disabilities in their courses, and their advice largely centered around education and the need for an open dialogue. While an institution’s disability services office should be responsible for supporting students with disabilities, there are numerous barriers created by the legally required process, so andragogy inside classrooms becomes even more salient. Previous research has found that faculty wish to be more inclusive, but do not have the necessary training, so I hope this study serves as a useful tool. Many students highly stressed the necessity of education, both for people who have disabilities and faculty who have students with disabilities in their classrooms. I hope the findings of this study help inform students that they deserve equity, they are not alone, and they are just as capable as their peers. I hope it informs faculty that disability can be an asset in the classroom, students should be taken seriously and accommodated if they seek support, and their demeanor has a significant impact on students’ experiences.

It is time to change the narrative about disability.

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Appendix A

University of Washington, Tacoma
College of Education
Education Leadership Ed.D.



Research Participant Information and Consent Form

TITLE OF STUDY: Graduate Students with Learning Disabilities: A Case for Inclusive Classroom Andragogy

PRINCIPLE INVESTIGATOR: Marcee Boggs, doctoral student, University of Washington, Tacoma

COMMITTEE: Dr. Kathleen Beaudoin (Co-Chair), Dr. Robin Minthorn (Co-Chair), Dr. Leesa Huang

DESCRIPTION OF RESEARCH

You are invited to participate in a research study about creating inclusive and accessible classrooms for graduate students with learning disabilities. The goal of this study is to gain insight into the unique needs of graduate students, the reasons some students choose to disclose and seek accommodations or not, and characteristics of classrooms models that might reduce or eliminate the need for students to self-disclose and rely on accommodations. The insights gained from your perspective will be used to shape a more expansive research project that will develop into professional development for postsecondary faculty.

This qualitative study will be conducted with one-on-one interviews lasting approximately sixty minutes. With your permission, the interview will be audio recorded in order to ensure accuracy. I will utilize a non-affiliated transcription service and will ask participants to review their transcripts for accuracy and revisions. Both audio recordings and transcripts will be kept in a password protected file for three years and then destroyed. Data may be used in publications, conference presentations, or future research projects.

If you participate in this study, I would like to be able to quote you directly without using your name. If you agree to allow us to quote you in publications, please type or sign your initials at the statement at the bottom of this form. If you are unable to complete this form digitally, consent may be provided verbally at the beginning of the Zoom session.

WHAT WILL MY PARTICIPATION INVOLVE?

Your participation is completely voluntary. You have the right to withdraw at any time during the study. Participating in the study will include a one-on-one interview lasting approximately sixty minutes. You will be given the interview questions ahead of time and you may skip any question you wish not to answer. If you wish to redact any piece of your interview, please contact me and I will delete the section(s) from the transcript. As compensation for your time and participation, a \$25 gift card to the University Bookstore will be provided to each participant at the beginning of the study.

ARE THERE ANY RISKS TO ME?

This study poses minimal confidentiality risks. With a very small sample size, it is possible participants could be identifiable based on their responses. Risks will be minimized by not disclosing the location of the study and using pseudonyms in the data, analysis, and any publication to protect the confidentiality of the participants.

HOW WILL MY CONFIDENTIALITY BE PROTECTED?

To ensure confidentiality, only I, the interviewer, will know the identity of the participants. I will use pseudonyms in the data, analysis, and any publication to protect the confidentiality of the participants. All written notes and computer transcriptions will be coded, and I will include password protection on documents that have participant data. All data will be destroyed after three years for publication purposes and future research.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

Upon the completion of the study, I will be happy to discuss the findings with you if you request to do so. If you are not satisfied with response of the research team, have more questions, or want to talk with someone about your rights as a research participant, you may contact the University of Washington Human Subjects Division – Team D at hsdteam@uw.edu. The Human Subjects Division is a group of people that reviews research studies and protects the rights of people involved in research.

Sincerely,

Marcee Boggs

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Consent Signature Form

Your signature indicates that you have read this consent form, had an opportunity to ask any questions about your participation in this research, and voluntarily consent to participate. You will receive a copy of this form for your records.

_____ I give permission for the interview to be recorded for transcription purposes.

_____ I give permission to be quoted directly in publications without using my name.

Name of Participant (please print or type): _____

Signature (or digital): _____ Date: _____

Appendix B

University of Washington, Tacoma
College of Education
Education Leadership Ed.D.



INTERVIEW PROTOCOL

Researcher begins each interview with introduction, positionality, and interview procedures.

Background Questions

1. Please tell me a little bit about yourself. Feel free to share as much or as little as you are comfortable with.

Undergraduate Experience

1. What was your undergraduate major/minor?
2. How would you describe your undergraduate education?
 - a. Did you experience any barriers or discrimination related to your disability?
3. Did you formally seek university accommodations/supports?
 - a. If yes, can you share any positive or negative experiences with the accommodation process or in your classes?
 - b. If yes, why did you decide to seek accommodations?
 - c. If yes, were there any instances or classes where you did not seek accommodations? If so, why?
 - d. If no, can you share any positive or negative experiences in your classes?
 - e. If no, why did you decide not to seek accommodations?
4. Is there anything that the faculty or institution could have done differently to better support you in your education?

Graduate Experience

1. What program are you currently enrolled in? and what year are you in your graduate program?
2. How would you describe your current graduate education?
 - a. Do you experience any barriers or discrimination related to your disability?
3. Did you formally seek university accommodations/supports?
 - a. If yes, can you share any positive or negative experiences with the accommodation process or in your classes?
 - b. If yes, why did you decide to seek accommodations?
 - c. If yes, were there any instances or classes where you did not seek accommodations? If so, why?
 - d. If no, can you share any positive or negative experiences in your classes?
 - e. If no, why did you decide not to seek accommodations?
4. Is there anything that the faculty or institution could change to better support you in your education?
5. Are your needs as a graduate student different from when you were an undergraduate student?

Andragogical Recommendations

1. If you were able to create your ideal classroom, how would you describe it?
 - a. What about assignments and tests?
 - b. Physical layout?
 - c. Modalities of instruction?
2. If you could give one piece of advice to faculty who have students with learning disabilities in the classes, what would you tell them?

Is there anything else you would like to add?

Appendix C

Ideal Classroom Characteristics

Participant	Disability	Ideal Classroom
Avery	Anxiety and depression	<p>I think a lot of the strategies I've seen some of my teachers use this quarter have been really good indicators of like what we should always expect to see in classes or what should be always the standard: make sure you're compassionate, make sure you're helpful, make sure you answer since emails on time, make sure you're available for office hours. I think as a student, some of the things I really appreciated is the openness and honesty of our professors who are reaching out to students on a regular basis, who they don't see from very often, who make it a point to really get to know their students in terms of being inclusive in the classroom, get to know their interests, and their likes and their reactions to certain activities. Curriculums that are more student centered and more student based are always a good idea.</p>
Dakota	Auditory processing disorder and memory recall challenges	<p>Having flexible seating and less rigid rules about how you can sit - if students need to stand, why can't they just stand? Or if students need to pace a little bit, but they're still listening, why would that be an issue? So just being able to move around having flexible seating. Also having more of a diverse way of presenting information - so like more group projects, or example-based learning, instead of just the like 'Here are my slides. We're going to read off with them.' Every student learns differently, so instead of just having one way of doing an assignment, maybe you would allow multiple ways of doing it as long as the kid is showing that they're learning something. So it's not just like that like, you have to write this essay, it's maybe you draw something about it, or dance, or whatever your medium is, but as long as you're still getting the learning across, that should be acceptable.</p>

Casey	ADHD and possible autism	Classrooms where you don't have to crawl over other people in order to get out and take a break. Physically being able to get up and around. I also think professors should be offering breaks every 45 minutes. Transcripts of lectures are awesome. Also, for papers, if we don't have to turn that in in person - that has actually been a huge relief for me because everything's virtual right now. The whole extra steps of having to print things out is a barrier I am just thinking through these extra steps...who are they helping and can we reduce any of them?
Jordan	Bipolar, PTSD, and OCD	An ideal classroom is a space, when it comes down to the physical space, is a space when I can sit down and really, we can say park myself. What I mean by this is, I can sort of take temporary ownership of this space and get all my things out to take my notes and to read and to have some room to sort of really accommodate myself. I appreciate being with people, but I generally appreciate having some physical distance with people and having the opportunity to step out of the classroom as needed is very useful. And when it comes down to do the lessons themselves, and to the opportunities, what I find the most useful is to have a clear calendar of everything that is going to be do for the class (for the entire duration of the term) with the specific deadlines and with the specific requirements for each assignment. And to have the opportunity to talk to the teacher about potential ways for me to ask for help and to accommodate things in the schedule.
Peyton	ADHD and chronic illness	So ideal classroom - physically, I think it would be a lot more like grade school classes where you're all in a room and you're there, whether there's lecturing happening or not. Like grad school and undergrad, you're only in the classroom when they're lecturing and the rest of time you're doing the work separately. Being able to ask those questions where you're like, actually, like, actively learning is a lot more helpful. I feel like lectures can easily be a recording because I don't really benefit from someone talking at me.

Sophie	ADHD and an eating disorder	I think that, first and foremost, it would have a structured syllabus. Notes on what was do every day and every assignment would have an example next to it. If there was a lecture component - the chance to discuss after lecture.
Taylor	Chronic migraines and PTSD	I would have a classroom, which is incredibly active, and I would get people outside. I've taken a couple classes that used a bunch of different lecturing techniques and teaching techniques, and I think that I would do that, because recognizing that all students learn differently, and not every student is going to be able to sit through a lecture for 50 minutes, and not every student is going to want to do group work - mixing it up and doing lots of things to just change how they're learning, and maybe teaching the same topic in lots of different ways so that they can approach it from different perspectives. I think also making it goal-oriented and like telling students why they're learning and not just like that they're learning.
Devon	Dyslexia and ADHD	I wish there was a much smaller teacher-to-student ratio. I wish the classes were like an hour and a half long, because two hours I cannot pay attention that long. If they were like an hour and a half long, and the first section of it was reading or doing a lecture, and then the second half was actively problem solving, or doing discussion, we could do that. And ideally, the groups would be based on the ways that you learn too - like auditory, visual, tactile. That way, when we're having the interactions, we would be speaking the same language. If I just sit there and listen to a lecture, I don't actively store it into long term memory because it's just words being vomited at me, and I don't do great with words. I wish that there weren't tests and I think it's more beneficial to have long term projects, so you can kind of build on what you've done, and see where you're going, and you can have as much time as you want.

Riley	Anxiety/Depression and ADHD	I really liked the flipped classroom. I could not do that for every course, but I really like that because I can do it on my own time and there are times of day that I'm better than others and so I get to [prepare] at a time that I'm able to be most productive. I like where things are very systematic, very laid out - this is what we're getting through, this is where we are in the course, and this is where we're going so I can see the big picture. Testing - I like to be able to spread out and it needs to be a very clean environment.
Raegan	Major depressive and ADHD	Having a more community-based element to the post coursework space. Having a regular meeting space, either on zoom or physically, in which we could generate ideas in a low-stakes environment. [Raegan also stressed the need for structure throughout the interview].
Parker	hearing impairment, ADHD, and possible autism.	I need a lot of clear instruction. I want the flexibility to choose to do group work, or just do it on your own. And generally, I guess to just to make the students feel more comfortable to share things with faculty.

Morgan	Memory and cognitive processing disorder	<p>I think it depends on the content. So anything, let's say, like public health, social sciences, that kind of thing, I think tests are stupid. I think that projects are more beneficial and you learn just so much more from it. Learning practical skills like Excel analysis, and actually being trained in that to use in your career - I would have really appreciated. For the hard sciences, I also think tests are stupid, but I think that there should never be a time limit, and I think it shouldn't be multiple choice, but instead more case study based, because it actually assesses your learning better, and I think that there should always be opportunities to do re--grades, so that you're learning the information, and then you're essentially being rewarded for providing a better product than what you turned in. Also, for me, this is just specific to my disability, but I hate when we're expected to work on something in the classroom with everyone else. If that happens, I would rather the teacher let me go early, and just work on it from home in a quiet environment. And that goes for group work too; I know group work should be part of part of learning, but don't do anything heavily graded in a group setting, because, especially with people with disabilities, that's really difficult. I can't focus. It has to be completely silent, to be able to type or write things for me.</p>
Frankie	anxiety and depression	<p>[Frankie was able to create their ideal curriculum and implement it as a TA – they describe it here]: The entire live course was structured off the way that I know how I learned best, which is doing things with my hands, and then testing things out, seeing how it works, and then seeing how it failed, and then capitalizing on that failure to make it even better. That's always been better than to me then tests because tests are - you have you have the understanding or you don't. But with an open lab environment, you can learn along the way. Maybe we can incorporate [curriculum] in a way that makes it more exploratory because I think that's how I learn best.</p>

BaileyCognitive
processing disorder

I sit towards the more like traditional view of learning, which is the outdated version of learning essentially. And even though I was able to succeed, they were not environments that everyone was able to succeed and promoted a lot of inequities in the classroom. So for an ideal classroom, I would love to find a model that creates this equitable playing field for all students. I think in terms of assignments and tests, I think busy work is the biggest waste of time. I would try to allow students to make the learning what they want it to be. I think [a classroom] where the instructor is trained and aware that people learn in different ways and at different paces.
