Examining Beliefs and Practices of Students With Hidden Disabilities and Universal Design for Learning in Institutions of Higher Education

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Issues with retention, persistence, and completion are attributed to the increase of diversity and variability amid students entering higher education (Schelly et al., 2011). Among that variability are perceptual ability, language ability, background knowledge, cognitive strategies, and motivation (Nelson & Bashman, 2014). In this qualitative study, knowledge and perceptions of the diverse student population, specifically students with hidden disabilities and Universal Design for Learning (UDL) are explored. UDL benefits students with identifiable and unidentifiable disabilities that are unaware of disability services, do not want to disclose their disability, or are undiagnosed.

Keywords: higher education, community college, students with disabilities, hidden disabilities, universal design for learning

INTRODUCTION

Traditionally, most institutions of higher education (IHE) have mission statements that declare an investment in the educational excellence of their students. Among these include providing equitable learning environments and honoring the diversity that these learners bring. IHE claim to promote a "fair and just society" by integrating all societal groups (Franklin, 2013, p. 3). IHE serve as a necessary ladder for social mobility and an opportunity for the diverse student body to move upwardly (Franklin, 2013). However, most students remain under-challenged, overwhelmed, or dissatisfied by the limited and rigid practices (Meyer, Rose, & Gordon, 2014). Moreover, students entering higher education have no guarantee of completion as they navigate new learning spaces and curricula (Bracken & Novak, 2019). It is common knowledge that completing a college degree is a challenge for all students. Issues of persistence, retention, and degree attainment exist in almost all two- and four-year higher education institutions (Murphy, 2006; National Center for Public Policy and Higher Education, 2008). In fact, the increase of diversity entering IHE is often one of the most cited explanations for these issues (Schelly et al., 2011). Students today embody a range of diversity in age, experiences, ethnicity, language, socioeconomic status, learning needs, abilities, and academic readiness (Banks, 1996). This current situation demonstrates that merely having access into IHE is not enough to persist, let alone graduate or transfer for all students. The gaps in achievement and issues with retention further illustrate that the systems in place are failing to support students and educators in realizing their potential (Hogan & Rose, 2018). As shown by the National Organization on Disability (2001) and by Whelley and colleagues (2002), coursework completion and completion by individuals with disabilities education in IHE has dropped between 1986 and 2001. Belch

(2004) describes the lack of degree completion by students with disabilities (SWD) in IHE as concerning and suggests that this matter be examined and addressed.

Students With Disabilities

Among the diversity entering IHE include English learners, students from low-income homes, students of color, and SWDs. SWDs represent more than 10% of all students enrolled in IHE (U.S. Department of Education, 2009) and these numbers are anticipated to increase in the coming years, further compelling college professionals to understand the needs of SWDs and how to support them (Peña, 2014). More research on this could inform practitioners on ways to better support and serve SWDs (Peña, 2014). College students, including SWDs, are often disadvantaged by having an intersection of identity markers (Crenshaw, 2013). Further research on how these intersections of disability and other identities play out could also be informative for practitioners. When college professionals lack awareness of intersectionality of identities among their students, not only are they limited in how to best to serve students, what is more, is that they dishonor their lived experiences and sustain socially constructed stereotypes (Peña et al., 2016). Disability has lacked visibility historically and, to this day, when compared across identities such that of race and social class, continues to be omitted from conversations around social justice (Liasidou, 2014; Baynton, 2001). This is also observed in the literature, where only 1% of the articles about SWDs were published in the top peer-reviewed journals of higher education in the last two decades (Peña, 2014). Methods, beliefs, and practices that support the needs of SWDs in IHE will be crucial as their enrollment numbers increase.

Students with hidden disabilities are among the many entering IHE. Further, the "distribution of disability types has changed" (Schelly et al., 2011, p. 17). Among these are "non-apparent" and "apparent" disability categories (Schelly et al., 2011, p. 17). In fact, Schelly and colleagues (2011) describe the non-apparent and apparent disabilities to have inverted, with an increase happening in the former category and decline in the latter (p. 17). The non-apparent category includes a higher percent of SWDs, among these include attention deficit hyperactivity disorder (ADHD) and specific learning disabilities (SLD) (Schelly et al., 2011, p. 17).

Universal Design for Learning

Universal Design for Learning (UDL) is a proactive, evidence-based framework that designs learning environments that support the variability of learners (Meyer, Rose, & Gordon, 2014). UDL upholds the "spirit of inclusion" and is based on three main principles that are designed to adapt to the learning environment and are based around neuroscience and the learning networks (Schelly et al., 2011, p. 18). These three principles that align with the three broad networks in the brain are; providing multiple means of engagement, providing multiple means of representation, and providing multiple means of action and expression. In the UDL Guidelines, the three principles include guidelines and associated checkpoints to provide practitioners an organized way to "align best teaching practices and learning strategies" (Posey, 2019, p. 162). Educators integrate these practices and strategies already, "but intentionality shifts with UDL" (Posey, 2019, p. 162).

As the goal of education has shifted from acquiring knowledge to independent learning, UDL aims to cultivate students to become expert learners (Meyer et al., 2014), in other words, assisting students in learning how to learn (Hammond, 2015). A student that is able to identify the supports or systems that they need to be in place for their optimum learning can be described as an expert learner. Expert learners are actively involved in creating knowledge and meaning in their learning (Meyer et al., 2014). Hammond (2015) further asserts that by developing work that is relevant and focused on problem-solving for students, neuron growth and myelination is stimulated. In addition, Hammond (2015) indicates that increasing the rigor in instruction and the complexity of content will not stimulate brain growth. However, stimulation of brain growth will occur through strategic thinking and information processing (Hammond, 2015). The ability of students to recognize where they are challenged, their motivation to overcome challenges, and their ability to be resourceful and use strategies that reduce or remove barriers in their learning is what encompasses an expert learner (Meyer et al., 2014). Ayala and colleagues (2012) further reiterate that UDL

addresses the barriers that exist within the curriculum (e.g. goals, methods, assessments, and materials), not within the student. As students are encouraged to take ownership in their learning, they are encouraged to be accountable, be reflective, learn to rise from failures and setbacks. They develop the resilience necessary to persist through their course work and fortify necessary life skills outside the classroom.

Higher education institutions would benefit from integrating a research-based design that establishes a framework that ensures access, engagement, and learning outcomes for all students (Bracken & Novak, 2019). Universally designing postsecondary environments can meet the learning requirements, along with supporting students realizing their learning potentials in "wider worlds of social well-being, creativity and employment" (Bracken & Novak, 2019, p. 3). The framework of UDL is similar to a living document in that it is continuously being shaped and informed by neuroscience, education research, and the cognitive learning sciences. Utilizing UDL as a foundation can transform education since no foundation that considers the needs of the diversity of all learners currently exists.

PURPOSE OF THE STUDY

As the overall diversity in higher education increases, students with intersecting identities and those whom have been historically marginalized can benefit from universally designed learning environments.

The purpose of this qualitative study was to explore knowledge and beliefs of students with invisible disabilities and inclusive practices, such as those of UDL. Further, implications for practice and recommendations for future research regarding inclusive practices, attitudes and beliefs, and disability are presented as the result of this study.

RESEARCH DESIGN

This qualitative study focuses on students with disabilities and UDL. This study examines 10 interviews with college professionals that are educators, staff, and administrators on perceptions and knowledge students with hidden disabilities and UDL. After the data collection, the interview data was examined with the framework of UDL as a guide in the analysis.

Sample

The sample for this study included leaders in higher education, faculty, and staff. Participants interviewed included two faculty, one adjunct, four staff professionals that have previously taught in the classroom, and three staff professionals that have not taught in the classroom, however, have taught in different teaching contexts.

The participants were from publicly funded community colleges in the state of California. From the institutional data available to the public, this community college system serves over 2 million students, with over 90,000 having disclosed their non-apparent disability. The number of students with invisible disabilities was calculated from publicly reported data and included students with: attention deficit hyperactivity disorder (ADHD), autism spectrum disorder (ASD), developmental delays, hearing impairment, learning disabilities, speech language impairment, psychological disabilities, and traumatic brain injuries.

Data Collection Procedures

Semi-structured interviews were guided by the theoretical framework of UDL. The same questions were administered in the same order for all participants; interviews were recorded and lasted from 30 minutes to 70 minutes. Five of the interviews were conducted at the participant's respective institutions in urban areas of Southern California. This is helpful as you build trust with the interviewees and they are more likely to share details about their beliefs and perspectives (Given 2008). The remaining five were conducted via telephone using my personal number. This method is also beneficial because it provides participants anonymity, enabling them to speak more open and freely (Given, 2008).

Limitations

The generalizability of this study is limited due to the restricted scope of the number of participants that were available to be interviewed and among those who volunteered to be interviewed. This sample was one of convenience. The sample included professionals that were familiar with or are sympathetic to UDL, and this may be recognized as a limitation. Additionally, it is important to note that the participants that volunteered to be part of this study may be observed as an ideal sample because change takes place with a dedicated and committed group of professionals.

Data Analysis Procedures

The interview data was transcribed on a speech recognition software and later edited for mistakes. The interview transcripts were uploaded to a data analysis program to be coded for themes. The analysis was done deductively and inductively. Certain language used in the interview questions guided the development of anticipated themes. The inductive portion was guided by the theoretical framework when open coding. This also include more specific types of coding, as the transcript data was reread various times. The code frequency analysis was done on Excel, the code applications being the measures of frequency

THEMES

Major themes found in the study included problematic attitudes about students with disabilities among colleagues and challenges that college professionals face such as implementing inclusive and equitable practices for students with disabilities.

Students With Disabilities

The study focused on students with hidden disabilities, and an expected outcome is the finding titled students with disabilities. It was interesting to find that the increasing number of students with disabilities, specifically hidden disabilities, entering higher education are sometimes met with lack of knowledge, understanding, and compassion. Participants spoke of being accepting, welcoming, and accommodating to this population. In contrast, participants also described many of their colleagues having negative attitudes toward students with disabilities; for example, instructors denying a student's accommodations and rolling their eyes at the student. A substantial and unanticipated finding as it relates to this, were the limiting beliefs and practices that exist among colleagues in higher education. This includes limitations with practices; for instance, fixed or rigid teaching practices, resistance to change, and or adapting to evidence-based practices. These limitations in practices may be the result of a lack of awareness and understanding of students with disabilities. This too, could be the result of lack of training on best practices to work with diverse populations.

Barriers that students face was an additional finding that emerged. Apart from negative beliefs and attitudes, students with disabilities are often met with inaccessible resources and materials, and have real concerns about disclosing their disability for fear of being discriminated and labeled (Cai & Richdale, 2016). Other barriers students endure are due to the lack of relationship with instructors, where instructors are just focused on delivering material, are not engaging with students, and the opportunity to create a culture of community is lost. One interesting finding that emerged as it relates to challenges college professionals have in IHE was in response to a question about support for UDL implementation. The interviewee is employed in the accommodation services office at their respective institution. This participant shared that the support they would be missing from the institution is due to other factions of the school viewing them as only advocating for students with disabilities, when in actuality, they are advocating for all students by adopting UDL as a practice.

Challenges in IHE

Another important finding from the study are the challenges that personnel, including instructors and staff, face in higher education. Some of the barriers these college professionals have are within factions of the institution itself; for instance, the working relationship between disability support services and faculty.

Adopting new initiative after initiative also emerged as a challenge, along with acquiring funding for resources and other supports. It seems possible that these results are due to several factors, including having to answer to upper level administrating bodies that govern the system as a whole.

DISCUSSION AND SCHOLARLY SIGNIFICANCE

Faculty need resources and support in their professional learning from their institutions. The approach faculty take in reaching students who are having difficulties academically and behaviorally was also noted by student participants in Barber's (2012) study to be in "need of help and support" (p. 17). Cai and Richdale (2016) observed that students were able to "better cope with the demands of their courses" when structure was in place (p. 5). By integrating design approaches like UDL, students can benefit from a framework that provides options and clarity. Depending on the institution, integrating UDL can be challenging. These challenges can be due to the inadequate support for UDL, which may be the result of a lack of knowledge of what UDL is along with its effectiveness.

In terms of awareness of UDL, there is a common misconception that UDL is solely for students with disabilities. UDL emerged from the technologies CAST was creating for students with disabilities. However, the researchers at CAST recognized that barriers in the curriculum were not exclusive to just this community – all students learn differently and all students can benefit from UDL. By considering all students' differences and how this variability can have an impact on learning, educators can design instructional practices that align pedagogies that not only make a difference for all learners but "effectively address those differences" (Kieran & Anderson, 2018, p. 2). A faculty member in a study by Zeedyk and colleagues (2019) study noted that some of the teaching practices that benefitted students with ASD coincidentally benefitted students without ASD. In other words, as a result of creating classrooms and learning experiences with the intention to accommodate students with identified learning and physical disabilities, students with hidden or undiagnosed disabilities benefit as well (Pisha & Coyne, 2001).

UDL anticipates student diversity as the norm and proactively designs for this variability. In this context, how we interpret any person or situation significantly affects our ability to learn, remember, and respond (Rose & Meyer, 2002). This perspective is deeply relevant to education, not only because it deals directly with issues of learning, but also provides the groundwork in understanding learning variability (Meyer et al., 2014). Additionally, educators must also be aware of the attitudes towards, interactions with, and their expectations of students with variable learning needs and how these implicit biases can threaten the learning environment (DeCuir-Gunby et al., 2010).

The goal of UDL is for students to be able to guide their own learning. As suggested by Kieran and Anderson (2018), educators can choose pedagogies that provide different levels of rigor and create opportunities for students to develop self-determination in the classroom. A further recommendation for the curriculum is to create appropriate materials that tailor the "culturally influenced learning variations" (Chita-Tegmark et al., 2012, p. 7). UDL promotes the design and implementation of a flexible, and responsive curriculum that offers choices for how knowledge is presented, how students can respond and demonstrate their understanding, and how students become engaged in the learning. Additionally, the implementation of UDL provides an opportunity for all students to access, engage, and progress in the education curriculum by reducing barriers in the instruction and instructional environment. As Williams (2016) states, UDL "... reaches those who need it, whether or not they have been identified as having [a specific] need" (p. 3). Examples of this can be conveying the curriculum through multiple configurations and adjusting the instructional pace to increase the efficacy of instruction (Courey, 2013; Meyer et al., 2014).

IMPLICATIONS FOR PRACTICE AND FUTURE RESEARCH

The recommendations for research that are presented here focus on closing achievement gaps through the framework of DisCrit. With the increase of SWDs entering IHE and representing more than 10% of all students enrolled, more research needs to be conducted in order to keep pace (Peña, 2014). Furthermore,

future research and greater representation of SWDs in top-tier journals of IHE would be informative and beneficial for practitioners and SWDs in higher education.

DisCrit

Utilizing the lens of Dis/ability Critical Race Studies, also referred to as DisCrit, for future research can contribute to the disruption of distorted understandings around disability (Annamma et al., 2013). DisCrit brings forth awareness of how "disability" signals a misconception that there is an inability to carry out "culturally-expected tasks" that further define the individual as "unable to navigate society" (Annamma et al., 2013, p. 24). Annamma and Morrison (2018) assert that racism and intersections with other identities that possess additional oppressions are contributors to the dysfunctional education ecologies and can be addressed by drawing from the framework of DisCrit. With this research and framework, ineffective systems of practice can be identified, disrupted, and redesigned. Equally important to add, are the effects of deficit-based and negative attitudes and responses toward students with disabilities and how these can foster fear and distress. As a result of such feelings, any kind of learning is compromised. Several participants in this study expressed that students with disabilities that experience negative interactions with instructors left students feeling discouraged, undermined, and unsupported. One significant finding from the research that was how frequently participants shared instances about students opening up to them about negative and damaging encounters with their instructor's. Conducting future research, along with change in attitudes and practices through the lens of DisCrit can serve as transformational as it relates to interactions among students and college professionals.

Considering that students have multiple identities can be beneficial for faculty and personnel as well. For instance, students that are veterans and are transitioning to college would benefit from having their instructors attend an orientation on military culture to better help integrate students who are veterans or are in the military more fully into student life (Alschuler & Yarab, 2018). Students possess an intersectionality of identities and many of the roadblocks they encounter is attributed to the lack of understanding of this intersectionality of multiple identities (Crenshaw, 2013). Further awareness about intersections of disability can be heightened through the lens of DisCrit, which contributes to the dismantling of the socially developed misconceptions around disability (Annamma et al., 2013).

Challenging and Collaborating in IHE

The findings cross-referenced with the literature indicate that students continue to be mistreated for being different and or having different needs, including an accommodation. Participants shared that some instructors deny accommodations which leads to discord among the factions in the institution, unjustly puts the learner in the middle, and does not exemplify a collaborative, functioning, student-focused mission which so many IHE claim to value. It it is important to reexamine and reflect as college professionals that the student is whom is being served. If the students do not persist and stay, IHE will continue to have these issues of persistence, retention, and completion. It is critical to challenge colleagues who demonstrate a lack of compassion, and understanding of students with disabilities, and to invite them to engage in dialogue. This is not unique to students with disabilities, but to all students with a multitude of backgrounds, experiences, and intersecting identities. With the current and ongoing racial injustices and divisive climate around these issues, it is essential to challenge limiting beliefs that exist within colleagues, departments, programs, and institutions in higher education and collaboratively find solutions.

Redesign Through UDL

Participants were asked if it would be overwhelming to implement UDL. The majority of participants expressed that it would be; however, it depends on how UDL is presented, similar to acquiring "buy in." Redesigning a curriculum or a system through UDL would address a multitude of the issues educators face. UDL is founded on ongoing research, neuroscience, and is continually developing, reviewed, and updated in order to keep pace and be effective. Adopting UDL could also address the issues that present themselves systemically. UDL sets a vision for the goal to be student-centered from the beginning by addressing the barriers that are impacting the performance and outcomes associated with the variability of learners that are present in IHE.

UDL is often misinterpreted to exist for struggling students, specifically students with disabilities. UDL provides access, however, that is just one of the many features within the UDL framework. The objectives of UDL are to foster expert learners that can critically think in and outside of the "classroom." Additionally, this paradigm shift of UDL disrupts notions of unable or incompetent, ableism, ageism, and all other social constructs and systemic conditioning. Instead, UDL honors variability by focusing on growth-oriented mindsets. Like Annamma and colleagues (2013) explain when describing DisCrit, it is an effort to raise awareness around this deficit-based understanding and misconception of people with disabilities. This recommendation exists too in order to reaffirm students and their identities and validate their lived experiences by creating affirming classroom and institutional practices that provide options for learning and engagement.

CONCLUSION

This study set out to examine what college professionals know and believe with regards to students with hidden disabilities and UDL. With the increase of student diversity entering higher education, namely students with hidden disabilities, the importance of exploring how such variability is being supported, taught, and served is essential especially in conjunction with the very limited number of articles on SWDs in top-tier higher education journals: "When scholars, researchers, and editors of top-tier journals do not engage in or include scholarship on students with disabilities, even if unintentionally, they communicate that understanding these needs and interests is less important than other issues in higher education" (Peña, 2014, p. 38). By utilizing the guiding principles of UDL to design learning spaces, IHE can further assist in learner persistence, retention, and completion.

The findings also revealed problematic attitudes toward students with disabilities. This study identified that there are deficit-based perspectives that need to be reexamined and dismantled. Additionally, college professionals have an ongoing moral commitment to serving their students and are responsible for developing themselves through professional learning to better serve the diverse community of students that exist in IHE. Dolmage (2017) points out that generally in higher education, the institution is not aware of the degree to which it may be disabling, yet "the blame and the impact almost always falls on individuals to shoulder" (p. 58). Professional learning could better assist and equip educators and staff to improve their current practices to be more inclusive because it is apparent that some colleagues could benefit from professional development to transform their current attitudes and beliefs. Equally important, is understanding why colleagues are demonstrating these attitudes and beliefs. This is essential because outcomes cannot be changed without understanding how they emerged. In addition, IHE should continue to critically reflect on current systems of practice, dismantling and transforming them as necessary. It will be beneficial for IHE to honor and celebrate the diversity and the richness that it brings.

Lastly, acknowledging these unique, challenging, and unprecedented times during this research has been quite a reckoning. As it relates to the research, the majority of the data was acquired before this important historical time of the pandemic and Black Lives Matter. The recommendations and implications for practice and research were influenced by the findings, along with the injustices and inequities that currently exist during this pandemic and racial injustices. Attitudes of entitlement, ableism, and racism, along with inequitable and inaccessible educational sources are among the many issues that have emerged and have been exacerbated during this time. UDL and inclusive practices are needed now more than ever. These practices and beliefs, along with challenging limiting practices and beliefs, are necessary in order to create change and provide equitable education in terms of access, engagement, learning, and fostering overall student success.

Whether it be the curriculum, beliefs, practices, or the systems in place, if it benefits some students and disadvantages others, this is not equity. We must challenge inequity by assisting an underrepresented group until equity is achieved (Kendi, 2019). Several participants who have worked in IHE described colleagues making statements such as "why change now? I've been doing this for 30 years" thus indicating that they

do not understand the need to change. It is essential that this work continues as education is currently transforming during the unprecedented time. With the year 2020 acknowledging the 30th year anniversary of the Americans with Disabilities Act of 1990, we must continue improving the path toward inclusive beliefs and practices for students with disabilities.

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