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Disability Resource Specialists' Capacity to Adopt Principles and Implement Practices that Qualify as Universal Design at a 4-Year Public Institution

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DISABILITY RESOURCE SPECIALISTS' CAPACITY TO ADOPT PRINCIPLES
AND IMPLEMENT PRACTICES THAT QUALIFY AS UNIVERSAL DESIGN
AT A FOUR-YEAR PUBLIC INSTITUTION

A proposal for a thesis to be submitted in partial
Fulfillment of the requirements for the degree of
Master of Arts

By

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B.S., Rochester Institute of Technology, 2016

2018
Wright State University

WRIGHT STATE UNIVERSITY

GRADUATE SCHOOL

April 16, 2018

I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY SUPERVISION BY Cecilia Spencer Grugan ENTITLED Disability Resource Specialists' Capacity to Adopt Principles and Implement Practices that Qualify as Universal Design at a Four-Year Public Institution BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Master of Arts.

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This thesis is dedicated to a community I am most proud to be a part of: the disability community. It is my wish to continue to contribute to the betterment of the lives of my peers as we continue to devise solutions in overcoming prejudice.

ABSTRACT

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Due to the continuous growth of diverse student bodies on college campuses, creating accessibility for each unique student needs to be considered. Students who have a disability or disabilities are a substantial part of this growing diverse student body. Since disability resource specialists play a significant role in creating accessibility for such students, they can consider implementing practices that qualify as Universal Design. The purpose of this phenomenological study was to explore where disability resource specialists fall on Lewin's (1951) continuum of change and Reynold's (2009) levels of expertise in regards to implementing practices that qualify as Universal Design. Six participants were included in this study out of eight who were invited to participate. Out of those six participants, the study showed that all participants demonstrated a strong presence in the Unfreezing stage of Lewin's (1951) continuum of change. Also, the study showed that all participants showed a level of knowledge as the second tier to Reynold's (2009) levels of expertise. Limitations as well as recommendations for future research included recruiting a larger sample of participants to provide greater analysis of the study.

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CHAPTER I

Introduction to Study

Not too long ago, all-Caucasian, all-White, all-male, all-privileged individuals predominantly constituted the world of higher education. Such individuals were the beneficiaries of education, scholarship, and advancement to which the rest of the world had no access. Modern Student Affairs practices have swung open ironclad doors to the ivory tower that barred the rest of the world from accessing higher education opportunities. Along with legislative and societal changes, Student Affairs professionals have engaged in noble work that led to diversity becoming the new norm across all higher education entities around the world (U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Office of the Under Secretary, 2016).

Nowadays, our definition of diversity not only includes women, people of color, and people of different religious traditions, but also extends across characteristics including age, sexual orientation, economic status, gender identity, cultural identity, ability, political views, belief systems, military status, and even unique ways of thinking, learning, and communicating. An examination of this list shows how normalizing diversity continues to shape the future of Student Affairs. The rapid expansion of diversity in higher education calls for action among Student Affairs professionals in creating accessible higher education. Although campuses

have become progressive towards many different identities, they are stuck in a compliance mode when it comes to accessibility (Oguntoyinbo, 2014). This demonstrates campuses' response to meet each individual's need rather than considering campus wide approaches that meets everyone's needs.

Currently, Student Affairs professionals tend to support the ideal of an accessible education by reactively providing adaptations to a student's environment, so he or she can access his or her potential with a learning experience. Even then, adaptations such as accommodations for students with a disclosed disability do not always eradicate or even alleviate their barriers to reaching the highest potential of their learning abilities. Not only should students be given an entryway to their education, but also they should be given access to resources so that they can reach their highest levels of possibility. To facilitate this kind of access, the Student Affairs profession should consider embodying the principles of Universal Design which are: "equitable use, flexibility in use, simple and intuitive, perceptible information, tolerance for error, low physical effort, and size and space for approach and use" (Burgstahler, 2015, p. 33).

Statement of the Problem

With the rapid expansion of diversity across all higher education entities around the world, there is a call for action among Student Affairs professionals in creating accessible higher education. While campuses have become progressive towards many different identities, they are stuck in a compliance mode when it comes to accessibility. Therefore, there was a need to study the current levels of expertise among stakeholders such as disability resource specialists based on Universal Design

practices in higher education at four-year, public universities. Universal Design practices can “proactively ameliorate potential barriers” that diverse populations face (Burgstahler, 2015, p. 4). Due to Universal Design being a concept and approach that has only found recent attention (Edyburn, 2010), little information, research, and action exists currently. Furthermore, one of the most important stakeholders of Universal Design is disability resource specialists with whom little research has been done to explore their knowledge, influence, and current work on entertaining the concept of Universal Design.

If disability resource specialists in higher education systems are dedicated to continuous improvement in serving students with disabilities, newer concepts and approaches such as Universal Design need to be considered. As stated by a prominent Universal Design advocate and educator, Burgstahler (2015), “the accommodation model does not always provide an equitable experience for students with disabilities” (p. 9). With that being said, Universal Design practices can create “the design of products and environments to be usable by all people, the greatest extent possible, without the need for adaptation” (Burgstahler, 2015, p. 13).

Definition of Terms

- **Accessibility:** Describes an environment where access is equitably provided to everyone at the same time (Edyburn, 2010)
- **Accommodation:** Providing the support needed in a learning environment in terms of instructional or testing situations (e.g., altering the textbook’s format, lecturing in sign language, or extending test time in a separate room) (Kim & Lee, 2016)

- **C-Print:** Speech-to-text captioning technology used to provide communication access to individuals who have disabilities (Rochester Institute of Technology, 2013).
- **Disability:** The extent to which a person is limited in performing an activity or accessing a resource; if the activity or resource is designed to be accessible, one may not have limitations they usually face because of their disability (Burgstahler, 2015)
- **Disability Resource Specialist:** Under the general direction of a Director, the disability resource specialist is responsible for the coordination and provision of programs, services, and accommodations for students with disabilities. The disability resource specialist reviews and interprets disability documentation and works directly with students to discuss their disability, reasonable accommodations and self-advocacy (T. Webb, personal communication, September 27, 2017). The major responsibilities associated with the disability resource specialist are:
 - a. Determining program eligibility and accommodations through an interactive process with students.
 - b. Providing extensive direct support to students with disabilities.
 - c. Assisting in the testing accommodation processes for the university.
 - d. Appropriately supporting students with disabilities by referring students to campus resources and support services.
 - e. Participating in outreach to new students and families regarding the processes and procedures of the Disability Services Office.

- f. Participating on divisional and college-wide committees as requested by Director.
 - g. Assisting the Disability Services Director in outreach goals for the Office.
 - h. Reviewing and evaluating accommodation requests and recommending appropriate accommodation options.
 - i. Facilitating response to accommodation requests.
 - j. Responsible for supporting and implementing of any reporting obligations in coordination with the General Counsel's Office (T. Webb, personal communication, September 27, 2017).
- **Disability Resource Specialists as Stakeholders:** A shared role of responsibility in creating welcoming, accessible, and inclusive environments by serving as consultants regarding these efforts in addition to their traditional role of specifying accommodations for individuals (Burgstahler, 2015)
 - **Universal Design:** An approach that proactively designs a space to meet the needs of potential visitors with a wide range of [physical] capabilities which is in consideration of a benefit to all people (Burgstahler, 2015)

Research Question

- Where do disability resource specialists at a mid-size, public Midwestern university fall on Lewin's continuum of change (1951) and Reynolds (2009) levels of expertise in regards to adopting principles and implementing practices that qualify as Universal Design?

Assumptions

The following assumptions were identified and were accepted as true in this study:

1. The researcher assumed disability resource specialists met the qualifications to be employed in their respective positions in the disability services field.
2. Due to working in the disability services field, the researcher assumed disability resource specialists interacted and served with multiple students with disabilities.
3. All disability resource specialists in higher education are required to support students with disabilities in compliance with the law. The researcher assumed disability resource specialists knew their role and responsibilities in regards to executing the accommodations process for students with disabilities.
4. The researcher assumed disability resource specialists would respond to interviewing questions honestly.

Scope

This research study was limited to all disability resource specialists who had various years of working experience for the Office of Disability Services at a mid-sized, public, research institution in the Midwest. The disability resource specialists personnel included a technology center coordinator, a disability services coordinator, an assistive technology specialist, a test proctoring coordinator, an associate director, a director, a disability resource specialist, and two disability resource and STEM specialists. The individuals who were identified were asked to participate in an individual interview session during the spring semester of the 2017-2018 academic year. Student employees, interns, and desk staff were not included in the research due to not being considered specialists in the disability services field.

Significance of Study

The founders of Universal Design, Harrison and Mace (Burgstahler, 2015), established an all-inclusive concept that aims to benefit all users accessing a product or environment of design. Instead of designing spaces for the most average user, Harrison and Mace argued that spaces should be designed for the broadest possible access. Current trends of accessibility can be enhanced by the proactive considerations employed by those who choose to implement Universal Design. Through application and approaches that qualify as Universal Design, accessibility has a whole new meaning for our growing diverse student populations. These approaches would create an environment that is equitable and inclusive, not just in the accordance with rules or standards.

Higher education decision makers should uphold their legacy and mission of diversification by allowing all students to realize their fullest potential. Due to the increase of diversity seen among students, efforts to enhance students' potential through their different ways of learning leads to the need for campus wide solutions to accessibility. Universal Design approaches can incorporate these forms of enhancements, which are largely impacted by services provided by disability services. As primary stakeholders of Universal Design, disability resource specialists influence the progress that can be made in the implementation of Universal Design.

Conceptual Framework

The conceptual framework of this study is two-fold including Kurt Lewin's (1951) three-stage theory of change and Reynold's (2009) levels of expertise. The

researcher will describe Lewin's theory of change followed by description of Reynold's levels of expertise.

Kurt Lewin (1951) fathered the three-stage theory of change for which there are steps to follow in order to implement a change in human organizational functions such as higher education. This theory provides a model for employees to understand change within their organization (Kritsonis, 2005). This theory is often referred to as *Unfreeze, Change, Freeze* (Lewin, 1951). Since higher education is an organization itself, there are several components that would need to work together in order to push a change to happen.

The first stage of Lewin's three-stage theory of change is referred to as the Unfreezing stage (Lewin, 1951). During the first stage, the focus is to ready current forces for a change to happen by force field analysis (Lewin, 1951). This usually prompts employees in an organization to come to an understanding about why a certain change would be virtuous and what mindset is needed in order to prepare for a certain change to happen. The preparatory work requires employees to have unrestrictive attitudes, motivations, and knowledge in order to foster a change. The second stage is referred to as Change, which is where the most progress would need to take place (Lewin, 1951). This is the time when the change is being implemented; employees are going through a transition of foreign experiences that may be challenging or stimulating. The final stage is referred to as Freezing or Refreezing, which refers to the stabilization of the change is to occur. The change is one that has become the new norm; employees are to become comfortable with the change and to support the maintenance of the change within their organization (Lewin, 1951). As

defined, these three stages served as a guide for navigating the forces that work with or against change.

In order to adopt change, individuals of an organization must be equipped with expertise, which is the second part of this study's conceptual framework. Reynolds (2009) originated the three tiers of expertise for which one level of expertise is required in order to proceed onto the next level of expertise. The first level of expertise is awareness, which is the concern one has of a particular development such as Universal Design. After one demonstrates an awareness of such a development, one can achieve the second tier of expertise: knowledge. One demonstrates his or her presence in the second tier of expertise when they can provide facts and information about how to utilize a development such as Universal Design. Finally, if one has demonstrated knowledge, they can achieve the third tier of expertise: skills. By demonstrating the third tier of expertise, one demonstrates their ability to actively use a particular development such as Universal Design.

Due to the rapid growth of diversity in higher education, the prominence to adopt change after developing the proper expertise is necessary when supporting diverse student populations in higher education. However, first and foremost, disability resource specialists should continue to provide traditional services such as accommodations that allow them to maintain compliance practices. As they continue to provide such services, specialists can develop the appropriate expertise to consider changes including Universal Design approaches that support the diversity. Such changes can include the implementation of Universal Design throughout the campus environment.

CHAPTER II

REVIEW OF LITERATURE

Introduction to Universal Design

Not only within institutions of higher education but also in other informational settings such as work environments, customer functions, and entertainment industries there may be increased numbers of participants that bring differences to the table (Pocock, M.J., Tweddle, J.C., Savage, J., Robinson, L.D., & Roy, H.E., 2017). These differences include disabilities, unique characteristics and traits, ways of thinking, and methods practiced to retain information. Due to modern approaches of moving towards more inclusivity for these individuals and groups, there is dire a need for improvising ways in which student service administrators in higher education create, develop, and conduct approaches to serve them in a given work environment. Two advocates of accessibility and success in postsecondary education, Wolanin and Steele, reported that “the inclusion of students with disabilities in elementary and secondary education has resulted in growing numbers for these students who have the appropriate secondary school diplomas and academic preparation to qualify for higher education” (2004, p. xiii).

As all universities and colleges work with students who have specific needs, accommodations have long become a mandate for universities and colleges (Burgstahler, 2015). For safety and compliance purposes, providing accommodations is an expected requirement and approach in higher education. As accommodations

continue to be available for utilization, there is a futuristic goal that has begun to be implemented even outside higher education environments. This futuristic concept and practice is called Universal Design. As supported by Anderson et al. (2015), campuses today are striving to create learning environments that are “welcoming, accessible, and usable for everyone” (p. 191). This statement suggests that services including inclusive design, provided by higher education administrators, can assist the need to “respond to the pressure to address a spectrum of needs for students” (2015, p. 191). Universal Design is not an approach that is mandated according to current law or organizational policy. However, there are vital differences that result from Universal Design approaches compared to accommodation approaches as described in the following research.

Burgstahler, an educator and activist of Universal Design in higher education, defined the approach as one in which an individual or a group “proactively designs a space to meet the needs of potential visitors with a wide range of [physical] capabilities” (2015, p. xi). This approach is in “consideration of a benefit to all people” (Burgstahler, 2015, p. 13). With these considerations, one is working toward reducing the need to reactively provide accommodations after an individual expresses a specific need. For purposes of this study, Universal Design was to be distinctly recognized as a separate approach to delivering accommodations. With that being said, accommodations are a necessary effort to continue while efforts of Universal Design are being developed and implemented. Ketterlin-Geller and Johnstone explained: “while universal design approaches may help these students to access the content in a test, accommodations may still be necessary to minimize the effects of a

specific learning or sensory disability” (2006, p. 169). Students in higher education may need separate provisions made beyond implementation of Universal Design to reach the highest potential of learning and accessibility possible.

Unlike accommodations, Universal Design is an approach one uses to consider each and every aspect of the processes, products, and services that are being created and developed for the benefit of an entire given population. These considerations include how a product or environment is going to be interacted with, utilized, and maintained by any potential user. Harrison invented the concepts of Universal Design (Burgstahler, 2015). Universal Design was a term patented later by Mace in the 1970s (Burgstahler, 2015). With these efforts by our forerunners, Universal Design shines a new light on what a disability means to an individual and how society views persons with a disability or disabilities. For one to live with an impairment means that they possess an individual limitation to the environment they interact with. When it comes to one having a disability, one has a socially imposed restriction that was influenced by their interaction with their environment. Due to one having a disability because of a socially imposed restriction, it is important that one who has an impairment has an inclusive experience with their environment. An inclusive experience “considers the diversity of users in all phases of the creation of products and environments” (Buchanan, 2015, p. 338). If one has an inclusive experience, then their impairment does not result in a disability (Burgstahler, 2015).

Stakeholders and their Roles with Universal Design

There are considerations to be made in regard to whose responsibility it is to create an inclusive environmental experience. For the realm of higher education, there

are certain stakeholders and roles to analyze when delegating responsibility in this case. These stakeholders are not limited to but include the student with a disability, the disability resource specialists, faculty members, and student service administrators (Burgstahler, 2015). These stakeholders have roles and responsibilities that influence the use of Universal Design approaches. According to Burgstahler (2015), a student with a disability is the one who is responsible for self-determination skills such as advocacy to address his or her environmental interactions and issues. Addressing these issues, the student is establishing awareness of what errors there are to his or her environment that lead to socially imposed restrictions. Since students are recipients of the college experience on their respective campuses, students are able to identify and present the restrictions they face (Ketterlin-Staeger et al., 2006). Davies, Schelly, and Spooner (2011) led a study that documented the importance of gathering information on students' perceptions so that students can take a stand in addressing issues in the learning environment. The results of their study displayed how students' perceptions of professors differentiate based on how they deliver information in the course, including how professors engage students and allow them the autonomy to express their thoughts. If one does not know about the needs of the recipient within the learning environment, the recipient is not being served in the best capacity possible. Going along with that, the disability resource specialists are responsible for considering Universal Design approaches while maintaining the authorization and arrangement of accommodations for situations that do not include the effects of Universal Design. In considering Universal Design, a disability resource specialist is to collect information about the errors to the

environment to improvise an implementation plan of Universal Design to respond to the identified error. The final stakeholders are the faculty members and student service administrators who are responsible for implementation of Universal Design. This is following the consultation of the disability resource specialists. The faculty members and student service administrator are also to see that students' accommodations are supported in areas in which Universal Design is not present (Burgstahler, 2015).

There is a significant gap in current literature with which there is not much that can be found in regard to Universal Design, let alone the role that higher education stakeholders perform with Universal Design. With limited literature in consideration, the researcher's focus on Universal Design was in efforts to introduce the topic and fill in the gap that is seen in literature.

Disability Resource Specialists

A disability resource specialist is one who provides services, resources, and coaching for students who have a disability or multiple disabilities. Due to their involvement with a population that may see most of the benefits of Universal Design, disability resource specialists are one of the primary stakeholders in pushing Universal Design at higher education institutions (Burgstahler, 2015). Most institutions have enrollment including a few or even thousands of students with disabilities. Along with that, there are "changes that involve diversity among college students, more consumer oriented clientele, demographic trends within the professoriate, and the impact of disability legislation" (McGuire & Scott, 2006, p.124). Because of the enrollment and changes seen in higher education, it is critical

that student service administrators are able to create an inclusive feel on college campuses to benefit such students.

When working with this increasing population, there are two factors that come hand in hand with creating inclusivity for this population. First, a student service administrator needs to be knowledgeable about inclusive practices. Second, the student service administrator such as a disability resource specialist needs to have the expertise to implement inclusive practices. If the concept of inclusivity is valued by student service administrators through their services, then they are “promote[ing] full participation and universal access for persons with disabilities in higher education” (McGuire et al., 2006, p. 125).

Through assessment done by Lombardi, Murray, and Gerdes (2011), inconsistencies were shown in the assessment with the expressed knowledge and the actual application of incorporating inclusivity in one’s professional work. These inconsistencies contribute to the trends seen in higher education professionals acting as “gate keepers” of traditional application and commonly known approaches in minimal inclusive efforts as described by Dallas, Sprong, and Upton (2014). There is reluctance in implementing inclusive practices in one’s professional work because of required addition of one’s investment.

Students with Disabilities

Though Universal Design is an approach that is to be implemented for the benefit of all by something such as a product, environment, or way of presentation, there is a particular audience that may be most influenced by the presence of Universal Design in higher education: students with disabilities. Staeger-Wilson and

Sampson declared that “the design of environments, along with society’s perception of disability as a deficit, serve to exclude disabled individuals” (2012, p. 247). Along with this, the quality and fairness of accommodations provided by disability services and faculty and students’ tendencies to shirk away from any potential stigma if they were to disclose their disability contribute to a call from student service administrators for a changed approach of support (Marshak, Van Wieren, Ferrell, Swiss, and Dugan, 2010). This change of support can come from inclusive practices that result from Universal Design. Currently, the inclusive practices many of us are familiar with in serving students with disabilities are accommodations. Accommodations may seem to go hand in hand with Universal Design, and though they do influence one another in several ways, there is a critical distinction to make between the two. This distinction is imperative to understand as we look to the future of advancing services available to our students across all college campuses.

Heckel (2003) described the difference between the efforts of presenting accommodations and Universal Design. For instance, if students need to print an article to complete a classroom assignment, they would need to be in touch with disability services to have this printed source converted into Braille and then provided back to the student. Disability services would most likely have a printer that only prints out in Braille in order to accommodate students’ request of material being converted into Braille. This is an accommodation as is claimed by Heckel (2003). On the other hand, if a college campus has standard printers that can print out in Braille, students who use Braille can go to a printing center or library and print out their own material in Braille without asking for an accommodation through disability services.

This is considered to be a Universal Design effort of the college campus through the resources they provide (Heckel, 2003). With a standard printer that has the capacity to print in Braille as well, students who use Braille can access their learning materials just like other students who do not need their materials converted into Braille. If Universal Design practices such as assistive technology are present in a learning environment, the subjects are then able to fruitfully become their own agencies of their learning experiences (Grohowski, 2015). Also, “the development of new approaches,” such as Universal Design, “and improving current delivery of services, is a prerequisite to ensuring that students are able to acquire and maintain employment as adults” (Davis, 2009, p. 3).

With the distinctions between accommodations and Universal Design in mind, students with disabilities may face challenges not just in the classroom but also through their campus engagement experiences. Ziswiler (2014) conducted the study of the relationship between students with disabilities and student engagement on a college campus. This relationship is significant to one’s success and satisfaction in college because one’s learning and self-growth is determined based on the quality of one’s engagement in their campus environment. To study this relationship, samples Ziswiler’s (2014) study included 361 part-time and 5,927 full-time, first-year students as well as 1,197 part-time and 6,016 full-time, senior-level students with disabilities at four-year institutions. With these subjects and the results of this study, countless variables that affect one’s quality of engagement to campus life were identified. Ziswiler concluded that student engagement on a college campus elicit certain responses and influences to one’s academics. Naturally, these conclusions

demonstrated that granting accessibility for every student, with or without a disability, delivers one with more likelihood of prospering in college, both academically and personally.

Universal Design in Higher Education

Acquiring an understanding of the vast applications of Universal Design can bring one to recognize the pinnacles that can be reached in achieving inclusion and equity. To forge this future of higher education with implementations of Universal Design, it is crucial to understand where student service administrators stand on the subject of Universal Design, more specifically disability resource specialists. With this awareness, building blocks can be determined for creating all-inclusive learning environments throughout American universities and colleges all across the country. With those thoughts expressed, sources that have been studied and analyzed were selected based on developing a gathered understanding of where Universal Design is at, along with where our stakeholders are at with the subject of Universal Design.

A key source that has upstarted the development of this thesis is a book on “*Universal Design in Higher Education: From Principles to Practice*” and how the principles of Universal Design can be put into practice. This source includes rich co-authoring from many experts in the field; it was put together and also co-authored by Sheryl E. Burgstahler (2015). The co-authors along with Burgstahler invited one to utilize inclusive terminology that does not make one sound atypical to the rest of the population in a dismissive or inferior way. Along with this, the co-authors effectively navigated the relationship between diversity and disability with applicable scenarios and comparisons to multiple potential approaches including what is described as a

Universal Design-enlightened approach. Through this, the reader is given an opportunity to look at how disability can be rid of its stigmatic reputation by implementing practices of Universal Design.

In addition to the findings of this book, theses and dissertations provided various aspects of how Universal Design is or can be used as well as how Universal Design is to be considered for the future of higher education learners (Davis, 2009; Grohowski, 2015; Heckel, 2003; Ziswiler, 2014). For example, Grohowski (2015) wrote about how multimodal practices can be used in the classroom to allow individuals utilize their various abilities in maximizing their learning experience. In marriage to these aspects, the research articles shared multiple analyses including the following: higher education professionals' views toward Universal Design (Dallas et al., 2014; Lombardi et al., 2011), levels of comfort between students and higher education professionals (Davies et al., 2011), and limitations seen in the general education curriculum (Bongey et al., 2010; McGuire et al., 2006).

The themes and concepts that have emerged during the reading and analysis led to the commanding indication that Universal Design is a novel subject, even among experts in higher education. Buchannan and Smith (2012) documented a form of “shift” that needs to occur for Universal Design to be seen across learning environments. Buchannan and Smith (2012) described this shift as going from a current focus on the medical model to the ideals of Universal Design. The medical model puts the focus on the person with a disability and how to assist him or her; whereas, Universal Design places this focus on the environment around each person and how to make it user-friendly for all. This focus of Buchannan and Smith's (2012)

shined a light on the ideal that student service providers give an opportunity or option to students' to choose their best way of learning so to best retain and comprehend learning material.

Naturally, when one is able to retain and comprehend his or her learning material without burdensome difficulty, one feels satisfaction or a feeling of accomplishment. Bongey, Cizaldo and Kalnbach (2010) have tested this idealistic model through a study conducted with an undergraduate biology course taught in an online format. They tested correlations between Universal Design, student satisfaction, and student grades through surveys and follow-up interviews. The analysis documented that there was high satisfaction with the Universal Design that was implemented in the course. While the satisfaction was a successful indicator with utilizing Universal Design approaches to the course, there was no evidence that student grades have improved because of utilizing Universal Design.

Despite a lack of convincing statistics in the improvement of student grades from the study aforesaid, student satisfaction is beneficial to the higher education economy. Student satisfaction increases retention rates and Universal Design becomes a tool to recruit prospective individuals and students to campuses, even those who may have been pre-determined as a concern or even a lost cause. Having access to the general curriculum in higher education allows for a future of accepting students who have distinctive ways of navigating a given environment. Edyburn (2010) shared that in the 1990s, the conversation and efforts to incorporate inclusion was based on physical access. Since then, a larger focus and concern has lead to

conversation and emerging efforts to generate access for all kinds of learners and persons of various abilities.

Challenges in Implementing Universal Design

Challenges Edyburn (2010) described in regards to implementing Universal Design are the responsibilities that may emerge and fall on particular stakeholders who are resistant to change. Such change includes new approaches such as implementation of Universal Design. For example, the responsibility of implementing Universal Design in a curriculum ideally belongs to faculty members but they may respond with some pushback to more requirements. Dallas, Sprong, and Upton's (2014) identified faculty members' tendencies to act as "gate keepers" to how education is approached, modified, or affected. Faculty like to demonstrate their ability to accommodate students if their special needs are known; however, when it comes to an expectancy for willingness and readiness for organizational change such as implementation of Universal Design, there are trends that show faculty resistance (Dallas, Sprong, & Upton, 2014).

On the other side of the table, we have student perceptions of Universal Design being implemented by faculty into students' courses. Davies, Schelly, and Spooner (2011) took the lead on studying the levels of motivation and comfort with students' views on professors who proactively incorporate Universal Design into their courses. The authors determined that students develop stronger relationships with their professors when professors allowed students to have the autonomy to express their comprehension of the learning material the way that best suited them and their abilities. To come to an understanding of the perceptions of students, it must be

recognized that students are the primary recipients of beneficial implementations of Universal Design in a learning environment.

As primary recipients of Universal Design in higher education, students become another stakeholder of Universal Design. Students are a principal focus for higher education but the population of our future students is drastically changing. Sources support the ideals of futuristic actions to create learning environments that are accessible to any student prior to them even stepping onto any campus (Bigelow, 2015; McGuire et al., 2006; Staeger-Wilson et al., 2012).

Discussion

The sources and the findings that have been described in this literature review brought attention to the confines and obstructions that are brought on certain students because of lost opportunity in intentional consideration and enactment of Universal Design. Equally important, the findings demonstrated the need for developing trusting relationships between higher education professionals and students who are the beneficiaries of the learning experience. If higher education professionals such as disability resource specialists become effective stakeholders of Universal Design, specialists will create those necessary trusting relationships. Furthermore, any individual can be rid of stigmatic factors that interfere with one's education by applications of Universal Design. Not only would the use of Universal Design reward one with freedom of stigma, but it would also allow one to give primary focus to one's education. A space would be created for any individual to benefit without constant roadblocks that require improvisation.

Dreaming and striving to achieve the next big idea is often found on organizational agendas though they often are ideas that take years to even decades to form and implement. For instance, creating an effective process that allows students increased accessibility granted by Universal Design can accommodate the growing population of students enrolled into college who have disabilities. What once used to be the next big idea of higher education with the accommodations process has an upcoming thirty-year anniversary since the Americans with Disabilities Act of 1990 was passed by George H. W. Bush. There was much time, money, resources, activists, leaders, and educators that contributed to the investment in accomplishing the accommodations process. In the light of the current accommodations process, there is relentless talk about what the next big idea is for the realm of higher education for its growing diverse student population. The dilemma with thinking about the “big picture” is the concern of having enough resources or support to undertake a master plan. This is the very case for the next big idea following the accommodations process: Universal Design.

With this dilemma in mind, there are some limitations that can be identified with Universal Design. First and foremost, establishing fundamental awareness, knowledge and a collective understanding of what Universal Design is, how and where it can be implemented, and thinking of other innovative ways to apply it to a learning environment has not yet reached its potential across all higher education environments and its professionals. This stalls the ability for disability resource specialists to create opportunities in implementations of Universal Design. These components take great investment to establish. In addition, identifying and

determining the roles that disability resource specialists serve in the higher education population with Universal Design may not be commonly agreed upon or understood. Disability resource specialists may contribute to the resistance trends seen in individuals having little to no desire to take on more responsibility or prioritizing a next big idea such as Universal Design. Each professional has personal goals to be met so some may not have the willingness to factor in effort into an additional, beneficial idea such as Universal Design. Along with that, the implications of money and resources to be readily available are not surprisingly hard to come by.

With all things considered, Universal Design is the future of diversity, in which it will celebrate all individuals regardless of who they are, who they are not, what they can do, or what they cannot do. In fact, Universal Design will make individuals feel no more inferior or superior than another because Universal Design will be the new normalcy in any given environment. All persons will be capable in the given environment that is universally designed. Ideally, there will be no concern of who is competent or who is not because all will be able to reach their highest potential.

Implications for Organizations

Throughout the development of higher education, there have been expansions seen across all activities, programs, services, and systems of support. Through these developing expansions and under the circumstances of current organizational practices, higher education has guided its professionals into obliging students with their expertise on a reactive basis. To elaborate, a disability resource specialist may meet with students to create their college accommodations plan. These meetings only

occur if a student or the student's caregiver contacts the disability resource specialist. After that, the student only benefits from the available services provided by the disability resource specialist after the student provides appropriate documentation of their disability. These services are provided for the student after the student has made his or her needs known to a disability resource specialist. This goes to show that higher education professionals use organizational practices that are reactive to students' needs or wants.

Because organizational practices are primarily done with serving students' individual needs as they transpire, this implicates the ability for Universal Design to make its mark in higher education. There is a level of comfort in taking up on an approach that has been and continues to be widely used. With Universal Design, that comforting and well-known approach would not work as an organizational practice. Universal Design is all about how we can proactively benefit *all* persons rather than how we can reactively serve each individual after his or her needs are disclosed or noticed. Nevertheless, Universal Design is one of those approaches that is slowly but surely seeing its expansion after not long ago being a novel way of supporting students.

Coupled with the organizational practice implication of disability resource specialists reactively supporting students, Universal Design may be difficult to implement without knowing one's audience. As an illustration, a faculty member may modify his or her general curriculum to conform to as many unique learners as they can. These modifications may be intentionally designed to benefit all; however, not every aspect of a general curriculum may be humanely possible to Universally Design

in a way that works for everyone. Approaches implemented for the purpose of Universal Design may need to be done without knowing one's audience in advance. One would have to consider all the possible aspects of unique individuals' ways of learning and apply techniques that work for most, if not all.

In the same fashion, Universal Design may be the aim to benefit all people but some individuals may wish to have individualized attention and services that are solely developed to meet their needs. Through current organizational practices, students may seek attention and support that is individually designed to accommodate and support them. With this individual attention, an individual may be gaining a service that is exclusively tailored for his or her needs. In this case, current organizational practices may be worth continuing for certain individuals when they ask for the individual-to-individual basis, while Universal Design can be implemented initially and set in place for the rest of the audience.

“Historically, higher education in America has been tailored to meet the needs of English-speaking, able-bodied, White male students” but today, with the vast diversity we see with eager learners that seek higher education opportunities, Universal Design needs to become the primary focus in the composition of an environment (Buchanan, et al., 2015, p. 337). This composition includes all considerations possible of the design in an environment that allows access for every single user without the need for reactive adaptations to be made (Ketterlin-Staeger, et al., 2006, p. 166). The composition of an environment can be influenced, created, and developed by stakeholders of Universal Design such as disability resource specialists. They are the front line of serving students who often are the ones that feel

most burdened by an environment that is not Universally Designed. Because of this, Universal Design continues to rise on disability resource specialists' priority lists in higher education. With that being said, it is vital to stress that Universal Design does not mean that current accommodation practices should be eliminated for individual who require accessibility services.

To continue, a component of Universal Design is how people view the way services are provided and used which is a perspective called the Universal Design-enlightened approach. The following illustrates an example of sign language interpreting services provided at a full workday training series for the Department of Residence Life and Housing that includes a Universal Design-enlightened approach. The department arranges these interpreting services. At the end of the day, the department's accountant receives the pricy bill of having had those interpreting services provided. Nevertheless, the accountant arranges for the deduction to be taken off of the department's bill as if it were another expense that is necessary and for the benefit of those who participated in the training series. The accountant did what they were responsible to do; however, what is essential with this example is how one can see this situation from a Universal Design-enlightened approach. This perspective would look like this: with an interpreter in the room, all individuals that participated in the training series were able to communicate with one another and contribute effectively and equally; therefore, the training series was valuable for all individuals. The interpreting service allows for equity and social integration for every individual who is a part of that meeting, leading to a positive experience for everyone (Burgstahler, 2015).

In efforts to make the educational realm a more welcoming, accessible, and usable environment regardless of who wants to come learn, considerations of Universal Design need to be a principal part of all future strategic plans. For starters, one needs to understand and know what Universal Design is. Secondly, one needs to identify areas Universal Design will bring the most benefit. Thirdly, one needs to determine where one can begin the process of accomplishing the implementation of Universal Design in a given area and what one's role is in that process. Finally, one needs to begin that process with the resources available while educating others on one's process so to invite them along for the ride. As one keeps in mind of what is "possible" and what is "reasonable" in implementing Universal Design practices, one should still strive for what Universal Design stands for. The efforts that are put into incorporating Universal Design will unit all in getting one step closer to the delivery of the ultimate flawless experience across all learning environments.

CHAPTER III

METHOD

Introduction

Today, diversity extends across considerations as unique as a person's different way of thinking, learning, and communicating as well as how one functions in any given environment. Such growing considerations of diversity continue to shape the future of higher education professionals, including Student Affairs personnel, to devise approaches that create an accessible education for all. Even though higher education campuses have become progressive towards many different student identities and differences, they are stuck in a compliance mode when it comes to accessibility (Oguntoyinbo, 2014).

One of the most common ways for higher education entities to adapt to the growth in diversity is to provide accommodations for students with disabilities. Accommodations are the motherhood for creating an accessible education; accommodations reactively providing adaptations to students' environment to allow them to participate. Students must be helped to overcome challenges that hinder their ability to reach their greatest learning potential. To eradicate all challenges for higher education students, the epiphany of accessibility is a concept called Universal Design (Burgstahler, 2015). Such a concept is not a means to an end but rather an approach that Student Affairs professionals, such as disability resource specialists, can begin to integrate into their work efforts to address great challenges students of unique

differences face. This phenomenological study explored where disability resource specialists at Wright State University fell on Lewin's (1951) continuum of change and Reynolds (2009) levels of expertise in regards to adopting principles and implementing practices that qualify as Universal Design.

Philosophical Paradigm

The researcher's philosophical stance was constructivism and interpretivism. The constructivist and interpretivistic philosophical stance included the perception that knowledge and existence are constructed through human interaction, which emphasizes understanding. One of the major considerations of this philosophical stance was: "through voices and acknowledgment of participants and a researcher, knowledge is gained" (Jones, Torres & Arminio, 2014, p. 13). Another major consideration of this philosophical stance for this study was: "the aim of research is increased understanding of complex human phenomena to alter existing power" (Jones, et al., 2014, p.13).

Personal Positionality

The researcher was born with a profound hearing loss and self-identifies as culturally Deaf. The researcher grew up mainstreamed in a predominantly hearing environment. It was not until the researcher enrolled in college that she was immersed into a Deaf community, through the National Institute of the Deaf (NTID). While completing her undergraduate degree, she learned American Sign Language and discovered a culture and community, which she joined with much enthusiasm and gratefulness. The college provided world-renown access services such as sign

language interpreting, note taking, and real-time captioning such as C-Print. These services required little to no effort from the recipients of the access services.

After graduating, the researcher enrolled in a Student Affairs in Higher Education master's program within a mid-size, public Midwestern university, which is a predominantly hearing environment. While there, the researcher noticed a great difference in her ability to access her highest potential in all aspects of her life, including academics, employment, and social situations.

The trials and tribulations that she has faced with regard to her disability contributed to her philosophical stance as a constructionist/interpretist and to her passion in studying Universal Design. Since the researcher is focusing on describing the experience of disability resource specialists "and how it is that they experience what they experience" in regards to Universal Design, it was appropriate that the research design was a phenomenological study (Patton, 1990, p. 71).

Participants

This phenomenological research study took place at a mid-sized, public, and research institution in the Midwest. The unit of analysis was the disability resource specialist. Eight potential participants were selected from the staff list of Disability Services at that research institution, regardless of staffs' years of experience in the field, levels of education, or specialty areas. The only requirement for participants was to have been employed in disability services at the research site on campus in the 2017-2018 academic years. Those not included as potential participants were the student employees, interns, and staff assistants at the front desk of the Disability Services department within the research site.

Measures

A semi-structured interview protocol was used to collect data from the participants. Prior to questioning each participant, the researcher allowed each participant to read the definition of Universal Design. This ensured that all participants had consistent understanding and information regarding the definition of Universal Design. The interview protocol follows.

Universal Design: An approach that proactively designs a space to meet the needs of potential visitors with a wide range of [physical] capabilities which is in consideration of a benefit to all people (Burgstahler, 2015, p. xi)

1. Using the provided definition, how would you describe Universal Design in the context of higher education?
2. Provide a specific example of how you have seen Universal Design implemented in a higher education context?
3. What do you like about Universal Design, if it were to be implemented in the context of higher education?
4. Describe a situation in which your action, as a specialist, represented Universal Design.
5. What is the role of a disability resource specialist in implementation of Universal Design in higher education?
6. What is the relationship between accommodations and Universal Design?
7. Is there anything else you wish to share about Universal Design?

Procedures

Eight potential participants were identified via the staff directory shown in the website of the Office of Disability Services at the research site. When participants were identified, the email addresses listed for each employee in the staff directory were utilized to reach out to them to introduce the study via a cover letter which can be found in Appendix A. Participants were selected based on their willingness to participate. Eight invitations were sent out, one to each of the eight potential participants. Six responded with the willingness to participate in this study. One-on-one interviews were pre-scheduled via email between the researcher and each interviewee.

The interviews took place in a small lab room for which the door was closed throughout the entirety of each interview. Before each interview, participants selected a pseudonym and acknowledged consent regarding the study, which included audiotapes of the interviews. Participants used pseudonyms throughout the research. At any point during the interview, participants were permitted to stop the interview or refrain from continuing with the process at free will with no penalties.

Trustworthiness

To establish trustworthiness in the methods, the researcher identified which ways she would ensure that the study design included credibility, confirmability, and transferability. The researcher had served as an intern in the Office of Disability Services. Also, the researcher received services from the same office, which developed a familiarity with the Disability Services office culture; these experiences establish credibility (Shenton, 2004). The relationships allowed the researcher to

develop rapport with the Disability Services office thus having created prolonged engagement, another aspect of credibility. The researcher employed member checks, which allowed participants to review transcriptions for accuracy and research findings for coherency. Along with member checks, the researcher conducted triangulation by examining the differences and similarities through the existing literature, interview data, and member checks, which added additional credibility for this study. Following the efforts to increase the credibility in this study, the researcher made sure all data was collected according to the Institutional Review Board (IRB) standards of inquiry for human subjects.

To add strength to the trustworthiness of this study, the researcher kept notes of her predispositions and beliefs as reflective commentary during the duration of the study, which established the confirmability of this study (Shenton, 2004). In addition, the researcher noted the emergence of any noticeable patterns or changes that occurred outside the framework of the predetermined methods. In regards to creating transferability for this study, the researcher used purposive sampling, which was done by selecting a group of individuals who exhibit particular attributes. The participants' attributes included being higher education student service administrators who are disability resource specialists. With these qualifications for the population sampling, this study has the potential to be repeated at other institutions that employ disability resource specialists. Finally, the procedures and coding system were generated to be internally consistent so that another researcher or group of researchers can mimic the methods done for execution of this study.

Analysis

The researcher's proposition was that the disability resource specialists at the mid-sized, public Midwestern university were in the Unfreezing stage of change (the first stage) regarding adopting principles and implementing practices of Universal Design. To explore the proposition through the transcripts, a color coding system that included *a priori* themes was used before other themes emerged. The *a priori* themes included Reynolds' three tiers of assessing the level of expertise of a Student Affairs professional in any identified area through these three facets: awareness, knowledge, and skills (2009).

The level of awareness, which was marked red, was the capacity a disability resource specialist had in being able to articulate and describe the experiences they have had with Universal Design. The following key words and phrases were used to identify one's expertise and awareness: aware, identify, familiar, perceive, appreciative, apprehensive, wary, recognize, view, believe, think, experience, saw, heard, recall, watch, and witness. The level of knowledge, which was marked green, determined the capacity a disability resource specialist has in being able to articulate the relationship between accommodations and Universal Design as well as what they know about the content of Universal Design. The following key words and phrases were used to identify one's expertise and knowledge included: define, indicate, know, list, name, select, understand, concept, interpret, compare, contrast, explain, demonstrate, discuss, locate, learn, promote, educate, teach, advise, and advocate. The level of skills, which was marked purple, determined the capacity a disability resource specialist had in being able to demonstrate his/her contributions to adopting

principles and implementing practices that qualified as Universal Design. The following key words and phrases identified one's expertise and skills included: apply, compute, construct, demonstrate, for example, investigate, predict, use, assess, estimate, evaluate, revise, judge, create, conduct, work, develop, and experiment.

As for Lewin's (1951) three stages of change, each stage had its own keywords, which were as follows. For the Unfreezing stage – which was marked pink – the keywords included: choose, decide, organize, plan, prepare, propose, explain, examine and consider. For the Change stage – which was marked blue – the keywords included: perform, produce, demonstrate, discuss, locate, adjust and adapt. Finally, for the last stage, Refreezing – which was marked orange – the keywords included: appraise, assess, estimate, evaluate, judge, rate and revise. This coding system was used to explore where the disability resource specialists were on the continuum of change in integrating Universal Design into their work along with their level of expertise (awareness, knowledge or skills) in one of the three stages of change. As themes emerged during the analyses, appropriate codes were categorized and color-coded for an aggregate picture of where the participants were on the continuum of change.

CHAPTER IV

RESULTS AND DISCUSSION

Introduction

This study was aimed at exploring disability resource specialists' current familiarity with Universal Design. More specifically, this study was to divulge the levels of current expertise of disability resource specialists in regards to their ability to adopt principles and implement practices that qualify as Universal Design in the higher education context. This study also focused on determining which of the three stages of change were demonstrated at the research site. The study was set at a four-year public institution in the Midwest. The six participants were disability resource specialists at this institution. During the individual interviews, the disability resource specialists' responses generated data regarding their awareness, knowledge, and skill levels that influenced the perception of their readiness for organizational change through the following levels: Unfreeze, Change, and Refreeze.

Due to the expansion of diverse student bodies, efforts to enhance students' abilities to best utilize each of their unique ways of learning are essential (Smith, 2012). Universal Design approaches can benefit such efforts in response to the shift of the student body (Anderson et al., 2015). Disability services have the power to incorporate implementation of Universal Design. Since disability resource specialists are part of these functional areas, this study's findings will influence the progress made in the implementation of Universal Design. Meanwhile, it is important to keep

in mind that while Universal Design approaches can help a spectrum of differences in students, accommodations is still necessary for those who experience the effects of learning or sensory disabilities (Ketterlin-Geller et al., 2006).

The conceptual framework for this study was twofold: (a) that disability resource specialists were found to have the level of expertise that included one of Reynold's (2009) three tiers of assessing expertise: awareness, knowledge, or skill and (b) that the disability resource specialists demonstrate readiness for organizational change involving Universal Design practices by Kurt Lewin's (1951) three-stage theory of change: Unfreeze, Change and Refreeze. Such a conceptual framework was appropriate for this study because the need to adopt change in response to the diversification of our student body is necessary (Marshak et al., 2010; Anderson et al., 2015). In order to adopt change, champions of higher education must be equipped with expertise in certain areas that will provide tools for students to succeed (McGuire et al., 2006). Universal Design is one of those tools to serve our diversifying student body (Buchanan, 2015).

There was one research question around which the data collection and analyses were focused on: *Where do disability resource specialists at a mid-size, public Midwestern university fall on Lewin's (1951) continuum of change and Reynolds (2009) levels of expertise in regards to adopting principles and implementing practices that qualify as Universal Design?*

The researcher's proposition was that the disability resource specialists at the mid-sized, public Midwestern University were in the Unfreezing stage of change (the first stage) regarding adopting principles and implementing practices of Universal

Design. To begin, the response to the research question is presented first followed by the connections made with Reynold's (2009) three-tier measures of expertise and Kurt Lewin's (1951) three-stage theory of change.

And finally, a summary of the study is presented along with the limitations of the study, suggestions for future research, and a conclusion of the study. The researcher will describe the analyses that were used to determine where participants were on Lewin's (1951) continuum of change. Following these analyses, the researcher will describe the analyses that were used to determine where participants were on Reynold's (2009) three tiers of expertise. Finally, the researcher will summarize how the findings in the aforementioned analyses with the two theories combined contribute to a better understanding of the relationship between disability resource specialists and Universal Design approaches.

Lewin's Continuum of Change.

Unfreezing stage. All disability resource specialists demonstrated a strong presence in the Unfreezing stage. During the interviews, all six participants articulated keywords and phrases that indicate their presence in this stage. For example, one participant shared her belief that, "You have to get everyone on board and that can be hard because you have to navigate the politics of faculty and teaching – the politics in higher education, which are just a totally different beast than a K-12 setting, or the like. So, I just wish more people would use it." The action verb, 'navigate' as found in this quotation, was an emergent theme the researcher did not have in the original list of words that identify participants' level of awareness about Universal Design. When the participant used the word 'navigate' in this context, she represented the

action that needs to be used for future action to gain support from influencers.

Therefore, the action verb, 'navigate' is a significant theme to include when analyzing one's level of awareness.

Another participant shared a similar viewpoint. "It's [Universal Design] not a burden. It's something that is going to help all people and I think that's the hidden lining of universal design initially when you're planning and doing the work to make something more universally accessible, we get pushback sometimes that it seems like a lot of work." It appears from this articulation that the participant expressed the challenges faced when a disability resource specialist wishes to explore and plan for Universal Design to try to pilot and put into place. In support of these participants' viewpoints, another participant said, "I'm trying to plan [for] my staff to go to all the strategic planning open forums and I'm asking them to all talk about Universal Design for instruction and learning as part of a conversation where we are moving as a university." The participant noted that he is at a stage of attempting to get a conversation going in order to reach out to others to support futuristic improvements for college campuses including efforts of Universal Design. Finally, a participant campaigned, "changing and reframing someone's opinion of what it means to be inclusive, I think, is such an important role for us." Participants of this study were pro-Universal Design and believed it to be essential to incorporate Universal Design into their practices along with collaboration with their colleagues and influences.

Change Stage. Coming from a strong presence at the Unfreezing stage, disability resource specialists' showed evolving signs of also stepping into the Change stage. For instance, one participant shared, "I actually am having a new technology being

trialed with the class that I teach. And [will] see what the feedback is from the class.”

This technology is called Wright Cap as shared by the same participant. She continued by saying that, “Researchers that are working on the technology [Wright Cap] are working on punctuation and speaker recognition because those are the two big hurdles we have to get through before we can use it to replace C-Printers.” This participant demonstrated current practices being conducted by staff on campus to implement technology that can qualify as Universal Design. Her statements reflected that she is moving into the Change stage. A participant expressed, “I am on a remodel committee right now so we are looking at the design of some chemistry labs and an art space and so, especially with the chemistry labs how do we make that universal design and accessible for not only the students but also teachers or GAs, TAs, who might have disabilities.” When speaking of remodeling, the term ‘remodeling’ indicated that the specialists’ actively engaging in collaborative efforts to change certain approaches in regards to accessibility through Universal Design. The term ‘remodel’ was another emergent theme that was not in the researcher’s original list in the codebook. The term is a significant indicator of the participant’s involvement in driving for organizational change.

Refreezing Stage. For the final stage in Lewin’s three stages of change, the organizational change of implementing practices of Universal Design in entirety had not yet occurred. However, participants expressed their viewpoint on this matter including a participant highlighting the level at which other colleges may be in regards to Universal Design. “Some college campuses are embracing it incredibly well. But it’s been something that, I know I’ve gone to conferences about it for

probably 15, 20 years. But we're not fully embracing it yet." Similarly, another participant mentioned, "I think 12 to 14 universities right now nationally that prescribe to a Universal Design for instruction framework for their curriculum design and they have from the top down adopted that which is incredible and I would love for us to get there but that is a whole other conversation." These thoughts confirmed that disability resource specialists in this study recognized that their position in implementing Universal Design has yet to pass the exploration and implementation phases which are the Unfreezing and Change stages, respectively.

Reynold's Three Levels of Expertise.

In addition to identifying disability resource specialists' place on the continuum of change, their level of expertise according to Reynolds (2009) was explored including awareness, knowledge, and skills as shown in the following.

Awareness. All six participants exhibited the first tier of Reynold's (2009) levels of expertise in a number of ways. For example, a participant said, "College is something that has so many possibilities for students and when it's physical access we don't want anybody to miss any opportunities." The participant showed awareness for the necessity to create spaces that are accessible to students – all students. The word, 'possibilities' was yet another emergent theme to the study for the codebook. This term is significant to contribute to the level of awareness for it demonstrates a participant's understanding of the opportunities Universal Design may have to offer in future implementation.

During participants' responses that indicated awareness, they usually followed with statements that exhibited levels of knowledge, which is the second tier of

expertise according to Reynolds (2009). For instance, a participant said, “I think, even outside higher education when we think about Universal Design we tend to think mostly physical spaces, right?” The participant then continued, “I think we have to start looking more at how to look at those other approaches, specifically within the learning environment. So not just the physical spaces but the content and how we manipulate the content and how we present the content, how we assess content.” The latter comment exhibited a deeper level of understanding and knowledge about Universal Design, which fits under Reynold’s second tier of expertise. Another example is when a participant shared, “I think an essential component of Universal Design is always not having that final untouchably, perfect draft but that there’s always something that you can explore and try.” From this statement, it was notable that the participant described his awareness of Universal Design not being a means to an end. The participant exhibited awareness in the sense that Universal Design is an approach to try through a series of trial and errors due to the novelty of Universal Design in the higher education context and communities beyond.

Knowledge. The second tier of expertise assessed was knowledge. Two of the participants were able to describe Universal Design based on their role in implementing such an approach. First, it is to be noted that a participant said, “I really, really love universal design. We’ve had this discussion for a couple of years in our office, and kind of bridging the staff/academic divide can be challenging sometimes.” Secondly, one participant stated, “I would like to see our role expand because for right now it’s more retroactive than it is proactive.” Participants expressed their understanding of Universal Design through terms used such as

‘retroactive’ and ‘proactive’. These terms are key ideas that differentiate accommodations and Universal Design. Thirdly, another participant explained, “A disability specialist’s role is to be a champion of it [Universal Design] and to promote it [Universal Design] where they can.” To express the need to promote Universal Design, the participant exhibited knowledge about the approach. Finally, yet another participant described her knowledge of Universal Design by comparing the approach with the current accommodations process used in her office:

Accommodations are like a fill in or a bridge or a stop gap measure to compensate for our lack of access to something in our classroom. C-Print is compensating for the fact that we don’t have closed captions on everything that happens in the classroom. If we did, we might not need that [C-Print]. So when we look at why an accommodation is there, it’s because there’s not Universal Design currently in place for the classroom and the materials.

Skills. Finally, the third tier assessed in this study was participants’ ability to articulate their skills to use Universal Design in their work on a college campus. Three participants expressed experience in using Universal Design in their classroom like this participant: “I’ve taught classes where we’ve used Universal Design for our instruction where the entire course was developed that way.” Additionally, two participants shared their current work on developing an approach that can qualify as Universal Design. A participant described her involvement with some researchers on her campus to develop a product that assists with accessibility with language: “Researchers [at Wright State] are working on the technology [Wright Cap] are

working on punctuation and speaker recognition because those are the two big hurdles we have to get through before we can use it to replace C-Printers.”

Discussion

In this study, the researcher analyzed the transcripts to determine what level of change their actions represented: Unfreezing, Change, and Refreezing. It was discovered that the participants were primarily in the Unfreezing stage of change in regards to incorporating practices of Universal Design through their department. Although it was evident that participants were primarily in the Unfreezing stage of organizational change, there were some emergent signs of participants engaging in work that can be described as the Change stage. Furthermore, it was clear the participants were in the transition between two stages as they explored Universal Design approaches through trial and error as a learning experience. Implementing such experiments placed participants in the beginning stages of creating organizational change.

In addition to the findings with the continuum of change, the researcher analyzed the transcripts to determine what level of expertise their actions represented: awareness, knowledge and skills. Participants’ responses in the interviews demonstrated their strong understanding of Universal Design. They were able to articulate what Universal Design is not only in the physical spaces but also in the learning environment. Also, when participants described their understanding of Universal Design, participants demonstrated their knowledge about Universal Design in higher education. Due to exposure to conferences, discussion, and participating in committees to learn and talk about Universal Design, all participants demonstrated

their position in the knowledge stage. With their collective knowledge foundation about Universal Design, they were equipped with an understanding of how to move onto employing skills that involve Universal Design approaches.

Figure 1. Building Blocks of Transitions from One Stage or Tier to the Next

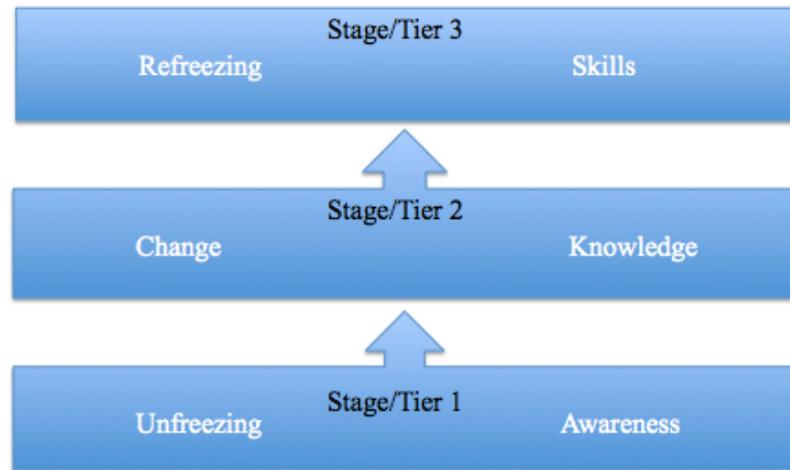


Figure 1. Transitions that occur in order to go from one stage or tier of Lewin’s (1951) continuum of change and Reynolds (2009) tiers of expertise to the next.

There were two key discoveries in this study that are notable. The first key discovery included several participants’ comments that connect Universal Design and faculty. For instance, one participant said, “I would love for them [faculty] to adopt it [Universal Design] as part of their standard.” Another participant shared, “You can’t really make faculty do things. One of the things that we’re thinking of trying to get faculty on board with is a way of note sharing for the whole class.” Indubitably, disability resource specialists made it apparent that collaboration with faculty in regards to implementing practices of Universal Design is crucial and necessary.

The second key discovery was the enthusiasm for Universal Design to be a part of the organization’s future service to students. One participant described his

hopes as a disability resource specialist to be able to influence a movement of Universal Design opportunities in educational entities:

My vision ultimately is to get there and to not only tout the benefit of students with disabilities but to also tout, ‘Hey, it’s [Universal Design] going to help with retention. It’s going to help with our success rate, our graduation rate. It’s going to help with so many areas.

Additionally, another participant explained, “Creating a more clearly understood process for the campus to engage in implementing UDL [Universal Design for Learning] would be helpful and make the process gradual with measureable goals and outcomes.”

These findings illustrated the participants’ knowledge and desire to move into the Change phase of organizational change. Since the participants work for the same department at their respective institution, it is apparent that this group of participants are familiar with Universal Design and are able to have professionally-inclined conversations on the topic. Participants primarily focused on Universal Design for students in the classroom environment rather than outside the classroom. The participants shared minimally about accessibility through Universal Design outside the classroom. This may be so due to the primary focus for students in enrolling into college, which is to be successful academically; therefore, a major focus for disability resource specialists is to meet students’ academic needs.

The findings aforementioned are significant to other disability resource specialists on other campuses due to the role they play on college campuses for students with disabilities. Disability resource specialists are significant if not the most

important advocates for students with disabilities (Heckel, 2003). Students with disabilities are often the individuals who face the most barriers due to inaccessibility throughout their educational experience (McGuire et al., 2006). Therefore, any efforts to drive for an increase in Universal Design approaches may alleviate any of these present barriers for these students (Burgstahler, 2015; Buchannan, 2015). Data that were gathered from participants may have provided a better understanding of the importance of raising awareness, gaining knowledge, and developing skills to implement Universal Design. Moreover, this study's findings demonstrate the levels of expertise that may be necessary for other disability resource specialists to move along the continuum of change for their respective organizations (McGuire et al., 2006). With the knowledge of where specialists are on the continuum of change, they can determine where they need to change as an organization in order to adopt Universal Design practices.

Limitations and Recommendations

There are two limitations for this study. First, having a greater number of participants may allow for more data collection for more extensive analyses. This variation may allow for the application of the conceptual framework to be analyzed more critically. Second, future studies could add additional questions to support an increased critical analysis. For instance, additional questions about Universal Design may encourage participants to talk about Universal Design outside the classroom. To speak about Universal Design in the outside-of-the-classroom context may lead to responses the researcher can analyze more critically when studying an organization's level of change and expertise among employees.

Conclusion

The phenomenological study findings documented that all participants demonstrated the knowledge tier of expertise in Universal Design. The first level of expertise is awareness, which is followed by knowledge and skills respectively. It is important for an organization's employees to demonstrate one of these levels of expertise to be able to create change such as implementing Universal Design approaches. For instance, the analyses demonstrated participants' presence at Reynolds (2009) first tier of expertise: awareness. Having awareness for Universal Design introduced a foundation for individuals to go onto the knowledge tier of expertise.

Analyses were also conducted in the exploration of Lewin's (1951) three-stage theory of organizational change including the Unfreezing, Change, and Refreezing stages. Participants demonstrated an understanding of what would be needed to increase the use of Universal Design in their organization's services which would be demonstrated by the Change stage. Participants' statements indicated that they have the knowledge, which supports the development of organizational change in their work.

With the study's analyses documenting participants' existent presence in the Unfreezing stage, participants can enter the Change stage of organizational change. This is an example of how the two conceptual frameworks intersect in this study. Essentially, an organization is at the Unfreezing stage when it demonstrates awareness of Universal Design. However, with demonstrated knowledge of Universal Design among all participants, participants have the ability to move onto

the Change stage if they choose to transform their knowledge into practice. The change stage requires an organization's personnel to have the knowledge about a specific development such as Universal Design before it can be implemented. As articulated, participants in this study have the capacity to implement practices of Universal Design as demonstrated by their levels of knowledge. To implement change in their organization, disability resource specialists need higher education decision makers to provide resources necessary for implementation of Universal Design approaches.

With all that said, the transitions from one level of expertise to the next and from one stage of change to the next are not definitive or precise. An organization may fall along the continuum of change based how one interprets the articulation of participants' expertise in Universal Design. This poses as an implication for other organizations to navigate. Nevertheless, this study demonstrates disability resource specialists' capacity to adopt principles and implement practices that qualify as Universal Design.

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Appendix A

Informed Consent Form/Cover Letter

Project Title: Disability Resource Specialists' Capacity to Adopt Principles and Implement Practices that Qualify as Universal Design at a Four-Year Public Institution

Dear Participant,

My name is Cecilia Grugan, and I am a graduate student in the College of Education and Human Services in the Student Affairs in Higher Education program. As part of my graduate research for my Master of Arts thesis, I am contacting you to request that you participate in my research study, as described further. You have been invited to participate in this research because the Division of Student Affairs identified you as a current employee of the Office of Disability Services at Wright State University. It is my honor to be able to listen, gather, and conduct an analysis of your participation for this study.

Purposes of the study: The purpose of this study is to analyze the current perceptions of disability resource specialists regarding Universal Design in higher education.

Methods used for this study: You will receive an email invitation to participate in this study because you have been identified as an Office of Disability Services employee. In this email, you will be asked if you are interested in participating. If you

agree, you will be asked via email to schedule an interview. When you arrive for the interview, there will be an informed consent document for you to review. These documents will have a pseudonym listed on them that will be previously determined to not allow the linking of your real name with the results of the study. The researcher's password protected cellular phone and computer will be used to record audio from the interviews. All audio recordings (when applicable) and transcriptions from interviews will be destroyed via shredding and erased from any password protected computer files once the requirements for this research is completed. The interviews are expected to take between 30- 45 minutes.

Rights as a participant: All participation is voluntary. If you choose to opt out of participating during the study, you will receive no penalty. Participants will receive by email the overall findings from their individual interviews to review for credibility and confirmability purposes.

If you have any questions about this study, please contact the principal investigator, Cecilia Grugan (grugan.2@wright.edu), or Committee Chair/Advisor Carol Patitu, (937-775-4148; carol.patitu@wright.edu). For further questions regarding your rights as a research participant, please contact WSU Institutional Review Board 937-775-4462 or robyn.wilks@wright.edu.

Appendix B

Email Invitation to Participate in Study

Dear Participant:

This email is a request for your participation as an Office of Disability Services employee in my study called, “Disability Resource Specialists’ Capacity to Adopt Principles and Implement Practices that Qualify as Universal Design at a 4-Year Public Institution”. If you are interested and able, please let me know which days and times of the week you would be able to provide 30 minutes to an hour of your time.

Again, I would like to remind you that all participation is voluntary. If you choose to opt out of participating during the study, you will receive no penalty. Also, participants will receive by email the overall findings from their individual interviews to review for credibility and confirmability purposes.

If you have any questions about this study, please contact the principal investigator, Cecilia Grugan (grugan.2@wright.edu), or Committee Chair/Advisor Carol Patitu, (937-775-4148; carol.patitu@wright.edu). For further questions regarding your rights as a research participant, please contact WSU Institutional Review Board 937-775-4462 or robyn.wilks@wright.edu.

Appendix C

Interview Protocol

Provide appropriate forms and respond to any questions.

Provide a definition of Universal Design. Ask participants to read the definition.

Answer any questions.

Universal Design: An approach that proactively designs a space to meet the needs of potential visitors with a wide range of [physical] capabilities which is in consideration of a benefit to all people (Burgstahler, 2015, p. xi)

1. Using the provided definition, how would you describe Universal Design in the context of higher education?
2. Provide a specific example of how you have seen Universal Design implemented in a higher education context?
3. What do you like about Universal Design, if it were to be implemented in the context of higher education?
4. Describe a situation in which your action, as a specialist, represented Universal Design.
5. What is the role of a disability resource specialist in implementation of Universal Design in higher education?
6. What is the relationship between accommodations and Universal Design?
7. Is there anything else you wish to share about Universal Design?