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# Utilizing the Universal Design for Learning Model to Improve Educational Environments in Secondary Inclusive Classrooms

Robyn A. Delahunt

*Concordia University - Portland*

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Concordia University–Portland

College of Education

Doctor of Education Program

WE, THE UNDERSIGNED MEMBERS OF THE DISSERTATION COMMITTEE  
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Utilizing the Universal Design for Learning Model to Improve Educational Environments in  
Secondary Inclusive Classrooms

Robyn A. Delahunt

Concordia University–Portland

College of Education

Dissertation submitted to the Faculty of the College of Education  
in Partial Fulfillment of the requirements for the degree of  
Doctor of Education in  
Instructional Leadership

Edward H. Kim, Ph.D., Faculty Chair Dissertation Committee

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Concordia University–Portland

2019

## **Abstract**

This purpose of this case study was to explore potential reasons why secondary teachers are resistant to working in inclusive programs, as well as to discover barriers to inclusion so that those obstacles can be addressed and rectified by those who make meaningful, relevant, and holistic educational changes, leading to improved classroom experiences for all parties within inclusive settings. The preresearch predictions that barriers to inclusion revolve around instructional differentiation, increased responsibilities, and additional workload were correct as they relate to the teacher identified obstacles of lack of support and lack of training, with most participants agreeing that lack of resources, instructional support, financial assistance, administrative guidance, and staffing were the greatest obstacles to teacher willingness to work in inclusive classrooms. Thorough and ongoing training in instructional design that supports a cognitively diverse student population, such as the universal design for learning model, was identified as an empathetic and ethical manner to support teachers tasked with the responsibility of collaboratively educating all students. The most interesting revelations of this study were that all the teachers interviewed for this study found inclusion valuable for both nontypical and typical students and all 12 teachers were willing to work in an inclusive classroom with the appropriate supports. The results from this study reveals that teachers find value in inclusive education but need to feel that they are valued by the entity that charges them with the task to educate all students inclusively before they can adequately embrace their role in the implementation process.

*Keywords:* Universal Design for Learning, Inclusion, Special Education

## **Dedication**

As I have gotten older, I have found aspects of myself as an individual, a professional, and as a parent that reflect my own parents' tendencies, gifts, and frailties. It is for these reasons that I am dedicating this dissertation to my parents, Mary Anne and Robert James Mooney, who I love, respect, and appreciate more than words can express.

## **Acknowledgements**

I would like to first acknowledge my Heavenly Father for giving me the gifts of compassion and strength so that I able to empathetically make the changes in society needed with dogged determination. I would also like to praise Him for giving me the resilience and tenacity needed during this time in my life as are family faced numerous crises while I was working on this degree.

Next, I would like to acknowledge the guidance, countless messages, and weekly phone calls from my advisor, Dr. Edward H. Kim. Dr. Kim helped me navigate this very tenuous journey towards the completion of my doctorate with calm and compassion and reminded me regularly that feelings of insecurity and doubt were typical for most people as they ventured through the process of becoming a doctor. In addition to Dr. Kim, I would like to acknowledge my appreciation to both Dr. Aaron Deris and Dr. Tom Cavanaugh for their conscientious and concise counsel and direction. Their feedback, in addition to Dr. Kim's assistance, gave me the necessary guidance to complete this paper. I would also like to thank my wonderful editors, Jenny Martel and Dr. Meg DuMez for their patience and compassionate support. Without this group of people, this paper would not have gained its needed academic refinement.

Finally, I want to acknowledge my husband, Bob Delahunt, who has picked up the slack as I have desperately tried to balance motherhood to teenagers, teaching teens with special needs, and working through this doctoral program over the past four years. I know it has not been easy, but I physically and emotionally could not have successfully made this journey without him.

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## Chapter 1: Introduction

The implementation of any social initiative often challenges the ideologies and philosophies of those who will be part of the execution of the proposed program. When the civil liberties of a specific group are compromised due to prejudice, society needs to consider recourses that will correct the wrongs levied against that community. Social reparations need to be made through reflective institutionalized initiatives, and in the absence of a rigorous sociopolitical critique of exclusion, society is left with an ethical or a technical controversy that does nothing to challenge the social power upon which exclusion is based (Armstrong, Armstrong, & Barton, 2016, p. 9). When the excluded group are children and the issues revolve around disabilities, sociopolitical interventions are both compassionate and ethically appropriate. Despite the need for social equity of all individuals, personal dogmas collide with social ethos when considering inclusionary educational practices. Inclusive education proposes that students of all intellectual, social, and behavioral capacities should be taught in a common classroom setting to promote healthy socialization, value, and purpose of all people. According to Boroson (2017), advocates of inclusive programming believe that viewing the classroom through the lens of neurodiversity allows all people to see that nontypical learners do not dilute the dignity and integrity of a homogenous learning environment but bring a new sense of energy and openness to their academic location. The ideals behind inclusion are lofty and have merit, but inclusion also creates logistical, professional, and personal challenges for the teachers serving a spectrum of learners within one setting.

Boroson (2017) noted that despite being rooted in civil liberties, much like racial and gender related integration, no educational initiative stimulates more ideological debates and visceral responses than the proposal of inclusively educating students with cognitive deficits,

especially at the secondary level, with their typical peers. Arduin (2015) attributed this controversy to the correlation that exists between societal values towards individuals with disabilities and the relevance of inclusively educating children with special needs with their typical peers. Secondary general education teachers, who are tasked with the responsibility for getting their students college-ready, place great importance on an increase in academic rigor and higher level thinking skills, which in turn stimulates even greater resistance to the idea of integrating students who are significantly limited in their capacity to rigorously problem solve into classrooms that are college preparatory-oriented.

According to Tkachyk (2013), many, on both sides, believe that there is a need for segregated classrooms where students with severe cognitive or behavioral disabilities can receive individualized programming and supports that they require in a small group, low-stress setting considering potential safety issues. Isaac (2016) remarked that those who are proinclusion believe that inclusive practices enable all students the opportunity to accept differences and develop new friendships. However, those weary of inclusion fear that the increased need for instructional differentiation in classrooms that support a broad spectrum of learners will overwhelm educators, especially at the secondary level, where intellectual gaps are widest. In addition to educator reservations, parents of typical students feel that their children will not receive the best educational experience if their child is sharing a learning space and educator attention with highly dependent, nontypical learners. It is undeniable that the educational one-size-fits-all expectations created through standardized testing make inclusion unrealistic and unmanageable (Isaac, 2016). Both sides, strongly advocating for the student population they primarily support, have reservations regarding student ability to access the most appropriate and



relevant academic experience in an inclusive setting when appropriate planning and preparation is not in place well before implementation.

These are the usual arguments made against inclusion, but are there deeper-rooted issues that are hindering the implementation process of inclusive education? In this study, I investigated teacher understanding of special education's purpose in the public-school system, philosophical elements that create resistance towards the implementation of inclusive education and propose instructional options. These instructional options included individualization, differentiation, and relevant supports, such as Universal Design for Learning (UDL), that can bridge the gap between resistance and reception of academic inclusion.

### **Introduction to the Problem**

Since the enactment of Section 504 of the Rehabilitation Act of 1973, there has been a flood of initiatives established to ethically meet the needs of students with disabilities in the American public-school system. Klemm (2014) noted that 40 years of educational reform has included ethical initiatives such as Head Start, New Math, Nation at Risk, Goals 2000, Race to the Top, No Child Left Behind, charter schools, Next Generation Science Standards, and Common Core. Unfortunately, the preparedness requirements and the extensive planning needed to effectively carry out these programs are not given the same level of consideration that is needed to successfully fulfill the promise of these initiatives. Inevitably, these initiatives are dismissed and discarded as just another educational misstep, wasting time, resources, and most importantly, educational opportunities.

The most recent initiative that has become problematic due to lack of teacher preparation involves the pedagogical challenges that come with inclusively educating students of all cognitive functions within one common setting. With the educational tides turning towards

inclusive education, general education teachers are forced to acquiesce to the concept of educating all students within common grade levels in a communal setting to provide social and academic equity. However, without thorough professional development and relevant instructional support, teachers tasked with the responsibility of managing these diverse classrooms find themselves overwhelmed, ill-prepared, and indignant towards the process of implementation. Mizell (2010) noted that impactful professional development enables teachers to develop the understand and skills they need to adequately address students' learning challenges, but without meaningful and ongoing training, lack of preparation leads to most students being underserved by the programs created for academic and social betterment. In the case of inclusion, lack of professional development and instructional training leads to the solidification of professional and personal teacher philosophies that inclusion is not only unrealistic, but academically hazardous for students with more advanced skills.

Scruggs and Mastropieri (1996) found that most teachers supported the concept of inclusion with certain limitations, with reservations as to the intensity of inclusion, the level of teacher support, and the degree of severity of the disability of the student. They noted that although a slight majority was willing to implement inclusion in their classrooms, a considerable minority felt that students with significant disabilities in their classroom would be too disruptive and difficult to maintain. There are many possible factors contributing to this problem, among which are lack of administrative support before and during the implementation process, lack of relevant and meaningful preparation prior to implementation, lack of teacher ability to differentiate instruction in order to adequately serve a cognitively heterogeneous student population, increased student behaviors as a result of all students being underserved, increased paperwork in the areas of data collection and documentation related to behavioral issues, and

scapegoating students with disabilities as the reason for the dysfunction in the classroom, which are all counter-productive to the philosophical purpose of inclusion. This study contributes to a body of knowledge needed to address this problem through perspectives and insight given by interviewed secondary educators as they reflected upon their personal experiences with inclusive education, addressed the issues that revolve around inclusion, and how these concerns or issues could be positively altered through the instructional interventions of the UDL model.

For the inclusive program to be implemented most effectively, general education and special education teachers need to cohesively work together. Ripley (1997) reported that programs designed to support a cognitively heterogeneous student population requires that general education and special education teachers work collaboratively or cooperatively to combine their professional knowledge, perspectives, and skills. Ripley also noted that the biggest challenge for educators is in deciding to share the role that has traditionally been individual: to share the goals, decisions, classroom instruction, responsibility for students, assessment of student learning, problem solving, and classroom management.

Despite teachers sharing the same professional field, much of the time, personal beliefs create philosophical chasms, especially when the ideologies of general education and special education teachers are challenged. Many general education teachers continue to hold firm to their ideal that students with special needs must reside in their specialized self-contained classrooms to maintain the academic integrity of those students destined for college. General education teachers at the secondary level are particularly frustrated with educating all students in a common academic setting due to the vast spectrum of abilities and cognition that are found in inclusive high school classrooms. Where the cognitive gaps at the elementary level may be between one to three grade levels, secondary educators in inclusive settings may support a group

of learners that exhibit a four to nine grade level gap. This means that a typical 10th grade student in a secondary inclusive classroom who reads at an 11th grade reading level may be working in a common learning environment with a nontypical learner who is reading at a second-grade level. The stress of finding appropriate material that meets the academic requirements for the grade level being supported in inclusive classrooms can become overwhelming to many secondary teachers if teachers continue to utilize traditional teaching methods.

Varying beliefs in the concept that all students should be afforded the right to a free and appropriate education despite their intellectual, emotional, behavioral, or physical deficits are as personal as any other human rights ideology. Subban and Sharma (2005) noted that even gender seems to impact belief systems in the credibility of inclusive education, with women being more compassionate and men being more confident in working with students with special needs in inclusive classrooms. Despite personal ideology, most teachers agree that certain components that come with educating students with special needs add significant workload that, if not maintained, can come with personal, professional, and litigious consequences.

Findlay (2007) noted that lawsuits filed by guardians of students with disabilities that are associated with the negligence of upholding contractual promises documented in annual IEPs against schools in hopes of benefitting from the district's wealth should they win can potentially ruin the careers of teachers and administrators named in the lawsuits, creating a fear factor for those who are working with students with IEPs. The amount of time it takes to differentiate and support each student's academic and emotional needs to maintain a scholarly environment is a daunting task. The additional responsibility of maintaining the annual goals of students with special needs, data collection, accommodations, and modification while providing additional

supports can seem overwhelming for any classroom teacher, but add in the component of legal actions being levied if these supports are not comprehensively provided, resistance towards inclusion exponentially increases.

### **Background, Context, History, and Conceptual Framework of the Problem**

Nowhere has the educational pendulum swung more dramatically than it has when considering the academic needs and appropriate supports for individuals with disabilities in the public-school system. Not that long ago, people with significant cognitive, physical, and behavioral disabilities were institutionalized for the duration of their lives without consideration of their having access to educational opportunities. Prior to the Section 504 of the Rehabilitation Act of 1973, there were few legal rights or laws that protected the civil liberties of people with special needs and no recourse for their families who were seeking viable options to improve the lives of their disabled loved ones.

On November 29, 1975, President Gerald Ford signed into law the Education for All Handicapped Children Act, which later became known as the Individuals with Disabilities Education Act (IDEA). In 1990, the Americans with Disabilities Act (ADA) was signed into law, further addressing the importance of establishing and protecting social equity for individuals with special needs. It was also the first time the government held all institutional entities culpable for maintaining the civil rights for all people with special needs. The Education for All Handicapped Children Act of 1975 was changed in 1990 to IDEA by Congress to recognize the individual first opposed to the disability. In an article written in 1990, editor Barbara Cheadle included an interview with Senator Paul Simon, who presided over the sessions that enacted changes that impacted the education of all students. Simon noted that Congress wanted to move away from terminology that focuses on a disability or deficit rather than the person. He

continued that in passing the Americans with Disabilities Act, the ideals attached to equitability would be protected by initiatives that ensure that disabilities would no longer be used to decide or define an individual's worth or capacity to grow. This is particularly stressed in IDEA since its purpose and premise is to protect the educational services designed to meet the needs of the individual with disabilities in public classrooms.

Through IDEA, the Least Restrictive Environment (LRE) requirements were established to protect the civil liberties of a typically marginalized population. Since these legislative enactments, the American public-school system, its educators, and administrators have had to acclimate to the vast cognitive, behavioral, and emotional differences that are seen in the average classroom and uphold the legally binding contract held by each student receiving special education services known as the Individualized Education Program (IEP). It is no longer sufficient or appropriate to send a student with special needs to a separate location to receive their education from a resource teacher or to spend most of their day in a sheltered classroom now that inclusion is no longer simply an ideal or a suggestion, but a mandate.

Jabareen (2009) defines conceptual framework analysis as a procedure of theorization for building conceptual frameworks based on grounded theory method. The conceptual framework of this study is based around issues passively expressed by teachers who are frustrated with a federal system that implements educational initiatives without providing relevant supports to the educators executing the programs. Inclusive education is one in a long line of principled initiatives that are dismissed by teachers who are charged with the responsibility of implementation without the luxury of preparation. The concept of this study is that when real barriers to inclusive education are exposed and the appropriate supports and instructional

interventions of UDL are put into place, an improved educational environment can be realized in secondary inclusive classrooms.

### **Statement of the Problem**

There is a problem in public education that impacts both teachers and their students. That problem specifically revolves around the institutionalization of initiatives that become federally mandated without considering the preparation and planning that it will take to successfully implement and maintain these initiatives. Currently, inclusive education, which supports the mandates established through the IDEA's LRE, is the model approach to creating social equity in public schools for all students. Most secondary teachers, however, are resistant to being placed in inclusive academic settings due to the challenges of educating students with cognitive or behavioral disabilities with their typical peers.

There are many possible factors contributing to this problem, among which are fears of the litigious nature of special education, beliefs that revolve around coeducating typical and nontypical students in common academic settings, uncertainty about how to properly accommodate and support a vast spectrum of learners simultaneously, and qualms about the classroom management of a diverse learning population. This study addressed the issues that revolve around inclusive education and how these concerns or issues can be positively altered through the project-based instructional methodologies of the Universal Design for Learning model, an evidence-based teaching technique that promotes the process of learning opposed to instructional practices that are rooted in memorization.

### **Purpose of the Study**

The purpose of this study was to discover if resistance to inclusive education is due to teacher attitudes regarding individuals with special needs, and if these concerns or attitudes can

be positively altered with more supportive instructional practices. Effective teachers in today's classrooms must learn how to develop classroom routines that attend to, rather than ignore, learner variance in readiness (Tomlinson et al., 2003) especially in inclusive classrooms, but teacher concerns and reservations need to be validated and resolved so that educators serving a diverse population can confidently support their students. This study contributes to a body of knowledge needed to address this problem by gaining additional perspectives and insights from experienced educators through interviews and surveys regarding their experiences with inclusive education, issues that revolve around inclusion, and how these concerns or issues can be positively altered through the instructional interventions of the Universal Design for Learning model.

### **Research Questions**

The focus of this study was the use of UDL model as a resource to improve educational environments, with a context in secondary inclusive classrooms. The research questions were as follows:

1. How do secondary teachers perceive the value of inclusive education?
2. How could the Universal Design for Learning model impact the educational environment of secondary inclusive classrooms?

Considering the educational need to uphold the federal requirements of LRE, while finding compassionate ways to support overworked teachers and underrepresented students with significant disabilities in general education classes, this study allowed teachers to express their concerns with candor, consider the connection between pedagogical practices, and the prospect of utilizing UDL as a viable instructional alternative. This study's pre-research theory proposed that the use of the pedagogical design found in the UDL model in secondary inclusion programs



would improve self-esteem, academic growth, mental flexibility, and productivity for both the students and the teachers in these programs.

### **Rationale, Relevance, and Significance of the Study**

Teachers are ethically obligated to provide a quality education to all students. It is not the place of teachers to determine which child is worthy of time and attention in public school classrooms, but that is what happens when students with special needs are placed in most general education classes. Students with significant disabilities are typically dismissed by general educators who express that these students are not their responsibility to educate. Much of this ideology comes from the frustrations that are attached to the application of intensive academic supports needed to appropriately accommodate each student with special needs. Where special education teachers organically build a variety of supports, accommodations, and modifications into their daily curriculum and instructional program, general education teachers typically focus on the content opposed to the delivery. Because of this academic ideological chasm, most general education teachers would prefer to maintain a cognitively segregated educational environment that separates the average to above average student from low-performing students, but inclusion implicitly acknowledges that all teachers must be prepared to teach all students (Winzer, 1998).

The feedback from this study revealed the challenges and barriers that promote teacher resistance to work in secondary cognitively diversified inclusive classrooms. Based on previous articles, personal and professional conversations with colleagues, and various studies that investigate teacher experiences regarding working with students with special needs, the researcher predicted that the challenges revolved around instructional differentiation and excessive data collection. Despite these known barriers to relevant change, the researcher

maintained complete objectivity during the interviews to ensure that the participant feedback offered authentic information.

### **Definition of Terms**

Understanding the vocabulary and terminology used in this study are common to the educational community, especially in special education. The high frequency terms used throughout this study include:

*Inclusive education:* The act of integrating students of all cognitive levels within a common academic setting. Many educational professionals recognize that inclusion may not only be considered a litigious, academic, or ethical initiative, but one that is tied to philosophical or ideological values (Wright, 2015).

*Individuals with Disabilities Education Act (IDEA):* The Individuals with Disabilities Education Act (IDEA) is a law authorizing formula grants to states and discretionary grants to state educational agencies, institutions of higher education, and other nonprofit organizations, including provisions related to formula grants that assist states in providing a free appropriate public education in the least restrictive environment for children with disabilities ages 3 through 21 years (Statues and Regulations, 1994).

*Least restrictive environment (LRE):* According to Wright's Law (1994) "school districts are required to educate students with disabilities in regular classrooms with their nondisabled peers, in the school they would attend if not disabled, to the maximum extent appropriate."

*Project-based learning:* Project-based learning (PBL) is a model that organizes learning around projects, with assignments being based on challenging questions or problems, that involve students in design, problem-solving, decision making, or investigative activities, giving students the opportunity to work relatively autonomously (Thomas, 2000).

*Social equity:* Social equity is the fair treatment, access, opportunity, and advancement for all people, while identifying and eliminating barriers that have prevented the full participation of certain groups (Kapila, Hines, & Searby, 2016).

*Special education:* Specially designed instruction, provided at no cost to parents, to meet the unique needs of a child with a disability (Rebhorn, 2017).

*Teacher-efficacy:* Tschannen-Moran and Woolfolk Hoy (2001) defined teacher efficacy as an educator's confidence in his or her ability to bring about desired outcomes of student engagement and learning, even among those students who may be difficult to teach.

*Universal Design for Learning model:* A set of principles used to guide curriculum development and provides a blueprint for creating instructional goals, methods, materials, and assessments that can be individualized per student needs and capacities (CAST, 2012).

### **Typological Data Analysis**

Because I entered this research with a significant level of awareness about many of the obstacles that interfere with the implementation of inclusive education as it relates to instructional differentiation, I approached the coding process through typological analysis. Hatch (2002) noted that typological analysis focuses on categories that are predetermined by the researcher prior to data collection and are generated by common-sense, theory, or research objective. Predetermined categories used to code for tracking themes or trends were identified during the review of interview transcripts. Color coding afforded more efficient identification of typological categories during. To organize the data in manner that allowed for objective clarity and easy referencing, the coded information was inputted into a matrix that separated the identified categories into coordinated colors.

As I read through each participant's transcripts from their interview and survey, I created a brief summary that focused on the participants' attitudes towards working with students with special needs, perceived parameters of inclusion, willingness to alter instructional styles, and likelihood to adopt UDL as an instructional model. Hatch (2002) noted that once these summaries are complete and the matrix is finalized, patterns that indicate cause and effect relationships will be documented to lend credibility to the data collection. Since this is a typological approach to data analysis and the coding parameters are predetermined due to the researcher's professional experiences, the chosen categories developed themes and trends that connect to and support the overall study's concepts. Once the patterns were developed, they established generalizations that verified their relationship to the research, giving closure to the analysis.

### **Limitations, Delimitations, and Assumptions**

Limitations and delimitations are conditions or circumstances that might affect the credibility of the study. Limitations refer to outside influences that the researcher might not be able to control. The limitations identified prior to the research study included the cultural bias of participants, personal/professional relationship with the researcher, and transferability with regards to how this study is interpreted or utilized by others. Delimitations in a case study are choices made by the researcher that are within their control to manage. The boundaries I selected for this study are the quality control of purposive sampling (the intentional selection of certain study participants), school of thought (participants were of a common perspective or like philosophies on the value of education), and reflexivity (experienced or perceived cause and effect elements).

Once the process of research gathering began, it was clear that one of my limitations became an unexpected delimitation. The limitation of intentionally selecting certain teachers to participate in this study became a deterrent opposed to a benefit. Half of the teachers who agreed to take the preliminary questionnaire did not take it once it was sent to them, despite multiple reminders. Of the teachers who did go on to the interview phase, two of the 12 never attempted the post-interview survey on the relevance of UDL in inclusive classrooms. After the realization that teachers who originally agreed to be a part of the study were passively refusing to participate, it occurred to me that my relationship with teachers who were chosen as potential participants may have hindered their willingness to be forthright in their responses, especially if they knew their perspectives or viewpoints are vastly different than mine. Their possible fear of judgement or lack of wanting change in the area of inclusive education may have made them wary to participate in a study that hinges its purpose in the promotion of inclusion.

The assumptions made by the researcher were aspects of the research that are presumed true. The assumptions considered for this case study included that the participants will answer the interview questions in an honest and candid manner. Another assumption was that the participants had a sincere interest in participating in this research study and did not expect to receive compensation of any kind in exchange for their contribution to this research.

### **Summary**

This research study was not one that simply examined the ideological issues that stand between inclusive education and its implementation, but one that reflected upon the need for teachers to find ways to apply social equity into the academic landscape while building confidence in themselves and in the inclusion program. By researching challenges that prevent inclusion from being embraced by teachers and employed by school districts, relevant and

meaningful solutions can be applied. Based on my assumptions, the discomfort, and disinterest that comes with the differentiation of both curriculum and instruction could be a significant deterrent to inclusive practices, which in turn allowed for my supposition that the use of project-based learning methods, such as the UDL model, could accommodate both the teachers' abilities to differentiate, and the students' abilities to assimilate information. Most importantly, this study addressed the importance of providing a happy and safe academic atmosphere for both teachers and their students who access inclusive classrooms.

## **Chapter 2: Literature Review**

### **Introduction**

This comprehensive review of literature focuses on teacher efficacy in secondary inclusive classrooms and the unique challenges that impact educators attempting to support a cognitively diversified learning community in a common setting. Traditional pedagogical methodologies, instructional practices, and teacher-centric settings do not adequately accommodate today's diverse learners in inclusive classrooms. Considering the heterogenous make-up of our American classrooms due to racial and cultural diversity, the move towards academic inclusion further pushes the boundaries of student population variances by introducing students with intellectual challenges into the general education classroom. The demand for inclusive education concerns not only the rights of children with disabilities, but is also a part of a wider societal analysis of that which constitutes itself as normal, and that in the absence of such an analysis, notions of opportunities rest upon an understanding of what is considered normal, reflecting the partial self-interest of the dominant groups in our society (Armstrong et al., 2016, p. 11).

### **Conceptual Framework**

The framework for this qualitative research study was constructivism. According to Olusegun (2015), constructivism is a learning theory, found in psychology, which explains the way people learn, suggesting humans build knowledge and gain meaning from their personal experiences. Finding opportunities to accommodate students of various capabilities, experiences, and intellects within a common setting by drawing upon practices found in constructivism establishes more meaningful and relevant learning experiences. Social reform through educational equity for all students calls for revisions in how students are taught. Nowhere is this

ideal more important and more convoluted than in classrooms that support a group of learners who fall on a broad intellectual spectrum.

From an ethical standpoint, Ralabate, Dodd, Vue, Karger, Smith, and Caralie (2012) reported that it the United States' responsibility to place the culpability of change on the educational system instead of expecting our diverse learning community to adapt to traditional teaching methods. Traditional curriculum commonly used in general education classes does not appropriately support the learning needs of students who struggle with cognitive or behavioral disabilities. Conventional curriculum and outdated instructional practices need to be revamped to accommodate the diverse learning population served in inclusive classrooms. Everhart (2009) noted that to determine how specific instructional strategies affect negative attitudes toward students with disabilities, researchers concluded that the use of project-based instruction significantly changed teachers' beliefs positively toward working with students with disabilities. Accessing student-centered, project-based instructional models that organically provide differentiation for academic engagement, curriculum presentation, and demonstration of mastery is key for educators that want to appeal to their diverse learning population.

### **Review of Literature**

The articles, books, and reports chosen for this literature review considered the relevance of the UDL model as a framework that supports both differentiation and scaffolding for a cognitively diverse student population, while upholding the maintenance of social equity and ethical responsibilities in inclusive classrooms. This literature review featured a variety articles, reports, and books that enlightened the greatest challenges facing the successful implementation of inclusive education. This included teacher efficacy and attitudes towards educating students with cognitive disabilities in the same academic setting as their typical peers, and how the UDL



holistically meets the academic, social, and functional needs of students in inclusive classrooms. From comparative analysis, observations, surveys, and interviews to field notes and previously published articles, the literature gathered for this study cumulatively documented the significance of the meaningful interventions featured in the UDL framework that prepare educators to support all learners inclusively.

The articles that focus primarily on UDL provided significant feedback that validated the belief that changes to instructional methodology are key to successful and appropriate differentiation for cognitive diversities, learning styles, and academic gaps in inclusive classrooms. These articles tied the interventions needed to improve teacher satisfaction to the principles of UDL, which allows for greater differentiation in content presentation, scaffolding for cognitive diversity, increased teacher and student engagement, and how students personally express mastery of new information.

### **Piaget, Vygotsky, and the Principles of Constructivism in Inclusive Settings**

The pedagogical principles encompassed within the ideals of special education are founded in the conceptual framework of constructivism regarding the importance of personal experiences, observation, investigation, and experimentation as relevant learning tools for students with cognitive challenges. These practices are mandatory as an educational practice for students with special learning needs, but they are equally beneficial for students. Akpan and Beard (2016) agreed that constructivism is well suited in today's classroom, suggesting that by moving away from textbooks and lectures and towards project-based, student-centered learning environments, all students are more properly supported within the classroom, despite cognitive limitations. Because constructivism is a relevant methodology in which to approach inclusive educational settings, ethical ideologies, brain-science, social psychology, and federal initiatives

will be reviewed and examined to better understand expectations and regulations. This study will place an emphasis on instructional practices that encompass the ideologies of constructivism, such as the UDL, as a lynchpin solution for the challenging barriers to inclusive education.

### **The Constructivist in the Inclusive Classroom**

The educational philosophy behind constructivism is that knowledge acquisition is not simply an act of transference from an expert to the learner, but that it is a comprehensive collection of environmental experiences, interactions, and engagements. Olusegun (2015) noted that constructivism is a theory found in psychology which explains how people assimilate and apply information, therefore directly impacting the learning process. The teachings of both Jean Piaget and Lev Vygotsky promote individual growth in learners through the process of actively engaging in their environment and building upon prior knowledge through meaningful interaction, investigation, and exploration. Both Piaget and Vygotsky believed that cognition is not a permanent state, but that intellect can increase through exposure to relevant experiences and interests connected to learning objectives. Both studied the science behind cognitive development, with Piaget believing that intellectual growth occurs through developmental stages and Vygotsky theorizing that intellectual growth is a product of socioemotional connections within the community. As noted by McLeod (2014), Vygotsky inferred that cognitive functions are affected by the philosophies and tenets of the culture in which a person lives, making cognition socioculturally determined. While Piaget did not believe that cognition and social development were connected, they both believed that intellectual capacity was not a stagnant entity of the human experience. The belief that cognition is not a predetermined trait, but one that can be cultivated through meaningful experiences and active engagement in a supportive learning environment indicates that Piaget and Vygotsky's vision for education is rooted in the

constructivist-learning environment of an inclusive setting using an instructional model such as UDL as the most appropriate academic framework.

### **Piaget and the Evolutionary Brain**

Piaget's work as a test writer first piqued his interest in the evolutionary characteristics of the brain. Working with children as an intelligence assessor caused him to reflect upon the significant differences in perception and logic that children possess from adults. As noted by McLeod (2014), Piaget regarded intellectual development as an ongoing reorganization of mental processes brought about by the maturation of the brain through increased exposure to their environment, affording "children the opportunity to construct an understanding of the world around them, then experience discrepancies between what they already know and what they discover in their environment." Where adults have experienced countless life events, affecting their dispositions, ideologies, and perceptions, children's lack of experiences influence their level of intuition and social awareness. Piaget believed that experiences build developmental growth leading to intellectual growth. Piaget labeled these necessary stages of developmental growth as schemas, the cognitive building blocks that allow individuals the ability to form a mental representation of the world. Considering Piaget's theory and the reality of the educational and social restrictions of self-contained classes, children with disabilities without opportunities to participate in a variety of life experiences are not going to meet their cognitive potential, but nontypical learners given the chance to participate in environments that cultivate a love of learning through exploration and investigation will cognitively progress.

### **Vygotsky and the Social Psychology of Inclusive Education**

Akhmetova, Chelnokova, and Morozova (2017) stated that Lev Vygotsky's ideology on learning aligns with the principles of inclusive education. Vygotsky believed that educators need

to consider each child as a whole person and that the principles of integrity and development are the basis of pedagogy. The primary reasoning behind the implementation of inclusion is the proven social and emotional benefits for students with special needs when they learn in environments with their typical peers. According to Henninger and Gupta (2014), students with disabilities who have access to inclusive learning opportunities develop positive social-emotional skills, acquire new knowledge and generalize previously learned skills in a variety of settings, and use appropriate behaviors to meet their own needs. Vygotsky's belief that every function in the child's development appears first, on the social level, and later, at the individual level applies equally to voluntary attention, logical memory, and to the formation of concepts, with all the higher functions originating first as social relations between human individuals aligns with the purpose of inclusive education (Lourenco, 2012). Vygotsky theorized that meaningful social engagement builds cognitive development in the most profound manner in all individuals, and inclusive classrooms do not only foster academic and cognitive growth, but they cultivate self-confidence and build self-esteem in students with disabilities, while increasing sensitivity, patience, and compassion in their typical peers.

### **Constructivism and the Universal Design for Learning Model**

The UDL organically accommodates learning differences through instructional practices, curriculum design, and demonstration of content mastery, encouraging students to take charge of their learning process through independent experimental and experiential learning opportunities. Rappolt-Schlichtmann, Bakia, Blackorby, and Rose (2016) documented that UDL is a research-based teaching methodology that incorporates the philosophy of constructivism as it pertains to how students engage, express themselves, and assimilate information, while providing opportunities for flexible and deep learning through the design of customizable methods,

materials, and assessments. Through the defining principles of the UDL model that allow for the multiple academic provisions of the how, what, and why of learning, students of varying capabilities and cognitions can work at their personal level within a common setting, while the teacher can set reasonable student goals with a growth mindset for everyone. These pedagogical practices reflect the ideologies of academic inclusion and promote the mandates of LRE, fostering social equity, while giving educators the needed tools to find a sense of confidence and efficacy in classrooms that serve a cognitively diverse student population.

### **The Equitable Ideology of Inclusion**

Mahbub (2016) reported that inclusive education systemically removes barriers, with the overall objective to influence educational opportunities significantly for all children despite intellectual, physical, or developmental limitations. There is not a “separate but equal” disclaimer when educators consider the significance of providing students a quality education in the LRE. LRE protects children with special needs from being educationally, socially, and ideologically segregated by the institution charged with providing opportunities for betterment and growth. Inclusion is equal but not separate. It is intended to provide a quality education that accommodates the individual while fostering a community environment in which everyone is accountable to everyone else’s progress. It is an academic commune of sorts, where strengths are fortified, interests are encouraged, exploration and reflection are meaningful and relevant, and areas of needed improvement are appropriately addressed and supported. It is a promise of a holistically enriched educational experience, but the promise cannot be kept if the correct supports are not in place prior to implementation. Pantic and Florian (2015) noted that the inclusive classroom model calls for educators to become agents of change, endorsing a social justice agenda that is concerned with educational inequalities and is marked by a desire to

increase educational attainment and improve outcomes for all learners. From the mindset of the teachers to the curriculum to the instructional style, the entire stage needs to be set prior to implementing an effective inclusive program. Once placed in an inclusive class, LRE protects the student with special needs from being removed from the general education setting without extensive documentation that validates that the inclusive placement is the least appropriate setting.

Because the active engagement of every learner is key to the success of inclusive academic environments, finding and using valuable instructional strategies that meet the needs of a spectrum of learners is paramount. The constructivism concepts of utilizing experimentation, practical application, and experiential education to promote meaningful, long-lasting learning has great merit in inclusive settings, where student progress is highly personal and individualized. Finding best pedagogical practices rooted in constructivism ensures that students will be educated in a manner that appropriately meets their needs, despite learning variances, strengths, and challenges.

### **Best Pedagogical Practices and UDL**

Teachers are obligated to address and respond to the variances in each student's present levels of performance, but traditional teaching practices are not an adequate means for thinking comprehensively about these variances. Furthermore, the standard method of providing mandated individual accommodations and modifications for students with disabilities often proves to be ineffective for teachers who do not think that a one-size-fits-all approach to education is adequate or acceptable for today's heterogenous classrooms. The UDL methodology organically accommodates learning differences through instructional practices, curriculum

design, and demonstration of content mastery, encouraging students to take charge of their learning process through independent experimental and experiential learning opportunities.

UDL is a research-based teaching methodology that incorporates the philosophy of constructivism as it pertains to how students engage, express themselves, and assimilate information, while providing opportunities for flexible and deep learning through the design of customizable methods, materials, and assessments (Rappolt-Schlichtmann et al., 2016). Through the defining principles of the UDL model that allow for the multiple academic provisions of the how, what, and why of learning, students of varying capabilities and cognitions can work at their personal level within a common setting, while the teacher can set reasonable student goals with a growth mindset for everyone. These pedagogical practices reflect the ideologies of academic inclusion and promote the mandates of LRE, fostering social equity, while giving educators the needed tools to find a sense of confidence and efficacy in classrooms that serve a cognitively diverse student population.

UDL gives students the level of support needed within one learning community. Independent learners are given the autonomy they desire, giving the teacher more time with dependent learners to review or clarify information presented in class. It affords a self-paced environment, allowing the teacher to work as a facilitator, mentor, and tutor. Katz (2013) explained that UDL is based on neuroscience, driven by social impartiality, and establishes that learning will be differentiated in terms of means of engagement, representation, and presentation. Fovet, Jarrett, Mole, and Syncox (2014) reported that UDL is a teaching approach that considers how curriculum, instruction, and assessment can meet the learning needs of the greatest number while maintaining appropriately accommodated academic rigor. Inclusive education is a socially and ethically sound initiative for both teachers and students when the proper supports, resources,

and structures are put into place prior to its implementation, and the UDL model offers meaningful opportunities for those pre-implementation components to be executed successfully.

The UDL model does not only stimulate confidence in learners; it has the potential to help students with disabilities become motivated in their learning, while diminishing insecurities they may have about their limitations, particularly if there is stigma associated with their disability (Black, Weinberg, & Brodwin, 2015). By using UDL in secondary inclusive classrooms, students find greater confidence in themselves as learners and teachers find greater confidence in their ability to meet the needs of their most dependent learners, while appropriately participating in the problem-solving process for their higher functioning students. Katz (2013) noted that traditional teaching methodologies are no longer adequate for today's classrooms considering the spectrum of students within a common learning environment and UDL provides an instructional framework that supports all learning styles while accommodating for most cognitive challenges. Like Piaget's schemas, or building blocks of knowledge, Katz continued that UDL's three block model helps teachers differentiate curriculum and instructional delivery in a manner that best supports each student, especially in inclusive settings. Hamza and Hernandez de Hahn (2012) further explained that the main implication of most constructivist approaches is that students have an active role in the internal process of constructing new meanings, using schema as learning building blocks, leading to more meaningful knowledge acquisition, application, and generalization of previously assimilated information.

Because UDL is based on both brain science and psychological methodologies that revolve around individual input, processing, and output of information, instructional differentiation is easily managed and maintained, leading to the reduction of behavior problems, an increase in metacognitive knowledge, and greater access to appropriate instruction for all



learners. Hartmann (2015) concurred that UDL's multidimensional theoretical framework of the learning process draws upon research in the fields of neuroscience, education, and technology, creating a dynamic learning system. UDL bases its framework on three principles that allow for instructional flexibility and greater student autonomy in the areas of engagement, representation, and expression (see Figure 1). Because these principles drive the manner curriculum is written, instruction is delivered, and how assessments are evaluated, traditional lecture oriented, teacher-centric practices become obsolete. Since project-based learning methodologies like the UDL foster the necessary creative thinking skills for 21st century students, teachers using these instructional methods to successfully accommodate all learners, despite cognition. In addition, UDL's propensity to cultivate an environment of student autonomy and invested engagement, behaviors are reduced, leading to less data collection and more manageable classrooms. Peters (2010) noted that teachers who offer multiple means of engagement promote both relevant student access to content and contribute to the reduction in student behaviors, eliminating the time and energy draining issues of behavioral redirection and discipline.

Because the principles of UDL support educational differentiation in the classroom, students who usually become frustrated during instructional time due to a lack of comprehension find themselves actively engaged in their own learning experience with increased access to their teachers. Fewer incidents in the classroom not only supports classroom management, but also avoids the loss of instructional time during periods of student misconduct. Nielson (2013) stated that the pedagogical best practices of UDL used in inclusive classrooms not only improves learning and reduces behavioral issues, but also fosters a sense of independence and self-confidence in students.

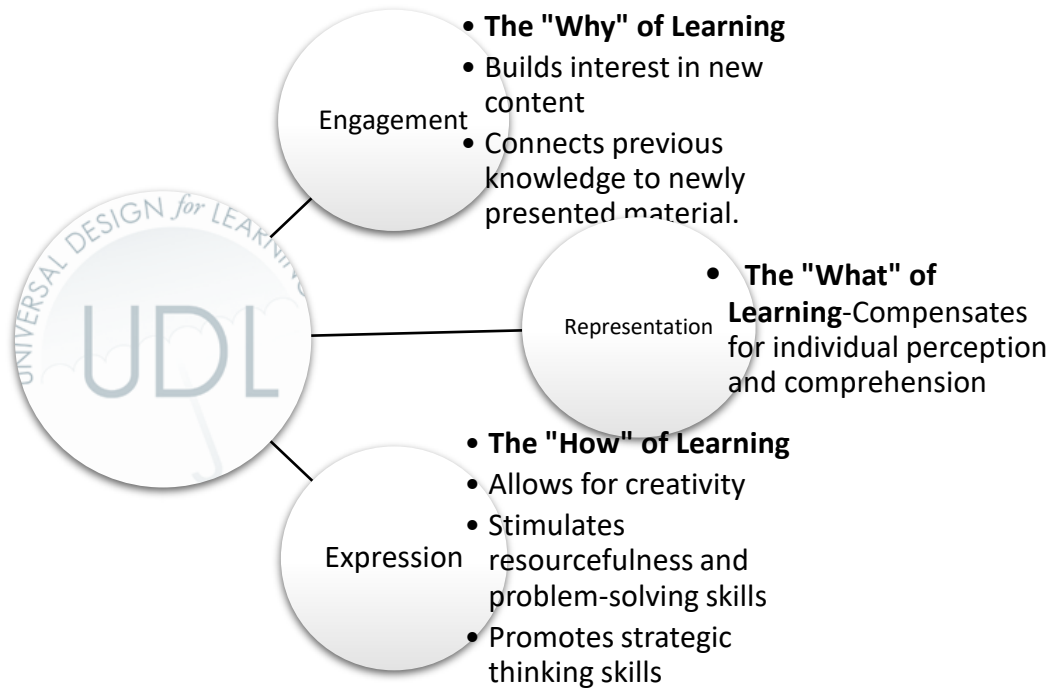


Figure 1. Universal design for learning (Delahunt, 2018).

In addition to increasing student self-esteem, teachers who use UDL are more confident and comfortable teaching students with special needs because they differentiate for learning needs through lessons and instructional delivery. Increasing teacher confidence in their ability to write and deliver instruction, while maintaining a holistically supportive learning environment for both typical and nontypical learners is key to both student success and teacher efficacy. McGhie-Richmond and Sung (2013) noted that teachers who apply the UDL framework to their inclusive classroom curriculum programming improve both their lesson plans and their teaching strategies meeting the needs of all their students. Zydney and Hasselbring (2014) added that UDL's instructional model is highly valuable when creating adaptable learning environments, such as inclusive classrooms.

One of the greatest noted frustrations for teachers working with students with special needs is the daunting amount of data collection, documentation, and paperwork that needs

maintenance by the educational staff. By replacing the barriers of teaching a cognitively diverse student population with salient options that increase student growth and teacher satisfaction, UDL’s framework provides meaningful solutions to the most pressing concerns that revolve around inclusive education and working with students with significant cognitive disabilities. The UDL accommodates academic challenges, such as increased data collection, instructional and curricular differentiation, and behavior management (see Figure 2), that teachers face when educating students with cognitive or emotional disabilities in inclusive academic settings.

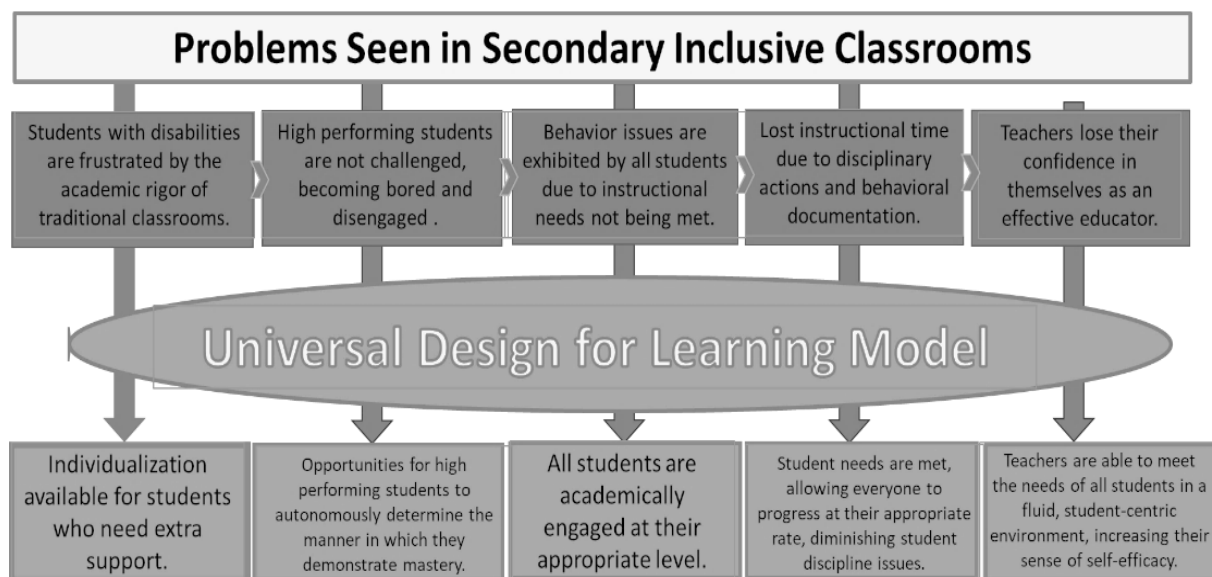


Figure 2. Problem resolution and UDL (Delahunt, 2018).

### UDL and the 21st Century Learner

Twenty-first century education is in a most unique situation. The quality of education is vital for the perseverance of a country’s stability in today’s atmosphere of progressive technological and scientific change. A nation’s success is contingent on the welfare of its education system, yet today’s classroom is the most diversified it has ever been in the history of academia. Gender, race, ethnicity, culture, and now disabilities are no longer a barrier to gaining

access to a quality education in a free and appropriate public school. Despite the move towards social equity, the challenges facing today's teachers revolve around meeting not only educational needs of this very diverse student population, but to meet their environmental and emotional wellness needs as well. The most pressing challenges and changes facing U.S. public schools are an increase in diversity in the classroom, a rise in mandated movements to recognize and respect diversity and promote global awareness, a push for inclusionary policies and practices, a move to standards-based curricula and increased accountability of total student achievement, and an increase in access to and emphasis on technological advances (Smith-Canter, King, Williams, Metcalf, & Rhys Myrick Potts, 2017).

Regardless of federally mandated initiatives pushing for social equity, the attitudes of both those supporting students and the students themselves continue to slow the process of progression. For instance, it is highly unlikely that students with significant cognitive needs are placed into or seek admittance into a STEM (Science, Technology, Engineering, and Math) programs because the courses are typically regarded as too academically rigorous. Basham and Marino (2013) revealed that very few children with disabilities consider the pursuit of careers in science, technology, engineering, and math due to learning issues with STEM content courses. These classes are typically highly structured, lecture based, and labor intensive, making them difficult to modify for dependent learners using traditional pedagogical practices. Rappolt-Schlichtmann, Daley, Lim, Lapinski, and Robinson (2013) elaborated that tasks such as recording, maintaining, analyzing, and interpreting data creates learning barriers that manifest frustrations and impede student learning in science classes. This truth is further expounded upon by Love et al. (2014) who suggested that STEM teachers working with students with special needs felt that

they could be more effective educators if learning accommodations were less “mechanical” and more holistically supportive.

By utilizing the UDL framework in classes that are analytically oriented, teachers can provide a variety of options for student investigation and examination of theories, as well as shaping mind-sets that accommodate learning engineering and mathematics. According to Basham and Marino (2013), teachers that utilize UDL in inclusive STEM programs can apply engineering design in various contexts for students with disabilities by allowing them to take part in meaningful problem-based learning experiences that include working with teams to solve a designated problem. Jesper, Nielson, and Zhou (2013) explained that problem and project-based learning means that learning is organized around complications, making finding creative problem-solving the central principle for the development of motivation. The problem establishes the starting point for the learning processes and places learning in context, based on the learner’s personal experiences. The students with special needs feel more confident and supported by their typical peers, and typical students are given the opportunity to exercise patience and compassion while reinforcing their knowledge by teaching their nontypical peers.

### **Review of Research Literature and Methodological Literature**

One of the most noteworthy issues that creates the ideological chasm between general and special education is the lack of a fundamental understanding of individuals with special needs, the legal responsibilities attached to educating students with disabilities, and how to acclimate to cognitive diversity. Misconceptions and confusion regarding special education law, legal responsibility, data collection, differentiation of curriculum and instruction, and the acronyms that plague the special education entity, as well as teacher attitudes towards individuals with cognitive needs, seem to be the root of resistance against the ideals of inclusive

programming. In the simplest terms, resistance due to ignorance or prejudices towards the special needs community is stymying the progression of inclusive education. Pantic and Florian (2015) stated that educators must honestly reflect upon their attitudes and beliefs about teaching and learning, as well as on their teaching method, and how they respond when their students encounter barriers to learning.

Through greater comprehension and familiarity of both the legal and the practical aspects of educating children with disabilities, teachers can find increased comfort and confidence in working with a broader spectrum of learners, knowing that they are appropriately supporting every child towards intellectual, functional, and social growth. Thoroughly examining the reasoning behind LRE, considering the ethical purpose of inclusive education, and utilizing instructional programs such as UDL as a pedagogical answer to successfully meeting the needs of an intellectually diverse student population is key to tearing down the ideological walls of teacher perception and attitudes towards students with special needs.

### **LRE--The Social Contract That Ensures Education Equity**

Prior to the Section 504 of the Rehabilitation Act of 1973, there were few legal rights or laws that protected the civil liberties of people with special needs and no recourse for their families who were seeking viable options to improve the lives of their disabled loved ones, until President Ford signed the Education for All Handicapped Children Act into law in 1975. In 1990, the Americans with Disabilities Act (ADA) was signed into law, further addressing the importance of establishing and protecting social equity for individuals with special needs. It was also the first time the government held all institutional entities culpable for maintaining the civil rights for all people with special needs. The Education for All Handicapped Children Act of 1975 was changed in 1990 to the Individuals with Disabilities Educational Act by Congress in

order to recognize the individual first opposed to the disability. Once students with disabilities had access to free education and the concept of academic mainstreaming became a possibility for students who had disabilities but could potentially thrive in general education classes, the consideration of educational desegregation came to light. IDEA's LRE, assures that, although a student receives special education services, their placement will not negatively impact the appropriateness of their academic program or stigmatize them socially. Since the implementation of IDEA, individuals within the public-school system have been on opposing sides of the ideological argument regarding the accountability of who should be providing students with significant disabilities the most appropriate academic experience and in what manner and where that experience needs implementation.

Considering the LRE component of IDEA, inclusive education ensures that students who have spent the greater part of their academic career in self-contained educational programs, separated from typical peers, are placed in academic settings that appropriately and holistically support the learning and social needs of all students in a common classroom. Fruth and Woods (2015) remarked that proponents of inclusive education understand that cognitively segregated environments inappropriately make academic achievement more important than social belonging and that students must know that they are accepted by their peers before they can successfully achieve at school. Erik Carter, Vanderbilt University special education professor and researcher continued this sentiment by noting that,

Early inclusion predicts later inclusion—in college and beyond. Early segregation does not merely predict later segregation; it almost ensures it. Movement is too often only in one direction as people with severe disabilities get older—toward the peripheries of a community. The trajectory we establish in school is quite likely to continue after

graduation. We must establish a trajectory of full and meaningful participation. (Carter, 2015, p.16)

Carter's sentiment mirrors that of many inclusion proponents regarding the importance of resisting the tendency to segregate a marginalized population to avoid continued inequity.

### **Where Does Social Responsibility in the Classroom Begin and End?**

Where the responsibility of educating nontypical students has shifted repeatedly since the enactment of IDEA, inclusive education makes all scholastic stakeholders culpable for providing the most appropriate and comprehensively supportive academic program to students with special needs, not just the special education community. From administrators who support their teaching staff to general and special educators who collaborate academically, emotionally, and socially by supporting a diverse learning community in a common setting, all members of the educational community are now responsible for supporting students with disabilities. Finch, Watson, MacGregor, and Precise (2013) noted that special education laws and regulations have increased the prevalence of inclusion within general education settings, thus requiring an increase of training in instructional strategies that support inclusion for general education teachers. Likewise, Balami (2015) remarked that the educational stakeholders are those who have the responsibility and interest in the implementation of inclusive education at different levels, and the government as an administrator and policy maker is responsible for providing the impetus and support to make inclusive education work. Urton, Wilbert, and Hennemann (2014) continued by noting that the implementation process of establishing a successful inclusive classroom model depends on the support of the district and school, its principal, its teachers, and its support staff. Inclusion is not simply a task to be performed by teachers, but one that needs to be fortified and supported by every educational entity for successful and long-term implementation to take place.



Although researchers around the world have noted both the educational and socialization benefits that inclusive education provides for children with disabilities, political and philosophical issues stymie the implementation process. According to Abbas, Zafar, and Naz (2016), the greatest barrier to the implementation of inclusion is the fear of teachers who believe they do not have enough knowledge to deal with students with special needs. The challenges of inclusively supporting a diverse student population increase once students enter the secondary stage of their educational career due to the perpetually widening cognitive gaps between nontypical learners and their typical peers. Where higher functioning students continue to experience marked growth in their ability to assimilate and synthesize new information, students with significant intellectual disabilities are academically hampered by their limited capacity to learn new information at the pace and degree of their typical peers.

Traditional instructional methodologies do not adequately support the learning needs of secondary students who access inclusive learning environments, and they do not meaningfully provide a reasonable platform for the teacher who attempts to advocate for the academic and social welfare of their diverse learning population. Navarro, Zervas, Gesa, and Sampson (2016) discussed the importance of educators being equipped with the appropriate competencies and resources to address the needs of all their students within the inclusive classroom so that quality educational opportunities are provided for their entire learning population. Without the necessary tools to teach a wide range of learners, such as relevant teacher training, curriculum, and resources, as well as administrative support, general education teachers become overburdened and frustrated with their instructional assignment, special education teachers find themselves underutilized as an academic resource, and students are either underserved or overwhelmed within their learning environment.

## **Inclusion and UDL--Creating an Ethically Supportive Academic Environment for All**

Because inclusive education is the most relevant answer to supporting LRE, the comprehensive implementation of appropriate instructional strategies must become the primary answer to increasing student growth while building teacher buy-in and efficacy. Katz (2013) noted that the global movement towards inclusive education demonstrates that there is a need to implement instructional methodologies that support 21st century classroom settings. Ralabate et al. (2012) went further by pointing out that it is society's challenge to adapt to modern day learners through individualization of curriculum and instructional practices, while cultivating learning environments that help each student meet their full potential. UDL makes that objective possible in the most meaningful and compassionate manner. In the landscape of the inclusive education, teachers are recognized as key players in supporting the implementation process of inclusive educational systems. As a result, teachers need to be equipped with appropriate competencies through compassionate interventions so that they can provide for the diverse needs of their students (Navarro et al., 2016).

Utilizing best practice, research-based methodologies and instructional applications are paramount to the success of all individuals, both teachers and students, in the inclusive classroom. Instructional practices that employ both brain science and cognitive psychology better assist educators in creating lessons that accommodate individual learning processes and information assimilation. Basham and Mariano (2013) agreed that the utilization of efficacious instructional methodologies and assessment strategies, both found in the UDL model, can help teachers provide effective instruction for a wide range of learners, while giving students with special needs age appropriate opportunities to acquire academic, social, and functional skills.

Smith (2012) concurred that results from educators using the UDL principles to help design coursework lead to goals that are more aligned with instructional practices, positive relationships to student interests and academic engagement, increased problem-solving skills, and greater student autonomy as learners. Instructional frameworks such as the UDL compensates for the individualization and differentiation for curriculum writing, instructional delivery, and establishing a holistically supportive learning environment. UDL's implementation positively impacts student processes in independence in learning and academic, affective, and cognitive engagement.

The research-based UDL instructional methodology enables teachers to support all students by affording them academic autonomy in the areas of representation, engagement, and expression, while fostering a safe learning community that focuses on project-based learning. Bardeaux (2014) stated that UDL's framework evolves from architectural accessibility designs and concepts related to the neuroscience of learning, allowing educators who use UDL to transform classrooms into practical learning communities that encourage experimentation, autonomy, and self-expression. The UDL model provides an instructional approach that allows teachers to diversify their lesson plans in a manner that supports both Bloom's Taxonomy and Gardner's Multiple Intelligences within the classroom, while providing students the opportunity to employ their strengths. Nielsen (2013) noted that the pedagogical best practices of UDL used in an inclusive classroom makes it more likely that higher numbers of students will learn in meaningful ways that employ their strengths, fostering both independence and self-confidence. In addition, Hartmann (2015) went as far as to note that by using UDL in inclusive classrooms, students with significant intellectual disabilities build academic, social, and functional skills that will support them in their postsecondary lives. UDL gives students the opportunity to

demonstrate mastery in a variety of modalities and teachers the option to work in the more passive role as facilitator for independent learners or in a more intensive position as a small group tutor, providing greater instructional support for students who need more guidance.

UDL's instructional framework accommodates a highly diversified student population so that all students find social and academic success, while meeting their potential as both learners and valued contributors within their collaborative peer community. Kelly (2014) explained that by applying the UDL model in the inclusive classroom, instructors can remove academic barriers seen in conventional instructional models. UDL supports the students and the teachers by establishing a positive and supportive learning environment that veers away from the one-size-fits-all teaching methodology of traditional classroom strategies and techniques of the past, while creating an academic safe-haven for both the students and their teachers.

### **Developing Greater Student Autonomy through UDL**

Many of the articles used for this paper capitalized on the student growth aspect of UDL, and despite the focus of this paper being on teacher willingness to work in inclusive settings and identifying the challenges that impede the process of implementation, it was deemed both relevant and important to consider the effects of student growth as it impacts teacher efficacy. For instance, Brand and Dalton (2012) noted that by using the variety of modalities for expression of knowledge and the stimulating intra and interpersonal connections fostered in the learning community cultivated using the UDL model, teachers and students realize their potential for successfully assimilating newly presented information. Their research focuses on the multiple and diverse opportunities for teaching and assessing student growth as competent readers using the UDL method. Their argument regarding the use of UDL as a credible means for incorporating a successful literacy program that accommodates all learners is further reinforced

by their connecting UDL's framework to Bloom's taxonomy and Gardner's multiple intelligences. Likewise, Aiello, Di Gennaro, Palumbo, Zollo, and Sibilio (2014) agreed that the UDL model plays a very important role in the restructuring of learning environments by creating the necessary circumstances for the promotion of each student's differences and capabilities. As various research concludes, when teachers are educated in the use of UDL, they can promote its cognitive theory-based strategies as part of their academic programming, allowing students to become more confident and independent learners while affording the educators the ability to meet the needs of a vast spectrum of learners.

Basham and Marino (2013) continued this validation of the credit worthiness of UDL as a means for differentiation in the areas of math, engineering, and computer literacy, while Rappolt-Schlichtmann et al., (2013) noted how the use of the use of the UDL improved science content learning outcomes and positively impacted student performance, regardless of reading and writing proficiency or level of interest in science for the students in their case study. The belief that UDL not only offers teacher opportunities for differentiation of instructional delivery and curriculum, but also promotes emotional investment in the students utilizing the framework, especially in content areas that are academically challenging for many students such as math and science, indicates that UDL is a viable educational option that improves both teacher and student efficacy. Preparing teachers well before the first day in their inclusive classrooms to meet the needs of their entire student population by educating them on the implementation process of the UDL model is key to greater overall success of the inclusive program and self-efficacy for both teachers and students.

## **Radiating Effects of Using UDL in Inclusive Classrooms**

The topic of this study was chosen not only to improve both teacher efficacy and student educational opportunities, but because of the radiating effects that are related to both lack of professional efficacy for educators and lack of social and academic equity for all students if inclusive education is not managed in a holistic and compassionate manner. As important as it is to create and uphold the ideals of social equity for all students, it is equally important to appropriately support the teachers who are educating students in inclusive classrooms through relevant and meaningful interventions. When teachers are unhappy in their profession, student needs go unmet, and educators, who were once passionate about improving the educational landscape for children, feel defeated by the system that they once advocated. As noted in a report by Skaalvik and Skaalvik (2016), lack of teacher efficacy is exasperated by lack of administrative support, value conflicts, and low student motivation, which leads many teachers to permanently leave the profession. One of the most telling predictors to teacher dissatisfaction and burn out is low student motivation, which impacts student behaviors and academic performance on assessments. It seems a vicious cycle manifests itself when teachers become more dissatisfied and disconnected, leading to an increase in student behaviors and a decrease in motivation, with the potential outcome of both teachers and students leaving the education system prematurely once the cycle is beyond repair.

Issues that pose a threat to the maintenance of teacher retention in the field of education typically revolve around lack of administrative support, student and classroom management, and constant increases in job responsibilities in the forms of data collection and documentation. According to Fisher (2011) one-third to one-half of novice teachers leave within the first five years of their tenure as educators, with many of these teachers claiming that managing student

behaviors, especially at the secondary level, being the primary cause of their leaving the profession. Adding the component of inclusive education is perceived by many teachers as an additional and unwanted expectation that is unfairly tethered to both job performance and litigious culpability. Berryhill, Linney and Fromewick (2009) noted that unintended negative backlash created by many educational policies and initiatives typically overshadow their intended benefits when accountability systems are tied to teacher performance, leading to stress levels that potentially lead to burnout and falling retention rates. Johnston (2012) expounded upon this sentiment by noting that the most commonly identified educator stressors documented in multiple research studies are attributed to balancing multiple demands, time pressures, problems associated with class size, inclusive classrooms, student discipline, inadequate administrative support, declining self-efficacy, lack of resources, unsafe environments, and coping with on-going change, resulting in teachers fleeing the field of education.

Since inclusive classrooms and complications that arise in inclusive settings are identified deterrents to teacher job satisfaction and retention, it is imperative that relevant and compassionate interventions are put into place to meet the needs of both the teachers and the students. If inclusive classrooms are established without administrative support or implemented without thoughtful and relevant planning, teacher stress will result in possible loss of educational opportunities for all learners in their classes, resentment towards students in the class who are perceived as problematic, and diminished morale for everyone accessing the program. By exploring the potential issues that interfere with teacher-efficacy when working with a spectrum of learners in a common setting, meaningful solutions can be formulated and initiated, leading to increased self-confidence for both teachers and students accessing inclusive educational environments. Initiating proactive interventions such as ongoing, intensive training in curriculum

writing, instructional practices, and assessment options prior to the implementation of inclusive classroom programming gives teachers the appropriate tools to not only teach a wide spectrum of learners more successfully, but to manage classroom behaviors more efficiently, leading to increased efficacy for both teachers and students. In turn, the rise in self-esteem will lead to greater job satisfaction for educators, resulting in improved teacher retention, increased learning opportunities that meet the needs of all students, decreased student behaviors, and minimized data collection while improving social equity for all learners.

### **Is Student Success Possible without Teacher Success?**

Upholding the rights of students with disabilities does not come without the stress of teacher maintenance of the agreed upon accommodations and modifications that are established during the annual review meetings. The more significant the disability, the more significant the expectations, typically tracked through continuous data collection and documentation that demonstrates the interventions being used to meet the needs of the student with special needs. As society moves towards building greater civil liberties for students with disabilities, the educational system continues to increase the workload for the teachers who are supporting them. General educators, already overwhelmed due to a variety of professional challenges, find the proposition of adding the extra work that comes with inclusively supporting students with special needs into their classrooms feel defeated by the entity that is their chosen vocation. According to McCarthy (2010), barriers to inclusive education stems mainly from teachers beliefs that they have neither the time nor skills necessary to develop and implement IEPs for each student with special education needs, while Subban and Sharma (2005) explained that their research indicated that most teachers who are resistant to inclusion are most concerned with working with students whose disabilities revolve around emotional or behavioral deficits. Research points to teachers'



overburdened state being the catalyst to the resistance to the implementation of inclusion, and, much of the time, the reason for them leaving the field of education.

The satisfaction one derives from working as a teacher is the main reason why people become and remain educators, but the reality that there is global shortage of teachers in a day and age where a country's success is contingent on the strength of their education system illuminates the need for greater teacher support in and outside of the classroom. By finding relevant and compassionate solutions that alleviate the pressures that come with the overwhelming workload of today's classrooms, especially as inclusive education moves globally from a concept to an expectation, teachers will find greater professional and personal satisfaction. One of the most meaningful solutions revolve around ongoing pre- and in-service professional development as it pertains to utilizing curricular and instructional frameworks that support both the process of differentiation for student interests and strengths and scaffolding for cognitive variances.

### **Knowledge is Power—Preservice Preparation for the Inclusive Classroom**

The articles chosen for this paper predominantly focus on teacher attitude. Whether it is feelings towards students with special needs in inclusive classrooms or willingness to differentiate for a vast spectrum of learners, teacher attitude has been the overarching concern because it is the most impactful aspect of education. Costello and Boyle (2013) found that preservice teachers in their first year of their postsecondary studies were more positive towards the concept of inclusive education, but that over time, their optimism began to wane. This leads to the belief that training in pedagogical strategies that effectively accommodate a broad spectrum of learners needs to be implemented early in post-secondary education classes to maintain a positive ideological continuum. Fruth and Woods (2015) verified this belief by noting

that teachers who succeed in the inclusive environment apply superior teaching strategies such as utilizing universal design and differentiated instruction.

Loreman, Sharma, and Forlin (2013) noted that variations in the level of knowledge about inclusion law and policy; previous interactions with people with disabilities; confidence levels in teaching people with disabilities, and prior teaching experience and training in working with students with disabilities are highly impactful elements on the attitudes of preservice teachers once they have their own classrooms. These studies perpetuate the educational mantra that knowledge is power, especially when that knowledge is provided well before a teacher's first day in their own classroom. By appropriately preparing preservice teachers through a comprehensive scholarly experience that includes educational law, practical familiarity with typical and nontypical students, as well as the utilization of pedagogical frameworks that accommodate curriculum writing and instructional delivery for a wide range of learners, greater confidence and critical awareness in these future educators will be achieved.

### **Review of Methodological Issues**

Gaining a better perspective of teacher feelings, thoughts, apprehensions, and ideologies is best ascertained through surveys and interviews. Data collection of previously published findings helps build a case for a specific argument, but surveys and interviews are a highly reliable and credible resource for gathering information about opinions and viewpoints. To identify the reasons for a lack of commitment or enthusiasm towards the implementation of an initiative, such as inclusive education, one must ascertain the underlying issues that are creating barriers, whether they are based around ideology or simply a lack of understanding. Through surveys and interviews, the researcher can discover the real problems, making resolution both

meaningful and appropriate, especially when the topic is as controversial and sensitive as educating students with significant disabilities with their nondisabled peers.

### **Uncovering an Uncomfortable Truth Through the use of Qualitative Research**

Many people, including teachers, question the utilization of tax money to pay for the free appropriate public education of students with significant or severe cognitive needs. This is not an ideology that is characteristic of a regional group or culture, but a universal opinion that people of low cognition do not hold the same human value as typical individuals. Lee, Tracey, Barker, Fan, and Yeung (2014) built their case study around the problems that involve teacher lack of empathy and interest in working with students with intellectual disabilities, especially in inclusive classrooms, revealing that many teachers have negative feelings about teaching students with special educational needs. Sokal and Sharma (2014) uncovered that teachers need to reflect upon their attitudes towards educating high needs children when confronted with the possibility of working in an inclusive setting. Considering how teacher attitude impacts the attitudes of typical students and the way they treat their disabled peers, students with special needs find themselves more segregated and underserved within inclusive classrooms when teacher prejudice taint the learning environment. Buford and Casey (2012) reported that teachers who are ill prepared or uncomfortable with the concept of inclusion due to the presence of students with special needs may pass that disgruntlement onto these students, further demoralizing the confidence and success of students with special needs in these educational environments.

## **Seeking the Truth Through the Use of Surveys and Interviews**

Determining the efficacy of individuals within a group to assess the overall attitude of the primary stakeholders and to understand the real barriers from efficacy is possible with mixed methodology research models. Pinpointing perceived barriers by the masses and better understanding the leading choices of interventions that can potentially overcome those barriers is easiest to determine using quantitative research methods such as surveys. Because the trend towards inclusion is not only ethically sound, but also federally mandated, relevant and effective interventions must be put into place to make lasting, successful changes. West, Novak, and Mueller (2016) evaluated surveys and inventory responses to determine teacher attitudes towards inclusive education regarding scholastic and environmental barriers. They identified educator lack of understanding of legal definitions of disabilities and federal compliance of the Individuals with Disabilities Education Act as primary reasons for teacher lack of culpability regarding the education of special education students. By gauging educator reservations, opinions, and understanding attached to working with students with disabilities by using an anonymous investigative tool such as surveys, research participants can be more forthright, giving more credibility to the research findings.

## **Utilizing Articles that Provide both Qualitative and Quantitative Data**

Most of the resources used for this study are primarily qualitative based research articles and papers, using methods such as observations, field notes, video evidence, photo journals, and interviews to validate their findings, but many of the articles use a mixed-methods approach, integrating both surveys and interviews as the main source of information. The articles that focus on the adaptability of the UDL framework and its principles rely heavily on the mixed methodology of survey and interviews from both teachers and students, while papers that center

around the use of UDL in inclusive classrooms are more comprehensive, involving ongoing data collection gathered after numerous observations over an extended period. For instance, Crevecoeur, Sorenson, Mayorga, and Gonzales (2014) reviewed literature over 10 years, using comparative analysis to better understand and explain the scope and complexity of the UDL principles. Reference to data collected over an extended period gives better credibility to the effectiveness of any platform as a viable intervention, especially when there is significant skepticism towards the effectiveness of an initiative, such as educational inclusion.

### **Synthesis of Research Findings**

The research findings in the articles about inclusion chosen for this paper indicate that inclusive education, when thoughtfully implemented, is valuable in supporting and promoting social and academic equity. Armstrong, Armstrong, and Barton (2016) reflected that the demand for inclusive education concerns not only the rights of children with disabilities but is also a part of a wider societal analysis of that which constitutes itself as normal or typical. Ensuring that the rights of all students are observed in public classrooms, Henninger and Gupta (2014) noted that students with disabilities who have access to inclusive learning opportunities develop positive social-emotional skills, acquire new knowledge and generalize previously learned skills in a variety of settings, and use appropriate behaviors to meet their own needs. In an article written by Benfield (2018) about the issues she has faced as a parent with a child who has special needs, she quoted Dr. Erik Carter, professor of special education and researcher at Vanderbilt University, as he noted that early segregation in schools ensures on-going segregation in life and that it is our responsibility as educators to establish an early trend towards inclusion so that it becomes a societal expectation, not an exception.

Many of the articles pointed out that despite the ethical ideology behind inclusive practices, resistance to the implementation exists due to teacher reservations of working with students with special needs. According to Abbas et al. (2016), the greatest barrier to the implementation of inclusion is the fear of teachers who believe they do not have enough knowledge to deal with students with special needs, while Sokal and Sharma (2014) reported that teachers need to reflect upon their attitudes towards educating high needs children when confronted with the possibility of working in an inclusive setting. Resistance to inclusion seems greatest among experienced teachers as indicated by a report by Costello and Boyle (2013) who noted that pre-service teachers in their first year of their post-secondary studies were more positive towards the concept of inclusive education, but that over time, their optimism began to wane in the light of prospective reality. Johnston (2012) expounded upon this sentiment by noting that one of the most commonly identified educator stressors documented in multiple research studies revolves around participation in inclusive classrooms.

Support and preparation prior to the implementation of inclusion were common themes in the selected literature for this paper and the consensus is that it takes all educational stakeholders to become involved in the implementation process for successful inclusion to occur. Balami (2015) remarked that the educational stakeholders are those who have the responsibility and interest in the implementation of inclusive education at different levels, and the government as an administrator and policy maker is responsible for providing the impetus and support to make inclusive education work. Urton, Wilbert, and Hennemann (2014) continued by noting that the implementation process of establishing a successful inclusive classroom model depends on the support of the district and school, its principal, its teachers, and its support staff. The responsibility for successful implementation of inclusive education does not solely rest upon the

educators who support and manage these programs, but it is obligation of everyone who have a stake in the success of public education to become highly engaged in the planning and preparation prior to enactment.

The most credible and compassionate way to provide support for teachers and the students who are in their charge in inclusive settings is by teaching educators instructional strategies that appropriately support all learners. The concepts of constructivism provide the most viable strategies to support various learners in a relevant manner. Akpan and Beard (2016) suggested that by moving away from textbooks and lectures and towards project-based, student-centered learning environments built around constructivism gives all students access to more properly supported within the classroom, despite cognitive limitations. Many articles chosen for this paper discuss the qualities of the constructivism-oriented Universal Design for Learning model as the optimum curriculum and instructional framework to support a spectrum of learners in a common setting. Rappolt-Schlichtmann et al. (2016) documented that UDL is a research-based teaching methodology that incorporates the philosophy of constructivism as it pertains to how students engage, express themselves, and assimilate information, while providing opportunities for flexible and deep learning through the design of customizable methods, materials, and assessments. Kelly (2014) explained that by applying the UDL model in the inclusive classroom, instructors can remove academic barriers seen in conventional instructional models. Fovet et al. (2014) agreed that UDL is a teaching approach that considers how curriculum, instruction, and assessment can meet the learning needs of the greatest number while maintaining appropriately accommodated academic rigor. The UDL offers educators the opportunity to create curriculum and deliver instruction in a manner that supports a vast

spectrum of learners in an inclusive setting in a compassionate manner while maintaining an appropriate level of rigor based on the individual student's capabilities, interests, and strengths.

### **Critique of Previous Research**

Inclusion is a mandated component of public education. It is not an option or a suggestion. The LRE element of the IDEA ensures that students with special needs will receive their instruction and have access to all social events with their typical peers in general education locations as often as possible. It is the law and legal ramifications can be levied if LRE is not maintained with fidelity, but this does not make the implementation process easier to accept or adopt. Ideological challenges seem to hinder the process of implementing inclusion, as well as lack of administrative support and lack of teacher preparation. The most credible articles that support the idea that inclusion is challenging to enact due to lack of support draw upon the feedback of a large (45+ participants) pool of teachers actively working in schools attempting to implement inclusion. Articles that consider the beliefs of preservice teachers are used for comparative analysis purposes only to demonstrate the chasm between theoretical preparation and practical application.

Most of the articles about preferred instructional strategies that support inclusive classrooms are typically written by curriculum and instructional specialists who are well-versed in the application of constructivism, differentiation, and project-based learning in classrooms that support a diverse learning population. Many of the most highly qualified individuals in the field of curriculum and instruction development, such as Tomlinson, Fovet, and Katz, were referred to in this paper. By citing the research of leaders in the field of curriculum and instruction, greater credibility was given to the concept that changes in instructional practices can improve the experiences of both teachers and students in inclusive settings.



The favored instructional framework in this study is the UDL. Noted in an article written by Katz (2013), UDL provides an instructional framework that supports all learning styles while accommodating for most cognitive challenges and that UDL's three block model helps teachers differentiate curriculum and instructional delivery in a manner that best supports each student, especially in inclusive settings. Black et al. (2015) reported that UDL does not only support the needs of learners with special needs, but it builds confidence and diminishes the stigmas attached to disabilities, verifying that UDL is not only an effective strategy to deliver instruction, but a compassionate way to support vulnerable learners. The research used to support the findings of these reports are based on years of data collection, observation, and feedback, and are supported by research-based instructional practices.

### **Summary**

According to the literature chosen for this research study, inclusive education is not only legally mandatory, but also ethically necessary to promote social equity in public schools. Despite the legal ramifications that come with neglecting this mandate, teachers are weary of being placed in classrooms that support a wide spectrum of learners due to a variety of classroom management and instructional differentiation challenges. The skepticism towards inclusive practices is even greater with secondary teachers who find wider cognitive gaps in their student population, deal with more significant behaviors and student apathy, and have more paperwork to manage with less administrative support. This uncertainty translates to resistance, and without preparation and planning before implementation, resistance increases for teachers and students leading to loss of confidence in the school system charged with supporting them.

Finding ways to better support teachers and students in inclusive settings is both compassionate and practical. Since meaningful curriculum and instruction is paramount to

managing a successful inclusive program, constructivist teaching methodologies such as the UDL model is frequently recommended in the various studies as an appropriate pedagogical strategy to accommodate a diverse student population. The interviews and surveys from this study further explained the relevance of the UDL model as an intervention to ensure successful implementation of inclusive education and the importance of on-going training to guarantee that the execution of UDL is appropriately performed. The next chapter describes the methodology used to further enhance the body of knowledge on inclusive education, teacher efficacy, and the use of the UDL model to support both.

## **Chapter 3: Methodology**

### **Introduction**

The purpose of this chapter was to introduce the research methodology for this qualitative case study by examining reasons for teacher resistance to the implementation of inclusive education and the potential of the UDL model to resolve this resistance. This approach allowed for a deeper understanding of teacher attitudes and the true reasoning behind the resistance towards working in classrooms that serve a vast spectrum of learners, as well as giving teachers the opportunity to reconsider their apprehensions with the application of the nontraditional, research-based instructional methodology of UDL. This chapter reviewed the research population, the investigative instrumentation, data analysis, and the ethical elements of this study in terms of both limitations, delimitations, as well as my obligation to discovering the truth so that relevant and meaningful changes can be made possible for future programs. Finally, procedural elements and assurances necessary to conduct this study were elaborated upon, concluding this chapter.

### **Purpose and Design Study**

Currently, inclusive education which supports the mandates established through the IDEA's LRE, is the model approach to creating social equity in public schools for all students. However, most secondary teachers are resistant to being placed in inclusive academic settings due to the challenges of educating students with cognitive or behavioral disabilities with their typical peers. There are many possible factors contributing to this problem, among which are fears of the litigious nature of special education, beliefs that revolve around coeducating typical and nontypical students in common academic settings, uncertainty about how to properly accommodate and support a vast spectrum of learners simultaneously, and qualms about the

classroom management of a diverse learning population. Because honest feedback based on practical experiences from seasoned teachers was utilized to determine the curricular and instructional barriers to the implementation of inclusive education at the secondary level, the case study method was chosen by the researcher.

Yin (2009) noted that case study research is the optimal research design when attempting to determine the *why* and *how* of an issue in a real-life context. The choice to use qualitative case study as the research design for this study is to gain genuine feedback from teachers regarding their attitudes and philosophies towards students with disabilities in secondary inclusive classrooms and to determine if changes in instructional practices can alleviate the stress factors that create a barrier to teacher-efficacy in secondary inclusive settings. Baxter and Jack (2008) stated that qualitative case study is an approach to research that enables investigation of a phenomenon within its context using a variety of data sources. The exploration of this research took place through the semistructured, conversational interviews between the researcher and 12 experienced, secondary teachers. The primary phenomenon revolved around the use of the UDL model to improve the educational environment of the primary context, being the secondary inclusive classroom.

Merriam (1998) noted that qualitative case study allows for the study of a single phenomenon or community through empirical and holistic research strategy, capitalizing on the final product. Yin (2012) continued that case study is a legitimate manner to conduct inquiries regarding theoretical supposition. This case study determined what issues deter the implementation process of academic inclusion by identifying curricular and instructional barriers that prevent the ideological, theoretical, and tangible acceptance of inclusive education, while

considering the relevance of the UDL model as a viable solution to both appropriate differentiation and scaffolding.

### **Research Population**

The population of this case study began with the selection of 34 experienced secondary teachers from four secondary schools in a Texas suburb. The selection pool was comprised of both general and special education teachers representing each content area and support service. While special education teachers' primary educational expertise lies in the process of best supporting students with special needs through instructional differentiation, data collection, and strategic goal setting, secondary general education teachers are experts in their content area and stress the importance of academic rigor and analytical problem solving. Because maintenance of the academic rigor of their teaching field is paramount to the personal and professional efficacy of secondary general education teachers, a general educator representing every core content area as well as every elective course participated in the preliminary questionnaire which determined the final selection of interview participants.

### **Purposive Sampling Method**

Crossman (2018) defines purposive sampling as a non-probability sample of research participants selected based on the objective of the study. The 26 teacher participants purposively selected for the interview pool met the basic standard of being a seasoned secondary instructor working at the high school level. Merriam (1998) noted that purposive sampling is used when the researcher wants to gain insight from individuals with unique experiences and familiarities that make them experts in the area that is relevant to the case study. Seeking out the opinions of a small sampling of experts in the field of study allows the researcher to gain credible perspective and meaningful input that contributes to the validity of the data collection. The use of purposeful

sampling is dependent on forthright feedback from the most impacted stakeholders allows the researcher to gain insight on barriers, issues, and challenges that inhibit change from those who are most significantly affected by this change.

This sampling of secondary teachers who are eminently going to be placed in an educational setting that may be counter intuitive to their ideological belief system gives the researcher the ability to obtain subjective input that is not only pertinent but significant when considering the real issues that stand in the way of progress. The 34 educators were invited by the researcher to participate in a preliminary questionnaire prior to their being selected as one of the final 12 interviewees for this case study. Years of experience, status as secondary educators, current job position, and previous interaction with students with special needs qualify the preliminarily participants for the first phase of this study, while their present level of awareness and professional understanding of special education law, purpose, and terminology made them eligible to be part of the finalized interview pool.

### **Instrumentation**

Yin (2012) noted that case study results fill an explanatory role, allowing the use of documentation and interpretation of outcomes to illuminate the relationship between the stakeholders and the challenge at hand. Three types of research tools were used to investigate the level of knowledge teachers possess on the purpose of special education, the barriers to the implementation of inclusive education, and the potential instructional solutions to improve teacher efficacy. The three types of investigative instrumentation were:

1. Preliminary questionnaires
2. Face-to-face interviews
3. Post-interview surveys

In addition to the three investigative research instruments, previously published articles and data collection were used to qualify findings realized during the research process.

### **Data Collection**

Before data collection begins, I sought approval from the Concordia University Institutional Review Board. Data collection and documentation followed the guidelines established in the recruitment letter. Once the IRB approved the chosen forms of data collection for this case study, the interview candidate pool of the 34 teachers completed a preliminary questionnaire that delves into their professional familiarity of special education's purpose.

The preliminary questionnaire was comprised of five open-ended, fact-based questions that probe into the individual's understanding of special education law, the purpose of the Individuals with Disabilities Education Act, and grasp of special education terminology. These questions were not designed for opinion or perspective purposes. The sole purpose of the questionnaire was to determine the respondent's understanding of basic verbiage and knowledge about special education. I wanted to ensure that lack of understanding was not a factor regarding teacher reservations towards inclusion in secondary classrooms.

The questionnaires were sent to the participants via email so that they could be taken at the participants' leisure. The preliminary questionnaires eliminated potential interviewees that were resistant to the idea of teaching in an inclusive classroom simply due to a lack of understanding or knowledge of special education terms and practices. Utilizing the responses from the questionnaires, the 12 educators who were most familiar with and knowledgeable about special education were chosen to participate in this case study. The decision to utilize 12 of the 34 candidates for the interview pool ensured that in-depth feedback was possible while acquiring an adequately diversified consortium of qualified opinions and varied experiences due to the

expanded representation of content areas and instructional settings possessed by these seasoned educators.

The interview was written and delivered in a semistructured manner, consisting of 10 opinion-based questions that revealed the interviewee's ideological stance on the education of individuals with special learning needs. The interviews occurred before or after school so that interviewees could draw upon both their emotional and logical professional experiences, which lead to more forthright and candid feedback. The interviews took place in comfortable locations, typically the teacher's classroom, allowing for participant privacy while fostering a sense of safety so that the interviewee feels relaxed during the interview process. The interviews, which lasted up to 60 minutes, were dictated via a talk-to-text application that was downloaded to the researcher's personal computer. All the transcripts were destroyed after the feedback was documented in the study report to maintain participant confidentiality with complete fidelity per the CU-IRB (see Appendix F).

The interview questions consist of 10 philosophical questions regarding the interviewees' attitudes and beliefs regarding the ethical validity of educating students with disabilities inclusively with typical students. From reflection questions that force the interviewee to consider their opinions on educating students with severe cognitive or behavioral disabilities in public schools to inquiries on whether appropriate rigor can be upheld for all students in secondary inclusive classrooms through both appropriate differentiation and scaffolding, the chosen participants were instructed to respond with total candor. They evaluated the ethical capacity of many of their colleagues to manage a classroom that supports students with significant special needs, as well as elaborated on mitigating issues that prevent inclusive education from reaching



an implementation stage. The interviewees were instructed to refrain from mentioning other people's names during their interview to maintain confidentiality.

Upon completion of the interviews, the participants filled out a short survey on through Qualtrics. The surveys connected the typical concerns of secondary teachers regarding inclusive education with the constructivism attributes and practices used in the UDL model. Surveys gauged the participants' familiarity with constructivism methods, introduced the UDL model, and allowed them to view the UDL classroom in action to better understand how the model can be used in a classroom. It also indicated the individual's willingness to utilize nontraditional teaching methodologies to provide greater academic differentiation and scaffolding within their classrooms.

Before utilizing the feedback from the collected data, I reviewed the transcripts from the interviews with the participants to ensure that there was not a discrepancy between their intention and my interpretation. All feedback was taken solely from each participant's feedback and all content is from the questionnaires, interviews, and surveys are original and exclusive to this study (see Appendix G) and participant confidentiality was maintained in all documentation used for this report (Creswell, 2013).

### **Identification of Attributes**

Identifying the main reasons that stimulate educator reservations about the implementation of inclusion as it relates to working with students with special needs to find relevant and meaningful solutions that will increase teacher efficacy and confidence was the focus of this case study. These educators shared their perceptions and experiences of the positives and negatives of inclusively educating all students within a common setting as well as

their thoughts on the viability of successfully meeting the needs of a spectrum of learners simultaneously.

While special education teachers understand the importance of differentiation and the needed supports to accommodate learners with disabilities, general educators are content experts and understand the importance of applying significant rigor to the curriculum to prepare typical students for their postsecondary education. They are specialists in their content area and understand how to deliver curriculum through instructional practices that encourage critical thinking skills. Differentiation of curriculum or instruction was not the primary consideration for most secondary general education teachers because they feel their role in the classroom is to prepare high school students for their postsecondary future as collegiate scholars. It is the perception of their role as a secondary educator and their understanding of the purpose of education at the secondary level that makes their feedback particularly essential to understand the true resistance of the implementation of inclusive education.

The teachers considered for and chosen to participate in this study have at least some experience working with students with special needs. The teachers chosen to participate in this case study are seasoned educators with a minimum of three years of classroom experience as a secondary teacher. Most of the potential participants are currently working at the same high school campus, with five additional participants being at other secondary campuses in the same district. Those invited to participate in the preliminary questionnaire were potential teacher participants for this case study, knew the researcher in a professional capacity as a fellow educator, and have had casual conversations with the researcher in the past about their frustration with special education. Participants were aware of the fact the interviewer has worked in the capacity of both a general educator and a special education teacher and have a general

understanding of the researcher's professional and personal philosophies towards working with students with special needs.

### **Data Analysis Procedures**

Qualitative research methods guide this case study. According to Harding (2013), qualitative data analysis involves gathering a data set, dissecting the data, and reassembling the data in a manner that is relevant and meaningful to the study. Yin (2012) presented the argument for case study by advocating that it is a legitimate methodology for conducting inquiries into a proposition. Hatch (2002) continued that qualitative research starts with a social assumption and provide a narrative to build a case for the researcher's interpretation through rich description and detail.

The data analysis procedures used in this study began with a preliminary questionnaire that eliminated over half of the pool of individuals chosen to participate in this study, leading to a face to face interview with 12 interviewees regarding their perceptions and ideologies about cooperatively educating nontypical students with their typical peers. I used previously published data and articles that explore both teacher concerns about inclusively educating students with special needs with their typical peers and the validity of using supportive measures such as differentiated curriculum, research based instructional practices.

### **Typological Analysis**

Because I entered this research with a significant level of awareness about many of the obstacles that interfere with the implementation of inclusive education as it relates to instructional differentiation, I approached the coding process through typological data analysis. Hatch (2002) noted that typological analysis focused on categories that were predetermined by the researcher prior to data collection and were generated by common sense, theory, or research

objective. Typological categories of feelings, barriers, and UDL in secondary inclusive classrooms were taken directly from the interviews and surveys regarding individual feelings towards inclusive practices and experiences with inclusion as well as the relevance of the UDL model to support inclusion programs were used to ascertain trends and patterns. The content was organized by a matrix that focuses on the three main categories, while disseminating feedback into five subsections per category. Organizing the data in this manner allowed for objective clarity of content and easy referencing, while identifying definitive generalizations drawn from the research documentation.

As I read through each participant's transcripts from their interview and survey, I created a brief summary that focused on the participants' attitudes towards working with students with special needs, perceived parameters of inclusion, willingness to alter instructional styles, and likelihood to adopt UDL as an instructional model. Hatch (2002) noted that once these summaries are complete and the matrix is finalized, patterns that indicate cause and effect relationships were documented to lend credibility to the data collection. Once the patterns were developed and generalized to demonstrate their relationship to the research, the formal analysis was documented as the findings of this case study.

Since attitudes and ideologies towards working with students with special needs and teaching in inclusive settings was the focus of the study and one of the major categories used for coding purposes, the preliminary questionnaire was used to eliminate potential participants who are uninformed or unaware versus those who are aware and informed, but resistant to inclusion due to pedagogical beliefs. The questionnaire included five questions that inquired upon the respondent's understanding of special education (see Appendix A). Twelve participants were selected from the 16 who completed and returned the questionnaire were selected to participate

in the case study based on their understanding of special education law, its purpose, and verbiage.

**Preliminary questionnaires.** The questionnaire, which is written to gain insight to the extent to which the responder knows the purpose and application of special education services, was sent to the participants via email, allowing the participant to complete the questionnaire at their leisure. Based on the extent of the individual's cognizance regarding the entity of special education, 12 of the 34 teachers were selected for their knowledge and awareness. Since philosophical barriers to inclusion is the argument, teacher lack of understanding needs was eliminated as the deterrent.

**Semistructured interviews.** Of the 34 teachers chosen for the participant pool and of the subsequent 16 teachers who chose to take the questionnaire, the 12 teachers who scored highest on their questionnaire regarding their understanding of special education law, terminology, and educational purpose were chosen to participate as research interviewees for this study. The interviews were semistructured, allowing the participants to openly discuss and reflectively expound upon personal issues and professional ideologies regarding the challenges that revolve around inclusive education. Drever (1995) noted that semistructured interviews allow freedom for the interviewee to express themselves to the degree that they choose, leaving the structure of the content to be organized and arranged by the researcher.

The interview questions were developed to compel the participants to reflectively analyze their personal feelings about working with students with special needs, their professional experiences with coeducating students of varying cognitions within a common setting, and the liability that comes with accommodating the various educational, social, and functional needs of students with IEPs. Cohen and Crabtree (2006) observed that semistructured interviews allow

participants the freedom to express their views in their own words, promoting a sense of truthful self-analysis in a comfortable and casual setting. The questions (see Appendix B) that were posed during the interview range from philosophically oriented to experienced-based inquiry.

**Post-interview surveys.** After they complete their semistructured interviews, each participant was asked to complete a post-interview survey, written in open-ended questions, regarding the utilization of project-based instructional frameworks such as UDL in classrooms that support a spectrum of learners (see Appendix C). Surveys were taken by each participant within at least five days after the date of their interviews. The survey determined if the use of conventional curriculum and instruction impacts teacher willingness to move forward with inclusive practices and if teachers were willing to embrace alternative instructional practices to support an inclusive program.

**Previously published articles.** Articles and works that did not meet the parameters for the literature review, but contained valuable data such as published documentation, essays, and reports that examine the challenges teachers experience in inclusive classrooms were used for comparative analysis and supplemented the literature review content, while supporting the findings from this study. Exploring the various barriers between teacher efficacy and inclusive education revolving around attitudes and philosophies towards the appropriate public education of students with special needs as indicated in the chosen literature were used to compare the responses gathered during this study's interviews. Additional findings that the literature provided revolve around the relevance of the UDL model in inclusive classrooms, which further reinforced the findings of the survey on UDL in the inclusive classroom. The findings from these articles paralleled with the results from my study, further fortifying a global perspective on the

topic of inclusive education and teacher-efficacy, despite the small, localized sampling of my case study participants.

### **Limitations, Delimitations, and Assumptions of the Research Design**

Limitations, delimitations, and assumptions are conditions or circumstances could have affected the credibility of the study. This section provides information about the presumed limitations, delimitations, assumptions reflectively documented by the researcher and the plans to ensure the fidelity of the study.

#### **Limitations**

Limitations refer to outside influences that the research might not be able to control. The limitations for this study include the biases held by those of the culture of academia, personal/professional relationship with the researcher, and transferability.

**Biases held by those of the culture of academia.** I have considered the culture of academia and the prejudices that are experienced by individuals whose human value maybe diminished due their low intellectual capacity as my limitation of cultural bias. The partiality of interviewees who work primarily with typical learners may affect their belief system towards the validity of educating individuals with special needs. Many educators who have little to no engagement with students with special needs may dismiss the growth potential for people with disabilities, leading them to be under the impression that the education of students with special needs is either inconsequential or insignificant. Beliefs held by individuals who are accustomed to the rigor of honors coursework or college readiness preparation may lead to dismissiveness of the entire concept of educating students with cognitive, behavioral, or emotional deficits. These cultural biases could have potentially interfered with the promotion of inclusive education, stymying the process of the individual's consideration of educating students collaboratively.

**Prior personal/professional relationship with researcher.** The interviewees have either a professional or a personal relationship with the researcher. The researcher has known all the interviewees at least three years and is aware, to a degree, of the basic educational philosophies held by each interviewee. The researcher has had previous casual conversations about special education with most of the interviewees but has not had in depth discussions regarding their philosophy on inclusive education.

**Transferability.** The information gathered during the interviews determined the perceived academic challenges and philosophical barriers that hamper the process of implementing inclusive education, but the feedback does not directly determine the validity of the researcher's argument that educational frameworks such as the UDL to improve teacher efficacy. Surveys given to the interviewees after their interview touched upon the principles employed by project-based, student-centric instructional practices as well as introduced the UDL model, allowing the participants to reflectively reframe the idea of supportive interventions in secondary inclusive settings. Reflective aspects of the survey given immediately upon the completion of the interview does not ensure that the teacher participants will be ideological influenced to embrace the ideals of inclusion.

### **Delimitations**

Delimitations in a case study are choices made by the researcher that are within their ability to control. The boundaries I selected for this study are the quality control of purposive sampling, school of thought, and reflexivity.

**Quality control of purposive sampling.** Utilizing the feedback of highly trained and experienced teachers who are not only knowledgeable about their content area but are aware of special education's purpose in the public-school system insures a sense of quality control



regarding participant input. When lack of knowledge or experience is the only barrier to change in today's classroom, especially as it pertains to inclusive education, one can assume that time and familiarity is the most reasonable conduit to bridge the gap between resistance and implementation. Sagor (2011) noted that strong research design uses sampling techniques that afford accurate findings, and even though the feedback from this study revolves around perceptions and belief systems, those perceptions and beliefs are based in practical application. To gain insight that likely represents the beliefs of most experienced teachers, the purposive sampling of highly qualified teachers for this study illuminated the potential obstacles that are inhibiting the process of establishing and cultivating successful inclusive classrooms with fidelity.

**School of thought.** The participants interviewed for this study are the researcher's professional colleagues and have known the researcher in the capacity of a special education teacher for the duration of their professional relationships. The personal relationship that the researcher has with each interviewee varies in degree due to the frequency and duration of the individual's professional collaborations with the researcher, but all the participants have worked with the researcher in a capacity that accommodates the implementation of special education services. Since the interviewer and the interviewees are of a common academic society, there are shared mutual understandings and experiences that influence philosophical approaches towards educating students with disabilities, which could lead to how educators responds to teaching nontypical learners in a collaborative setting with typical learners.

**Reflexivity.** Reflexivity pertains to the "analytic attention to the researcher's role in qualitative research" (Gouldner, 1971, p. 16, as cited in Dowling, 2006). Since the credibility of the education of students with special needs is a subject deeply rooted in epistemological

connections that vary from person to person while considering my personal beliefs as a strong proponent for the educational rights of all people, I conscientiously maintained a sense of self-reflexivity to provide credible and valid information with fidelity.

### **Assumptions**

Assumptions are aspects of the research that are presumed true. According to Simon (2011), assumptions in your study are elements that are somewhat outside of the researcher's control, but if they disappear, the study would become irrelevant. The assumptions considered for this case study include that the participants would answer the interview questions in an honest and candid manner and that the participants had a sincere interest in participating in this research study and did not expect to receive compensation of any kind in exchange for their contribution to this research.

### **A Limitation Forces an Increase in the Selection Pool**

Once the process of research gathering began, it was clear that one of my limitations was going to hamper the information gathering process. Knowing the teacher population that would potentially participate in this study became a deterrent. More than half of the 26 teachers who agreed to take the preliminary questionnaire did not take it once it was sent to them, despite multiple reminders, which led to extended invitations to go to an additional eight teachers on other campuses to participate in the study. Of the teachers who did go on to the interview phase, two of the 12 never attempted the post-interview survey on the relevance of UDL in inclusive classrooms. After the realization that teachers who originally agreed to be a part of the study were passively refusing to participate, it occurred to me that my relationship with teachers who were chosen as potential participants may have hindered their willingness to be forthright in their responses, especially if they knew their perspectives or viewpoints are vastly different than mine.

Their possible fear of judgement or lack of wanting change in the area of inclusive education may have made them wary to participate in a study that hinges its purpose in the promotion of inclusion.

### **Validation**

Because inclusive education can occur successfully when the appropriate supports are put into place well before the implementation process, it was imperative that I maintained an open mind and a willingness to give credibility to the valid concerns of those whose ideology are different from my own. It is for this reason that I established the criteria of only utilizing the feedback of a highly qualified group of experienced educators who have practical experience in working with both typical and nontypical students. To maintain a personal checks and balances system, I chose to record all communication elements of the interview process through a talk-to-text dictation feature on my laptop in to avoid the possibility of interjecting my interpretation into the interview feedback, which may lead to my falsifying this case study.

Weiss (1994) noted that although most respondents are cooperative, there are participants that may be resistant to answer questions because they feel that complete candor is too risky or that their honest input is pointless. I wanted my interview participants to understand the importance of their feedback for the sake of the data, but I wanted to alleviate any concerns they may have about their privacy being compromised. In addition to protecting their identity and encouraging their forthrightness, I wanted the participants to express themselves without fear of judgement. I did not want to diminish the valid and reasonable concerns of those colleagues who are skeptical or weary of the idea of inclusive education and I wanted to give credence to those opinions that differ from mine. The overall objective of this study was to find what elements of inclusive education may deter educators from its implementation, making honest reflection and

feedback imperative towards the final goal of the employment of relevant and meaningful interventions that will potentially cultivate an environment that supports the implementation of inclusion with complete fidelity. This objective connects with the purpose of this case study regarding the discovery of the real resistance to inclusive education, if it is due to teacher attitudes regarding individuals with special needs, and if these concerns or attitudes can be positively altered with more supportive instructional practices, such as the UDL model.

The research attributes of member-checking and thick description will be put into place to further ensure the reliability of this study. In qualitative research, a member check allows researchers to help improve the credibility, validity, and transferability of a study by establishing more viable feedback. Establishing a research parameter that includes only utilizing the feedback from teachers with three or more years of experience at the secondary level ensures that the pool of potential interview participants come from a place of practical knowledge and not speculation. The use of the preliminary questionnaire filtered out the teachers who were not adequately acquainted with special education law, the language of special education, and its purpose in the public-school setting, as well as the theoretical purpose of inclusive programming. Lack of experience and knowledge was eliminated from the research equation for this case study to move into the aspects that focus on philosophical barriers to inclusion.

### **Expected Findings**

The expected findings for this study include that most teachers are uncomfortable with educating students with special needs and that the legal ramifications of not maintaining contractual accommodations and modifications established during annual review meetings make most teachers especially weary of working with nontypical learners receiving special education services. The expected findings revolved around the trepidation of inclusive education and that

most educators feel overwhelmed and frustrated with the responsibility of differentiating instructional materials to meet the needs of a diverse learning population, while resenting that the increase in work will not bring an increase in administrative support.

### **Ethical Issues**

Ethical procedures were essential to ensure the credibility and reliability of the findings from the case study. Ethical issues included assessments of potential conflict of interest and the researcher's position. To honor this commitment to ethical maintenance of my research, I adhered to the three principles of the Belmont Report of 1979. First is respect for people. Participants will be informed of any possible risks and benefits prior to consenting to joining the study and their privacy will be protected throughout the research process (Adams & Miles, 2013). This was demonstrated in by maintaining a safe environment for the teacher to openly express themselves by exhibiting active listening skills, non-judgmental language, and displaying mutual respect.

The second principle of beneficence was upheld with my commitment towards the improvement of teacher satisfaction in secondary inclusive classrooms. The Belmont Report describes beneficence as an obligation to the participants consisting of two rules: do no harm and maximize benefits while minimizing risks. No one participating in this study was harmed by violating confidentiality, but the benefits for those participating in the study will include their contribution to the potential betterment of both teacher efficacy and student growth in inclusive classrooms. To ensure the element of no-harm with regards to confidentiality, teachers were given alpha-numeric codes during transcription of the interviews and these codes were translated into pseudonyms for study identification. All information such as signed consent forms were

scanned into my personal computer and saved on a password protected file. Once the hard-copy forms were saved electronically, they were destroyed (see Appendix F).

This leads to the final principle of justice, which refers to the future tangible and ideological benefits from the feedback from this study. The participating teachers in this study will be contributing to the sociological and academic improvement of inclusive classrooms experiences for both educators and students. Their input provided added insight to the reasons why some educators are wary of inclusive education by their identifications of perceived or real barriers. The participants' voluntary participation also reaffirmed the ethical beliefs held by many teachers and put in place by the federal government to protect the civil liberties of all students in the public-school systems.

### **Chapter 3 Summary**

Chapter 3 described the methodology design for this case study. In this section, I provided the research questions, participants, data analysis, limitations, and delimitations. In addition to the logistical elements of my research, I provided issues related to my personal culpability to the maintenance of ethical practices as it pertains to participant privacy, as well as my plans to safeguard the credibility and validity of content gathered during the case study.

## **Chapter 4: Data Analysis and Results**

### **Introduction**

This case study was designed to gain greater understanding of the concerns and barriers to inclusive education in secondary classrooms and if the instructional interventions of the UDL model can accommodate those concerns and barriers. The results from this case study provided an opportunity for the researcher to examine a contextualized contemporary phenomenon within boundaries (Hatch, 2002). In this case study, I identified specific barriers that are connected to the implementation of secondary inclusive programs as elaborated upon by experienced secondary classroom educators and then considered the aspects of UDL to increase teacher confidence in inclusive classrooms. In this chapter, I present a description of the target population that was used for this qualitative case study and review the research methodology and typological data analysis of semistructured interviews and surveys. The findings are summarized before data and results are presented.

### **Description of the Sample**

I originally sent 26 invitations to participate in a questionnaire to determine which 12 teachers would participate in this qualitative case study regarding the use of the UDL model to resolve challenges of secondary inclusive programs. Because only 12 of the original 26 people completed the questionnaire, I invited an additional eight teachers who work for the district and support a common student demographic. Of the 34 teachers invited, 16 completed the questionnaire. The 12 teachers who answered the questionnaire most knowledgeably were invited to participate in the interview and survey phases of this case study. Among the 12 teacher participants, four were general education teachers, two were inclusion support teachers who worked in a coteaching classroom, and six were teachers who work in or have extensive

experience working in a sheltered classroom setting that supports students with the most significant behavioral or cognitive disabilities. Because gender was a consideration that could impact individual philosophy on the value of inclusive programming, five of the participants are male while the remaining participants are female. The ethnic demographics of the study population reflects the district's staff demographics as it relates of ethnicity percentages (see Appendix D). All the participants are identified by an pseudonym that protects their identify, ensuring their privacy and maintaining confidentiality.

All the teachers selected for this study are my personal colleagues, with a few of them being close friends. Because I have a relationship with all the participants and I wanted to create a more relaxed environment that would encourage honest, uninhibited conversation between friends, I used a semistructured interview method to gather relevant feedback for my research study. I accommodated participants schedule by allowing them the opportunity to select the time and location of their interviews. Most of them chose to be interviewed in their classrooms before or after school, but a few of the participants needed to be interviewed over the phone and one participant chose to be interviewed at a local restaurant during dinner. Giving the participants the ability to choose the time and place of their interview demonstrates mutual respect for the participants' time and comfort by the interviewer. The following section gives an overview to each of the participants' educational and career experiences that possibly influences their current perspectives and philosophies.

### **Description of Participants**

The following section provides a detailed description of the participants of the study. Table 1 is an overview of all the participants, with their pseudonym, their job assignment,



personal demographic information, and the number of years they had been employed in the teaching profession.

Table 1

*Participant Overview*

<i>Pseudonym</i>	<i>Job Assignment</i>	<i>Personal Demographics</i>	<i>Years of Experience</i>
<i>Sophia</i>	Special Education	Latin Female	20+
<i>Jackson</i>	Special Education	White Male	5
<i>Serena</i>	Special Education	White Female	12
<i>Robert</i>	General Education	White Male	13
<i>Dani</i>	Special Education	White Female	6
<i>Korey</i>	General Education	Black Male	12
<i>Rita</i>	General Education	Asian Female	11
<i>Brett</i>	General Education	White Female	11
<i>Elly</i>	General Education	White Female	10
<i>Mia</i>	Inclusion	White Female	8
<i>Willis</i>	Inclusion	White Female	5
<i>Laura</i>	Special Education	White Female	12

**Sophia.** A special education teacher with over 20 years of classroom experience as both a paraprofessional and as a teacher, has worked as an ESL (English as a Second Language) teacher, a case manager, and currently works in a life skills programs, supporting students with severe cognitive impairments. Sophia has a personal investment, as well as a professional interest, in improving the educational experiences of students with special needs since she has a

child who has received special education services. Sophia frequently remarked about the issues that impact the educational experience of students with special needs and their parents when teachers and administrators do not understand disabilities that impact behaviors and emotions.

**Jackson.** A special education teacher who is currently working in a behavior support program, has four years of experience as a general education teacher and a co-teacher in an inclusion program. He has a master's degree in special education and is presently completing his doctorate in educational leadership. This is his first year in a sheltered classroom, but he has a unique perspective towards the challenges that come with new teachers being placed since he was placed in an inclusive classroom without support or resources as a first-year teacher.

**Serena.** A special education teacher who has worked as both a resource reading teacher and an assistant team leader in special education, is a highly qualified as a teacher with 12 years of teaching experience and seven different certifications. She has a master's degree in special education, with a concentration in gifted and talented education. Due to her understanding of the twice exceptional student (a student who has been identified as both gifted and having special needs) as well as her experiences and knowledge of the logistics of special education during her tenure as a team lead, Serena brings unique insight to her interview feedback.

**Robert.** An advanced placement history teacher, who has a second job as history professor at a local community college, has 13 years of teaching experience at the secondary level. His master's degrees are in education administration and history, so his perspective is unique in comparison to the other participants in this study. He has not taught students with significant learning needs, but he has had experience working with students with behavioral and emotional disabilities, as well as students on the Autism spectrum.

Robert spends most of his professional time with high functioning students. Not only does he teach advanced placement coursework and college classes, he is the high school faculty advisor a variety of student organizations. Despite his constant exposure to students with above average to superior intellect who are intrinsically motivated to perform at rigorous levels, he still regards inclusive education as a valuable opportunity for all students to grow and evolve into more capable and caring individuals.

**Dani.** A special education teacher who started her career in education after she retired from 23 years in industrial technology sector, is not presently working in a classroom. She is currently a transition specialist, but her three years as a classroom teacher has taken place in sheltered classrooms that support students with cognitive disabilities in the life skills program or severe behavioral/emotional disabilities in the behavior support program. She, unlike the other teachers, has extensive experience working in the business sector and frequently compares the administrative activities seen in education to that practiced in the business industry. Like many of the other respondents, she not only has a professional investment in helping people with special needs due to her having a family member with severe disabilities.

**Korey.** A physical education teacher and coach has experience working as a special education teacher and general education teacher. During his time as a general education teacher, he worked in a coteach classroom with a special education teacher. He used to teach resource social studies at the middle school level before transitioning to high school as a case manager and physical education coach. Korey is not only a certified teacher and coach; he also has a master's in educational administration.

Korey has been out of the classroom for the past four years, but his time in the classroom allowed him to work with both typical and nontypical students in inclusive settings as well as

work as academic support staff in general education settings. He actively engages with students of all cognitive levels as a coach because, despite a student's intellectual level, if they can follow directions and are physically capable to make the team, cognition is not a factor on a field, diamond, court, or track, as it is in a classroom.

**Rita.** A resource science teacher, with 11 years of experience working with students with learning disabilities, has worked in coteaching settings, traditional general education classes, and as a sheltered classroom teacher. Rita has not only worked in a traditional high school but has worked in an alternative school that specializes in working with teenagers who are at risk of dropping out of school. She recently completed her master's degree and of all the respondents, she was most guarded with her feedback.

**Brett.** A general education teacher with 11 years of teaching experience, currently splits his time between two high school campuses, teaching science classes to students interested in a future career as a veterinarian. Despite being a general education teacher, his classes are taken by many students with special needs who are drawn to not only to the subject area that he teaches but to his teaching style as well. He is in the process of completing the final coursework for his master's degree. Brett, like many of the other teacher participants, is interested in moving out of the classroom and into a supervisory or administrative role in education within the next few years.

**Elly.** As an art teacher who has been teaching for the past 10 years, with the entirety of her career taking place at the high school level, Elly has a special sense of compassion towards students with special needs since she has several learning deficits that were difficult for her to manage as a child. This self-awareness has translated to her managing her classroom with a child-centered approach with empathy and respect. She also notes repeatedly in her interview

that art, as a teaching subject, easily lends itself to project-based learning methodologies. She is the only teacher interviewed who regularly experiences overcrowded classrooms and is most concerned with the challenges of instructional training being appropriately gauged towards the needs of fine arts educators.

**Mia.** A middle school resource math teacher, Mia currently works with a co-teacher in an inclusive math program. Mia began teaching eight years ago, and despite being a gifted career artist, she has left the field of the visual arts and has furthered her career as an educator by earning her master's degree in curriculum and instruction for inclusive classroom settings. Unfortunately, due to personal issues that have occurred at the school she currently works at and health issues that have forced her to take an extended leave of absence from service, her perspective towards teaching and the education system have been negatively impacted, which is evident in her interview responses.

**Willis.** The youngest respondent in this study, Willis has been teaching for the past five years, spending his tenure in education as a high school resource social studies teacher. Willis spent the tenure of his elementary and secondary education in Plano and now works at the same high school he attended a decade ago. Willis has a brother with special needs, so he is both personally and professionally invested in the ideals of social and academic equity for all individuals.

**Laura.** A former sheltered classroom educator who left the classroom five years ago to take a position as a department team leader, earned her certificate in education administration because her long-term plan is to move to a principal position in the future. Laura's teaching experiences have taken place in sheltered classrooms, such as behavior support programs that accommodate the high-level needs of students with severe emotional disabilities and life skills

classrooms that support students with significant cognitive challenges. Like many of the respondents, Laura not only has a professional interest in special education, but a personal one due to familial connections.

### **Research Methodology and Analysis**

I used case study design to understand teacher perspectives regarding the barriers to the implementation of inclusive education and if the use of the UDL model can instructionally support a spectrum of learners in a common setting. The case study was essential in order to gain a deeper understanding of how perspectives, both assumed and proven, can impact the implementation process of inclusionary practices in today's classrooms (Stake, 1995). I used the descriptive analysis model to analyze these data collected during the initial and follow-up surveys (Hatch, 2002). To evaluate the data collected from the interviews and the surveys, I used typological data analysis (Hatch, 2002).

### **Data Collection**

The data collection period lasted one and a half months with the initial stage being the request for participation in the research study which was emailed October 19, 2018 to pre-selected teachers. To maintain the privacy of the participants, I sent the email to the group with their names in the "blind carbon copy" recipient location. The prerequisite to be a participant in this study was that the teacher had to be working at the secondary level with at least three years of teaching experience. Initially, the plan was to only use input from teachers from one campus, but as I had to expand my search in order to find qualified and knowledgeable participants, two of the participants chosen work at other campuses, with one working at a middle school and the other at a senior high campus. These teachers work with a population of students whose demographics mirror that of the student population from the primary campus.

I sent 34 invitations to secondary educators in a Texas suburban school district to participate in the initial phase of this qualitative case study. Of the 34 invitees, 16 participated in the initial phase of the questionnaire (see Appendix A), which was preapproved by both the IRB and my dissertation committee prior to my sending out the questionnaire. The first question of the questionnaire asked the potential participant to define inclusive education. Question 2 and 4 asked the respondents to differentiate between special education terms that are frequently used but are typically misunderstood by many teachers. Questions 3 and 5 asked the respondents to explain how the IDEA and LRE impacts inclusive education and the maintenance of academic equity for all students. Among the 16 individuals who took the questionnaire, 12 were chosen to participate in the interview and survey phases based on their answers to the questionnaire questions. The 12 teachers chosen for the case study were chosen due to the depth of their understanding of special education law, purpose, and application in the classroom.

### **Preliminary Questionnaire**

The questionnaire, which was written to gain insight to the extent to which the responder knows the purpose and application of special education services, were sent to the participants via email, allowing the participant to complete the questionnaire at their leisure. Based on the extent of the individual's cognizance regarding the entity of special education, 12 of the 16 teachers who completed the questionnaire were selected for their knowledge and awareness. Since philosophical barriers to inclusion is the argument, teacher lack of understanding needed to be eliminated as the deterrent.

### **Semistructured Interviews**

The 12 teachers who scored highest on their questionnaire regarding their understanding of special education law, terminology, and educational purpose participated as research

interviewees for this case study. The interviews were semistructured, allowing the participants to openly discuss and reflectively expound upon their personal issues and professional ideologies regarding the challenges that revolve around inclusive education. Drever (1995) noted that semistructured interviews allow freedom for the interviewee to express themselves to the degree that they choose, leaving the structure of the content to be organized and arranged by the researcher.

The interview questions were developed to compel the participants to reflectively analyze their personal feelings about working with students with special needs as well as the effectiveness of special education, their professional experiences with coeducating students of varying cognitions within a common setting, and their feelings about the professional liability that comes with accommodating the various educational, social, and functional needs of students with IEPs.

Because I have a personal relationship with all the participants to some extent or another, in addition to our professional affiliations, the semistructured interviews easily evolved into revisited conversations that many of us have had regarding the frustrations that come from the constant increase of workload and expectations without added support. The interviews-turned-conversations revealed aggravations, annoyances, and disappointments that teachers ultimately have with the public-school entity and administrators that seem unsympathetic and overbearing when it comes to implementing initiatives without considering all forms of needed support. Every interview evolved into a frustrated diatribe when the questions of barriers to inclusion and needed parameters for inclusion prior to implementation were discussed and they all led back to lack of something, from lack of administrative support, training, or resources to finances, preparation, or time. It was clear that all the teachers who were interviewed in this case study felt



under or completely unsupported, especially when it comes to working with students with special needs in general education settings.

### **Post-Interview Surveys**

After they completed their semistructured interviews, each participant was asked to complete a post-interview survey, written with open-ended questions, regarding the utilization of project-based instructional frameworks such as UDL in classrooms that support a spectrum of learners (see Appendix C). Because time was an issue after the interviews, I told each participant to take the survey on their own time at least 24 hours after their interview. Unfortunately, I did not receive feedback from Rita or Robert regarding their feelings about the relevance of UDL. The survey did assist in my understanding how each participant perceived the relevance of UDL in inclusive settings and if they would be willing to move forward with inclusive practices and embrace alternative instructional practices to support an inclusive program.

### **Summary of the Findings**

The findings of this study revealed that the teacher respondents recognize the value of inclusion and would be open to working in a secondary inclusive educational setting despite identified barriers, if administrative and instructional support is available. Despite teacher identified barriers such as instructional differentiation, lack of resources and financial support, student behaviors, cognitive differences, and lack of training, both general and special education teachers are willing to work with a cognitively diversified student population due to the social and academic benefits for typical and non-typical students alike. All the teacher respondents did agree that certain teachers do not have the compassion or capacity to work effectively with students with special needs. This meant that preplanning for inclusion programming includes

careful consideration of who is chosen to work in a classroom that accommodates the needs of a cognitively heterogeneous student population.

When instructional interventions were proposed as a relevant solution to the challenges that impede the implementation process of inclusion, the teachers agreed that using project-based instructional methodologies, opposed to more traditional teaching strategies, appropriately meets the needs of students while accommodating planning time and classroom management issues for teachers. Since the principles of the UDL model supports individualized means of representation, engagement, and expressions, while accommodating learning differences, UDL was unanimously agreed upon by all the respondents as an optimum instructional intervention for inclusion teachers to utilize. The primary concern that the teachers had about UDL revolved around lack of training and lack of ongoing education on how to properly implement UDL in the classroom, while lack of administrative support which encompasses lack of financial, resources, instructional, and moral support, was the greatest concern for most of the respondents regarding the use of UDL in secondary inclusive education.

One of the questions that seemed to have the most varied responses revolved around educational equity and if it is possible through special education initiatives, programs, and services. The teachers who felt it is possible agreed conditionally. The teachers who said that educational equity is possible noted that adequate human and educational resources would have to be available before true equity would be possible. The teachers who did not believe that educational equity is possible felt there too many denominators to work against, especially at the secondary level, to be able to meet all student needs adequately.

As a researcher, I had to consider the personal and professional aspects that may potentially impact teacher beliefs or perspectives on the value of inclusive practices. My

hypothesis included possible biases based on job assignment, with special education teachers being more willing to work in inclusive settings and seeing more value in inclusive practices than their general education peers (see Appendix E). This hypothesis was proven wrong as general and special education teachers were equally willing to work in inclusive settings due to their seeing the value in inclusive education for both typical and nontypical students.

Another aspect that was considered regarding potential prejudices that may impact feelings or beliefs towards working in inclusive classrooms was the gender or ethnicity of the respondent. Again, the gender and the ethnicity of the respondent made no difference in how he or she felt about inclusive education and did not impact his or her willingness to work in an inclusive classroom. There were no definable outside elements or personal aspects that impacted the philosophies or perspectives of the respondents.

Finally, I had to consider that a reflexive researcher actively adopts a theory of knowledge, and that I had to refrain from interjecting my own biases and opinions into the interpretation of the feedback gathered from the interviews. Since discovering the truth to the barriers of inclusion overrides my interest in having the UDL model accepted as the optimum instructional model in secondary inclusive classrooms, I was forthright in my interpretation of the feedback and asked for clarification from the individual respondent if there was any question regarding their intent. I conscientiously maintained a sense of self-reflexivity to provide credible and valid information with fidelity because discovering the truth is my primary research objective, not protecting or galvanizing my own theories.

### **Presentation of Data Results**

Prior to beginning the study, I blind copied 34 teachers, inviting them to participate in a preliminary questionnaire on a variety of elements regarding special education law, practices,

and verbiage. The questions gauged the extent of each teacher's understanding of special education because I needed perspective to be the guiding component of the teacher resistance and not lack of knowledge or awareness. The questions were all straightforward, fact-oriented, and impartial, eliminating any opportunity for the teacher to express personal interpretation during the questionnaire. 16 of the 34 invited teachers responded within the given timeframe, and 12 of the 16 who provided the most appropriate answers were chosen for the interview stage.

### **Descriptive Analysis of Responses from the Preliminary Questionnaires**

The following paragraphs review inquiries presented in the questionnaire, responses provided that either met or did not meet the standards regarding accuracy and understanding of terminology, application of methodologies or practices, or the purpose of special education and inclusion, and the rationale for choosing the teachers who made the interview stage. The questionnaire inquired upon the respondents' understanding of *inclusive education, mainstream versus inclusion, the definition and purpose of LRE (Least Restrictive Environment), the importance of maintaining student IEPs (Individualized Education Plan), and IDEA's (Individuals with Disabilities Education Act) role in maintenance of educational equity for students with disabilities*. Each area was examined to provide clarity of how the researcher approached the selection process in order to finalize the 12 interview participants.

#### **Inclusive Education**

The first question in the questionnaire asked the respondent to define inclusive education. It was a clear-cut inquiry that simply asked the educator to explain inclusion as it pertains to collaboratively teaching students of varied cognitive levels within a common setting. One of the respondents not chosen to participate in the study stated that inclusion "means you include special education students in a classroom with like peers". Where this may seem an accurate

response, the inclusive classroom avoids the practice of placing students with like peers and promotes the incorporation of students of varied capacities, abilities, and intellects together in order to foster educational equity.

Laura, who was chosen to participate in the interview wrote, “All students, regardless of cognitive levels or other needs, are in age appropriate general education settings.” This answer is both factual and concise, meaning that the teacher has a strong grasp of the concept of inclusion. Since the focus of this study is to find ways to instructionally accommodate secondary inclusive settings, it was imperative for the participants to fully comprehend the purpose of inclusion.

### **Mainstream versus Inclusion**

Education has a litany of terminology and jargon that evolve in intent or meaning as new initiatives and interventions are introduced and applied over time. Some terms retain their meaning, but many lose their capacity to be used intermittently with similar terms, confusing those charged with the task to apply these terms in their real-world environment. Special education is particularly known for confusing not only the general education teachers but the special education teachers as well, since words that have common linguistic qualities are not necessarily synonymous. This is particularly perilous in special education though since many of these seemingly synonymous words carry litigious weight if the implementer is confused to the meaning or application of the word. For instance, *mainstream* and *inclusion* are regularly confused, as are the terms *accommodation* and *modification*, but these words carry very different meanings, and ignorance is not going to protect the teacher who is not aware of the purpose or application of these terms in their classroom.

Because of the importance of understanding the difference between mainstreaming, which has been a practice used for decades allows the student with an IEP to spend part of their

day in general education classes, and inclusion, which allows students with IEPs to be a fully participating member of the general education population, it was important to me that the interviewees understand the seemingly subtle, but significant, distinction between the two terms. A teacher who took the questionnaire, but was not selected for the interview, distinguished the two by noting, “Mainstream is placing special education students in a classroom with regular peers with accommodations, where inclusion is placing students with IEPs with similar peers.” Once again, the idea of keeping students with similar peers promotes exclusionary practices. The use of the word *regular* is dangerous as well. The preferred verbiage used in this case would be typical peer or non-typical peer, but nonetheless, inclusion ensures that both non-typical and typical peers are educated in a common setting, while having their individual needs met most appropriately. This lack of both understanding and compassion made this teacher a questionable choice for this study.

On the other hand, Serena, who was chosen to participate in the interview due to her accurately and compassionately differentiating the concepts of inclusion and mainstream by explaining,

Mainstream education means that you include some students with disabilities into the general education classroom with accommodations and modifications. In the mainstream model some students are in a resource or self-contained setting. They could even be in a school specialized for their disability. In the inclusion setting you have all students in the general education setting and provide the appropriate modifications and accommodations and staffing to including students with all disabilities and severities in the general education classroom.

## **The Definition and Purpose of LRE**

Understanding LRE and its purpose seems to muddle the process of academic placement for many educators and administrators when weighing the benefits to risks discrepancy for students with IEPs during their annual planning meeting, especially when the students have significant or severe cognitive or behavioral disabilities. Inclusion is directly impacted by the Least Restrictive Environment component of IDEA because it makes the implementation of inclusion a legally mandated aspect of the public education experience. Since the implementation of inclusive education is the predominant practice to ensure LRE is in place, knowledge of what LRE is and its purpose was a predetermined requirement to participate in this case study. Two of the 16 respondents had no idea of what LRE meant or its purpose. The other 14 participants knew the acronym means Least Restrictive Environment and basically understood its purpose.

## **The Importance of Maintaining the IEP**

The IEP (Individualized Education Program) is not only an academic plan for a student with disabilities while they attend public school. It is a legally binding contract made between the educational system and families of children with disabilities that litigiously confirms that those charged with the responsibility of educating students are going to exercise every intervention, accommodation, and modification written in the plan, insuring their child will be successful in school, despite having a disability. In my professional experiences as a special education teacher and case manager, many teachers do not understand the power that an IEP possesses with regards to not only the child's educational success, but the teacher's potential job security. If every intervention is actively used and documented by the teacher, and the student still fails to academically thrive, the teacher is legally protected and the student's interventions can be revisited to better accommodate their needs. Conversely, if a teacher is not aware of or

decides to dismiss the documented and agreed upon interventions in the IEP and the student fails, the teacher could be placed on disciplinary leave or worse, if the parents decide to pursue litigation.

In my experiences, many teachers admit to not being fully aware of every intervention, accommodation, and modification documented in their students' IEPs. This lackadaisical approach to managing a student with special needs academic programming warranted my needing to understand the depth and breadth of a potential interviewee's dedication to upholding the IEP as not only a plan, but a contract. One teacher who was not chosen but seemed to understand the big picture aspect of not maintaining a student's IEP simply wrote "lawsuit". It was a decidedly dismissive approach to answering the question, but he clearly understood the personal ramifications of not upholding an IEP.

Korey, who was chosen to participate in this research study, is not only a former special education teacher, but a hopeful educational administrator, concisely and comprehensively explained the purpose of the IEP and its importance by stating, "An IEP is a legal binding agreement the school district has with the student and must be followed by the teachers of record. IEPs are not suggestions. If any changes need to be made to the IEP, the (ARD) committee with have to meet again and unanimously agree on the changes."

### **IDEA and Educational Equity**

The final inquiry on the questionnaire asked the teacher respondents to explain IDEA's purpose in public school and if it provides educational equity for students with special needs. Sophia, who was chosen for the interview, competently explained, "IDEA - Individuals with Disability Education Act -protects the rights of the students with disabilities. It's a federal law that protects their rights to get the same education as their non-disabled peers." Interestingly, the



same two teachers that answered “I don’t know” to the question about LRE, were also unsure of IDEA’s purpose. Both teachers have well over 15 years of teaching experience and have had numerous students with IEPs in their classrooms throughout their tenures as educators.

### **Typological Analysis of this Qualitative Case Study**

The first interview took place with a face to face meeting on October 23rd, 2018 and the final interview occurred on December 5th, 2018 via telephone. The final phase of the data collection process began after the first interview was completed on October 23rd with the post-interview survey that allowed the participants to reflectively assess their feedback from the interviews with the potential instructional interventions and solutions provided through the UDL Model. The window for the surveys opened on October 23rd and closed on December 5th, 2018.

### **Coding Using Typological Analysis**

As each interview concluded, I began to input the participant feedback into a data analysis matrix that focused on the identified typological patterns in order to formulate generalizations that would support my research objectives. I started the typological analysis of data collection to decipher the content of the feedback received from both the interview sessions and the surveys by identifying and addressing the predominant and relevant topics of *Feelings, Barriers, Knowing, Application, Possibilities, Limits, Capacity, Willingness, Experiences, and Readiness*. Once I realized that the concepts of *Feelings, Barriers, and UDL in Inclusive Classrooms* were the overarching typological themes, I reconfigured the matrix to accommodate the coding process of these three main categories, with five subcategories identifying the patterns within the three main themes. An overview of the coded information is summarized in the following table (Table 2) followed by a more in-depth explanation of each category. The data from the interviews and surveys was configured by applying the typological analysis from a

summary sheet created from each respondent's feedback (Hatch, 2002). I analyzed the data, using Saldaña's (2009) pattern coding model of grouping summaries into smaller categories, themes, or concepts. The results of my analysis are presented in this section. In total, 15 codes emerged from the research data, with five identified codes encapsulated within three separate key themes.

Saldaña (2009) referred to the process of analytical memo taking as a component of qualitative data analysis. This refers to the researcher considering not only what the respondent states during the interview or survey, but mannerisms, vocal inflections, or emotional reactions displayed during the exchange. Saldaña (2009) noted that the analytic memo is an uncensored and permissibly messy opportunity to let the flow and ideas emerge organically, allowing the researcher to consider the overall tone of the interview instead of using the words as the only element of the interview.

Noting the befuddlement, frustration, or anger that each teacher was feeling during the discussion about barriers to inclusion, especially in relation to lack of administrative support, demonstrated the need to identify lack of support as a primary category and a dominant code. The participants who seemed most frustrated were teachers that were actively teaching in inclusive settings that were not being adequately supported through appropriate instructional strategies or administrative assistance. This dissatisfaction with lack of assistance would be later identified as one of the predominant reasons that teachers are resistant to working in inclusive settings.

Table 2.

*Typological Themes and Codes*

Main Themes	Code 1	Code 2	Code 3	Code 4	Code 5
<b>Theme 1: Feelings</b> (Individual philosophies, beliefs and thoughts about inclusion at the secondary level.)	Viability of inclusive programs at the secondary level	Choice to work in an inclusive classroom	Perceived or potential limitations or restrictions	Possibility of educational equity	The importance of teacher capacity
<b>Theme 2: Barriers</b> (Teacher perceived reasons for resistance to inclusive education at the secondary level.)	Instructional Differentiation	Lack of Support	Vast Cognitive Spectrum	Student Behaviors	Lack of Training
<b>Theme 3: UDL and Inclusive Classrooms</b> (Could UDL improve the inclusive education for teachers?)	Experiences with the Universal Design for Learning model	Interest in UDL	Supportive instructional qualities of UDL's principles	Increasing teacher efficacy in inclusive settings by using UDL	The importance of training in UDL

## **Theme 1: Feelings Towards Inclusion**

The first theme revolves around teacher feelings, philosophies, and beliefs in the inclusive program, especially at the secondary level, where behavioral, cognitive, and maturity gaps are most evident. The following subcategories have been identified and coded to identify trends and patterns revealed during the interviews and surveys.

**Code 1.1: Viability of inclusive programs at the secondary level.** All the teachers who took part in this case study agreed that inclusive education is a valuable and meaningful program. General education and special education teachers alike believe that both typical and nontypical learners benefit from being in cognitively heterogeneous settings. Robert noted that typical students learn greater compassion and patience for people with disabilities when they are coeducated with their nontypical peers, while Laura remarked that students with special needs accomplish more and learn how to socialize more appropriately when they are in the same classroom as students without disabilities. Sophia, who currently works with students with severe disabilities, reflected that inclusion is a good concept, but that its value and effectiveness is contingent on the support put in place prior to implementation.

**Code 1.2: Choice to work in an inclusive classroom.** Contrary to what I hypothesized, all 12 teachers interviewed for this case study stated that they would be happy to teach in an inclusive secondary classroom, but most of the responses were supplemented with a conditional disclaimer regarding support from administration. Jackson recalled that his first experience as a classroom teacher was in an inclusive classroom. Unfortunately, he was completely unprepared and untrained for the responsibilities of the position and received little support from his administrators, making his earliest teaching experience very negative. Despite this experience,

Jackson's belief in the value of inclusion and his willingness to work in an inclusive classroom again was not deterred by this negative initial experience.

**Code 1.3: Perceived or potential limitations or restrictions.** Most of the teachers feel that most students with disabilities should be part of an inclusion program, whether it is during a portion of the day or all day, but most agree that students with severe cognitive disabilities, coupled with significant communication and behavioral deficits should be allowed to stay in a sheltered classroom that offers a safer, more predictable location to learn. This means that the 12 teachers that took part in this study believe in inclusion, but not full inclusion. Brett remarked that not every student belongs in a general education classroom, and Sophia continued this thought by noting that since "some kids might break out into some sort of aggressive act when they get frustrated, the line needs to be drawn with students who exhibit violent behaviors with regards to putting restrictions on students with both severe behavioral and cognitive deficits."

**Code 1.4: Possibility of educational equity.** This issue was the one that received the most varied feedback amongst respondents during the interviews. During the interviews, half said yes, that educational equitable is possible but half of the respondents said no, that the idea of true educational equity is unfeasible. In addition to the aspects of equity, teachers varied on the equitability of special education regarding its sociological, functional, or academic worth for students with special needs. Korey noted that students with disabilities receive more social value from being with their typical peers in conventional situations, where Danielle considered the importance of student access to grade level academic content and curriculum presented by teachers who are experts in their instructional field to the maintenance of equity for all students.

Interestingly, many of the general education teachers believe that educational equity is not possible not because of the needs of students with disabilities, but because of the anticipated

and unanticipated needs of the typical students. Korey and Brett both noted that the students with IEPs in their classes are well-mannered and more compliant than the students without IEPs.

Korey remarked,

Special education is affectively providing students with both academic and social equity, from my experience. What I see is that a lot of our typical kids are lacking social skills and are more likely than the special education kids to misbehave. When you are talking about self-contained kids, then the focus may be more on social skills versus academic skill building, but, it's the general education kids, not the special education kids, who are lacking in the area of social skills.

Brett continued this thought by noting that “students with special needs are the most respectful and some of the best students I have ever worked with. In fact, my favorite students have come from sheltered classrooms.”

A few of the teachers who did not think that educational equity is possible took the vantage point from an overall view, and not one that solely considers the needs of students with disabilities. They considered that with today's students, there are so many factors with regards to language barriers, poverty challenges, familial instability, in addition to overcrowded classrooms, that providing all students with a quality education that meets all their needs is virtually impossible. Elly, an art teacher who frequently has class sizes of 32 or more students, noted that it is unfeasible for one teacher to understand the individual needs of each of their students when the teacher sees 180 students per day. Robert, an American history advanced placement teacher and college professor, noted that he thought that “legislature may have its heart in the right place when drawing up initiatives that deal with educational equity, but that the expectations are unreasonable for the average teacher to carry out on a daily basis.”

**Code 1.5: The importance of teacher capacity.** Unlike the previous question, the question regarding teacher capacity was met with immediate and unwavering responses from all the interviewees. All the teachers agreed that it takes a certain temperament that many teachers do not have to work with students who have special needs, especially when they are being inclusively educated with their typical peers. Willis, who has one section of inclusion classes amongst his resource class schedule, reflected, “Some teachers don't have the disposition to work with students with special needs. Their style, the way that they've taught, and the way that they interact with students does create difficulties,” while Serena frankly interjected that some teachers think that students with special needs make them look bad and are only interested in working with the top performing students because they believe that those students make teachers look more competent.

## **Theme 2: Barriers to Inclusion**

The second theme contemplatively considers the reasons or issues that come between inclusive education and its implementation at the secondary level. The respondents identified the primary barriers of instructional differentiation, lack of support, including administrative, resources, and financial support, vast cognitive spectrum, student behaviors, and lack of training. I anticipated a few of them, but I allowed the teachers to freely reflect upon what they believed were the barriers to inclusive practices without my interjections. Most of the teachers identified more than one barrier.

**Code 2.1: Instructional differentiation.** Variation of both curriculum and assessments has proven to be challenging for teachers in all secondary classrooms, both general and special education, due to the heterogenous population in today's classroom. When you add various accommodations and supports for behavioral or cognitive challenges as well as learning and

communication deficiencies and processing speeds, the task of meeting the needs for all students in an inclusive setting seems completely overwhelming. Mia noted that finding appropriate instructional strategies, making changes to curriculum, and implementing accommodations and modifications is overwhelming and leads to many teachers resenting the additional work. She pointed out that she has noticed teachers either losing their passion for teaching due to the increased workload or simply avoiding the work, despite the ramifications.

**Code 2.2: Lack of support (resources, administrative, or financial).** I was surprised at the level of emotion that came through when the interviewees brought up lack of support, especially administrative support. Not just school administration, but district and state administrative support, was the focus of many of the interviewees that identified lack of support as the primary barrier to inclusion. The topic of lack of administrative support led to conversations about state educational initiatives that did not take into consideration of increased workload without increased resources, both human and material, in order to meet the new expectations.

Laura noted that teachers are already over-worked and see inclusive programming as a new, overwhelming burden. She continued that,

it just boils down to the classes are already too large, too difficult to manage, with the added expectations that places greater demands on our teachers. We just need to re-examine and reformat education across the board because we are obviously not on the right track since Texas ranks 48th in education this year.

This was a statistic that I was not familiar with, so I researched this statistic and though the information was not correct, it was not too far off the mark. According to Lindsey Anderson



(2016) of the El Paso Times, Texas ranked 43rd out of the 50 states in education. Anderson stated that,

in school finance, Texas ranked 45th in the nation, earning a D grade based on per pupil spending, state spending as a percent of taxable resources and other factors. Texas ranked 49th in the country in per pupil spending, considering regional cost differences, according to the report. Texas spent \$7,957 per student, well below the national average of \$11,667 per student, according to the report.

The reality is that lack of spending per student in Texas is being felt by the teachers who may not know the actual statistics but feel the effects of not having the needed resources and funding to adequately support their highly diverse student population.

As the teachers spoke, it became apparent that lack of support included far more than lack of administrative support. It also included lack of morale, human resources, instructional material, classroom resources, funding, and planning were all identified as elements that were components of the generalized factor of support. Teachers already feel unsupported and overwhelmed by the expectations of today's heterogenous classrooms, but the additional expectations that come with inclusion programming seems to inflame the resentments already present.

**Code 2.3: Vast cognitive spectrum.** This identified barrier is one that interrelates directly to instructional differentiation, but also considers potential student behaviors and increased paperwork and planning that correlates to lack of resources. Dani, who spends a great deal of time with general education teachers who are maintaining the accommodations, modifications, and goals of student with IEPs in their classrooms, has had countless discussions with frustrated educators who feel overwhelmed with meeting the needs of a broad cognitive

spectrum of students, especially at the secondary level. She stated that she thought the cognitive levels of the students, which requires increased modifications with greater cognitive challenges, along with the differentiation of curriculum when there is finite time available for the teachers to work creates a greater sense of resentment and resistance to placing students with high needs into regular classrooms.

Korey, who has worked in both the capacity of a special education resource teacher and case manager to students in general education settings, as well as a general education health and coach, noted that:

Not that I wouldn't say behavior is an issue. In fact, behavior would be way at the bottom of the barriers to inclusion. I would say for me and my experience in the classroom, it would be the kids' cognitive levels.

Jackson agreed, as a former inclusion teacher, that cognition variances and finding ways to keep all students engaged while meeting their diversified needs simultaneously is enough to push people out of the teaching profession.

**Code 2.4: Student behaviors.** Robert, who is least like the other teachers interviewed for this case study due to his working with advanced placement senior level students, reflected that behaviors exhibited by his AP students on the Autism spectrum have been very challenging in his classes. He does not work in an inclusive setting, but he does have a number of students who are high functioning, still struggle with the social, sensory, and communication deficits that all individuals on the Autism spectrum struggle with and these deficits manifest in the classroom when the students are frustrated or overwhelmed by the rigor of honors classes. He stated,

You know I have AP classes with high functioning kids with Autism who have a hard time doing a lot of the assignments. That doesn't bother me that much, but there those

kids who make a big scene or cause problems or become extremely disruptive when they are frustrated. That's when it becomes a problem because it negatively affects everyone else and I am not adequately trained to deal with that. That might be a huge barrier to inclusion, so you know perhaps maybe when we talk about inclusion, we need to consider the behavioral part of it.

**Code 2.5: Lack of training.** I predicted that this was going to be the most impactful barrier to inclusion, partly because I have had on-going conversations with frustrated teachers who feel abandoned in the classroom with students they do not understand and held hostage by educational system that dictates how teachers teach without supporting them. Lack of training was the dominant barrier to inclusive education, with it correlating with all other aspects of the other identified barriers. Sophia suggested that it is not only training, but continuous education hosted by special education team members who are highly competent and comfortable with differentiation and paperwork, is needed so that teachers are better prepared to move into inclusive settings. Korey concurred by noting that training is most important and needs to be continuous because teachers cannot learn everything needed by attending one or two training sessions. Teachers need to continually go through, if not twice a year, at least once a year, some type of training on working with students with special needs. From knowing how to best accommodate instruction for students with special needs, to learning how to manage paperwork, to coping with behaviors exhibited by students with behavioral issues, relevant and meaningful training is key to preparing and supporting teachers who work in inclusive settings.

### **Theme 3: UDL in Secondary Inclusive Classrooms**

The third theme explores the potential of the UDL model as a viable solution to the challenges experienced in classrooms that support students of all cognition levels. The post-

interview survey (Appendix C) posed reflective questions that allowed the interviewee to connect the responses they expressed during the interview to the academic remedies UDL provides. The following codes were developed from the responses from the survey.

**Code 3.1: Experiences with UDL.** All the teachers who are actively working in a traditional classroom, except Serena, use project-based learning methods to accommodate the learning needs of all students. Serena, an academic literacy teacher who works with resource level high school students, remarked that she wants to use project-based learning programs but because she currently lacks resources in my classroom, from instructional resources to technology to flexible work spaces, she is unable to apply UDL methodologies with her students. The other teachers use UDL to some level or degree in their classrooms. Brett uses UDL for assignments but continues to use traditional pen and paper assessments to determine student mastery of presented content, while Mia noted that she likes using UDL because it allows for higher thinking in a group setting, while providing extension activities and opportunities for reteaching as needed. Willis, who also teaches in a resource program for over half of his day, noted:

I use some UDL. On some assignments, I give options for how to complete and demonstrate mastery, but to implement it more, either the district would have to write more lessons and assessments in ways that accommodate UDL, or we would need the time to create these different UDL assignments.

**Code 3.2: Interest in UDL.** Every teacher surveyed for this case study expressed interest in learning more about and using the UDL model, especially when working with a spectrum of learners in an inclusive setting. Jackson noted that he has used the UDL model in class and that has proven to be very successful, but he feels it would be beneficial to learn more

about it to be more comfortable when implementing it. Sophia concurred by reporting that she uses the UDL concept for all her lessons, but always wants to learn more ways to incorporate the UDL principles into her curriculum planning.

Most of the teachers interviewed for this study have had the opportunity to use UDL or other project-based learning methodologies and have found them very effective when working with a spectrum of learners. It seems that most subjects are easily accommodated by the UDL model, including math, as notated by Mia, who teaches middle school math in an inclusive setting with a co-teacher. She remarked that she uses UDL to create lessons that will engage all students.

**Code 3.3: Supportive instructional qualities of UDL's principles.** All the teachers surveyed in this case study believed that the principles of the UDL model support student and teacher needs in inclusive classrooms. Sophia noted that she agreed that UDL's principles help students reach their potential at their own level as well as help teachers prepare lessons that makes sense to all students. She continued that these principles make assessment more meaningful in order to get real results, not just "superficial or marginal results." Brett noted that students take charge of their learning by applying the principles of UDL, while Mia observed that students are better able to overcome many learning obstacles by applying the strategies of UDL.

**Code 3.4: Increased teacher efficacy in inclusive settings.** Finding ways to assist teachers in not only surviving inclusive classes but thriving in the same manner that students grow and evolve as learners is as important to the implementation process as any other aspect of employing inclusive practices. During the survey, I asked the teachers to view a couple of videos that showed the UDL model in practice in inclusive classrooms. Jackson remarked upon viewing

the video that he felt that it could be used to increase student and teacher efficacy, “because when dealing with inclusive students who aren’t at the same learning level as your general education students, having multiple options for all students in the class would be beneficial.”

Serena agreed by noting,

I think UDL is a viable option in the inclusive classroom for most students. I think it would add a viable option for increase in teacher and student efficacy by providing multiple means of demonstration of knowledge and forms of representations.

Elly did reflect upon the issues that may arise during the early implementation periods of using UDL that could impact teacher efficacy. She said commented that she thinks that UDL will help with student efficacy in inclusive settings, but that it will be a lot of work in the beginning for teachers. She continued that after the changes have been implemented and everyone is more comfortable with the process of using the UDL model, teacher will experience greater time efficiency if student behaviors do not become an issue.

**Code 3.5: The importance of training in UDL.** The main purpose of this study is to find the real barriers to inclusive education in order to see if the research hypothesis is correct regarding UDL as a viable and relevant solution to supporting students and teachers in inclusive classrooms. All the teachers agreed that UDL is a viable solution regarding curriculum planning and instructional strategies, with the stipulation that the district or school offers on-going training on the proper use of UDL. Dani noted that she would attend trainings on UDL because she would like to add as many teaching strategies as possible to her professional “toolkit” in order to evolve from a good teacher into a great teacher. Laura continued this mindset regarding the importance of training by saying, “I would attend any training that would help me support my teacher and students. I would implement anything I could on my campus and within my

department.” Korey remarked that given the right training, UDL can give the students the power to take more of a role in the learning environment, while Sophia agreed that the more training teachers get, the better they are able to support their students, help them reach their potential, and be successful in their learning.

### **Supplemental Documents**

I evaluated the data from additional literature that was not used in the literature review as well as information taken from works included in the literature review to further validate content from the interviews and surveys using typological analysis model by Hatch (2002). The documents comprised articles and reports located on the ERIC and SAGE websites as well as content from agencies that support Texas educators to organizations that support parents of children with special needs. The themes that emerged through the typologies from the literature support both the researcher’s hypothesis and the themes established from the interviews and surveys. The patterns and trends from the literature focus on the three themes of *Inclusive Education in Secondary Classrooms*, *Teacher Efficacy*, and *the Universal Design for Learning Model*. These themes were chosen as the overarching issues that guide this case study. Ensuring teacher efficacy in secondary inclusive settings by providing relevant instructional options such as the UDL model has been the fundamental platform for this qualitative research study. The interviews and surveys were developed with the intention to discover the barriers to inclusion in order to make meaningful and applicable changes. The following table illustrates the overarching themes from the literature that support the research.

Table 3

*Literature Themes*

Overarching Literary Themes	Literature Focus	Correlated Research Codes
<b>Theme A:</b> Inclusive Programming in Secondary Schools	• Teacher Attitudes Towards Inclusion	• 1.3
	• Barriers to Inclusion	• 1.5
	• Positives of Inclusion	• 2.1-2.5
	• Educating Students with Autism in Inclusive Settings	
<b>Theme B:</b> Teacher Efficacy in Inclusive Settings	• Reasons for Teacher Resistance to Working with Students with Special Needs in Secondary Classrooms	
	• Enhancing Teacher Efficacy Through Relevant Pedagogical Practices	• 2.2
	• Increasing Teacher Retention in Today’s Classrooms	• 2.5
	• Professional Development	• 3.4
	• Increased Support	• 3.5
<b>Theme C:</b> UDL in Inclusive Classrooms	• Lack of Administrative Support	
	• Principles of UDL	• 3.1-3.5
	• Using UDL in High School Classrooms	
	• Can UDL Improve the Educational Experience for Everyone in Inclusive Classrooms?	

**Theme A: Inclusive programming in secondary schools.** The challenges that are met in elementary inclusive classrooms become more complicated at the secondary level when cognitive and maturity gaps widen beyond multiple grade levels. The literature used for this study explores challenges that revolve around instructional differentiation and cognitive levels to



behavior management and assessment methods. These articles and reports reflect upon the same concerns that the teachers interviewed for this research expressed as indicated in typological codes 1.3, 1.5, and 2.1 through 2.5.

**Theme B: Teacher efficacy in inclusive settings.** Articles that focus on ways to increase teacher job satisfaction in inclusive classrooms support the findings from this case study as demonstrated in codes 2.2, 2.5, 3.4, and 3.5. The articles document findings that agree with the findings from this research study regarding the importance of using project-based learning models such as the UDL model in inclusive classrooms, the need for both on-going training and meaningful administrative support, and teacher willingness to embrace UDL to assist in better management of inclusion classes.

**Theme C: UDL in inclusive settings.** Articles from the literature chosen for this case study regarding UDL as a viable option to support the instructional needs in secondary inclusive classrooms further validate the feedback from this study's survey. The articles support the study codes of 3.1 through 3.5, which consider the viability of UDL as an instructional support that promotes differentiation, social skill building, appropriate problem solving, and active engagement for a spectrum of learners, with a focus on meeting the comprehensive needs of non-typical learners. The literature provides insight to both the value and challenges faced in inclusive settings and how important it is to consider instructional methodologies to meet the needs of all students regarding giftedness or limitations. The articles also focus on the importance of both administrative promotion of and on-going training in the principles of UDL to fortify teacher self-esteem as competent educators, and in turn, build the sense of social and academic confidence in their diversified learner population.

The interview and survey questions are illustrated in Appendices B and C. The codes that were developed from the feedback from both the interviews and the surveys are illustrated in Table 2. Table 3 demonstrates how the incorporated themes from the literature support the codes established from the research feedback. The themes from the literature and the codes from the research data emerged to support the research questions of:

1. How do secondary teachers find value in inclusive education?
2. How could the Universal Design for Learning model impact the educational experiences of secondary inclusive classrooms?

### **Summary**

Despite differences in educational experiences and assignments, the teachers interviewed and surveyed for this case study unanimously agreed on the value of inclusive education, willingness to work in an inclusive classroom with the appropriate supports, and that a teacher's innate capacity to work with students with disabilities is imperative to consider during the planning process prior to implementation of inclusion. Consensus on the UDL model revolves around teacher perception on UDL's viability as a solution to instructional challenges in inclusive classrooms and the importance of teacher participation in continuing education and training on UDL in order to properly implement UDL in their classrooms to support their heterogeneous student population. All the teachers mentioned the importance of administrative support at some point in their interview and noted that lack of administrative support is attached to various challenges experienced in inclusive classrooms with regards to lack of support, resources, and training.

## **Chapter 5: Discussion and Conclusion**

The purpose of Chapter 5 is to summarize this study, review and reflect upon the findings from the research and how these findings positively impact the educational landscape for inclusive education. Key findings related to the literature review as discussed in Chapter 2 are presented through the lens of constructivism which has grounded this study. I conclude this chapter with recommendations for practice, policy and future study.

### **Summary of the Results**

This study was guided by two central research questions:

1. How do secondary teachers perceive the value of inclusive education?
2. How could the Universal Design for Learning model impact the educational environment in secondary inclusive classrooms?

These questions were conceptualized with the intent to discover if utilizing the pedagogical practices and principles of the UDL model can improve educational environments in secondary inclusive settings. The interviews and surveys provided forthright and descriptive feedback about the experiences and perceptions of the participants, while the literature used for this study further validates the research findings.

Most of the findings from the interviews that focused on the perceived barriers or the realized challenges that arise in the secondary classroom were presumed well before the research began by the researcher. Because I have over 15 years of teaching experience in both general and special education classrooms with 13 of those years taking place in secondary schools, I have had countless crucial conversations with colleagues who have felt overwhelmed and unsupported as educators who are perpetually having their responsibilities expand and evolve. It has been these conversations as it pertains to the value of cooperatively and cohesively educating students

of varied cognitive levels in a common setting that inspired this case study. Discovering issues that revolve around teacher willingness and welfare to work in an inclusive setting is imperative for implementation to occur with fidelity. The interview questions were written to explore teacher philosophies, feelings, and experiences on working with students with special needs in general education settings with their typical peers. The questions required the participants to reflect upon the value of inclusion and the possibility of educational equity, their willingness to work in an inclusive setting, the importance of teacher capacity to work in inclusive classrooms, and their personal experiences working collaboratively with nontypical and typical learners in a common setting. It also provided a platform for the teachers to openly express what they believe to be the real barriers that stymie the implementation process of inclusive education at the secondary level.

The interview queries focused on possible philosophical or practical reasons why secondary teachers seem resistant to inclusive programming despite all the respondents being pro-inclusion and willing to work in an inclusive classroom. The identified barriers to secondary inclusive education were lack of support, lack of training, student behavior, vast cognitive spectrum, and instructional differentiation, with lack of support and training being the most pervasive issues that deter the implementation process. Lack of support, as identified by the teachers, encompassed lack of administrative support, financial assistance, materials, morale support, and additional support staff to assist in classroom management. Lack of support in context

The post-interview survey offered the teachers the opportunity to reflect upon the identified barriers and to connect how those barriers may be accommodated through the pedagogical practices of the UDL model. The teachers agreed that UDL's principles

accommodate the learning needs of a cognitively diverse population and makes instructional easier to manage. Of the 10 teachers who took the survey, two of them were weary of the certain aspects of UDL. One of them noted that on-going training would be imperative to maintain the proper application of UDL, while another recognized the value of UDL, but expressed concern about its relevance across all content areas.

The results from the research indicated that teachers are willing to work in inclusive settings because they recognize its value for both typical and nontypical students, but they also unanimously acknowledge that certain teachers do not have the capacity to work in inclusive settings. Their willingness to teach in an inclusive setting is conditionally hinged upon administrative support and appropriate instructional training, which includes continuous education on relevant and meaningful pedagogical practices that accommodate a vastly diversified student population. All the teachers agreed that project-based teaching methodologies are a preferred method for teaching a cognitively heterogeneous population, and UDLs principles accommodate all students' learning styles, strengths, and interests, while allowing for a self-paced, student-centric learning environment. The success of secondary inclusive classrooms is contingent on the preparation and preplanning of the program which includes considering who will be teaching and how curriculum will be taught in the inclusion program well before implementation.

## **Discussion of the Results**

### **Results RQ1: How do secondary teachers perceive the value of inclusive education?**

The first research question presented the reflective inquiry regarding teacher perceptions of inclusive education. The question was posed as the primary matter because revelation of teacher perceptions and feelings would help guide the direction of the discovery of relevant

solutions to issues that deter authentic implementation of inclusive programming. The preliminary questionnaire eliminated the concern that lack of knowledge or understanding was a reason for disinterest or disdain for inclusive programming, so the next consideration revolved around teacher philosophies and feelings as a potential reason for resistance to inclusion.

The first question of the interview session asked the respondents to reflect upon their personal feelings on the value of inclusion. Every respondent felt that inclusion was not only advantageous for students with disabilities, but equally beneficial for their nondisabled peers. The teachers observed that where inclusion benefits student with special need in social engagement, academic rigor, and access to age appropriate activities, they noted that typical students gain greater patience, compassion, and empathy. The fact that every interviewed teacher recognized the value of inclusion for all students demonstrates that professional ideologies or personal feelings themselves are not the cause for teacher resistance to the inclusive practices. Simply put, the secondary teachers interviewed for this study feel good about inclusive education and are willing, despite current job assignment, to work in an inclusive classroom with the one stipulation of increased support and availability of training.

### **Results RQ2: How could the Universal Design for Learning model impact the educational environment in secondary inclusive classrooms?**

During the interviews, the respondents were asked what barriers they thought hampers the implementation process of inclusive education. Since all the respondents found value in inclusive education for all secondary students, outside elements were considered, such as being tasked with the additional responsibility of managing paperwork, differentiation of curriculum, instruction, and assessments. The teacher respondents identified the greatest barriers to inclusion as increased instructional differentiation, lack of support (i.e., administrative, resources,

financial, morale, and additional staffing), lack of training, student behaviors, and vast cognitive levels. This correlated with the findings from a report by Skaalvik and Skaalvik (2016) when they noted that lack of teacher efficacy is exasperated by lack of administrative support, value conflicts, and low student motivation, which leads many teachers to permanently leave the profession.

Lack of support included the manners in which teachers feel under- or unsupported in their profession, not just in the inclusive classroom, but in traditional classrooms as well. The teachers reflected that an inclusive program is going to require more support, both human resources and material resources, as well as administrative support, and that the lack of these supports impede the implementation process of inclusion and the willingness of teachers who feel positively about inclusion to work in an inclusive classroom. Lack of training, on the other hand, encompassed the barriers of instructional differentiation, vast cognitive spectrum, and student behaviors, so the overarching barriers of lack of support and lack of training illuminated the primary reasons why there is a resistance to inclusion.

Saldaña 2009) referred to the process of analytical memo taking as a component of qualitative data analysis. This refers to the researcher considering not only what the respondent states during the interview or survey, but mannerisms, vocal inflections, or emotional reactions displayed during the exchange. Saldaña noted that the analytic memo is an uncensored and permissibly messy opportunity to let the flow and ideas emerge organically, allowing the researcher to consider the overall tone of the interview instead of using the words as the only element of the interview. Noting the befuddlement, frustration, or anger that each teacher was feeling during the discussion about barriers to inclusion, especially in relation to lack of

administrative support, demonstrated the need to identify lack of support as a primary category and a dominant code.

The irony that lack of training was identified as a predominant issue in a professional entity based around the promotion of knowledge acquisition was not lost on the teacher respondents. Korey remarked during our interview that it is astounding that the profession of education struggles with professional development and training. He stated,

Training is most important to me and I'm sure training needs to be continuous because I don't think you should have training one time in then think, "Okay, I'm good. This is all I need to be able to do my job right." I think of other professions such as lawyers and doctors who are constantly going through training and continuous education in order to stay current and relevant. They are constantly practicing their profession, so when it comes to special education, I feel like the same expectations need to be in place for us. Teachers need to continually go through if not twice a year, at least once a year, some type of training that revolves around instructional practices. And yes, I think it is possible to do this. It may be challenging without a doubt, but teachers must have the resources and education to be successful and feel good about their ability to reach all students.

Since lack of training is connected to learning how to execute instructional differentiation, meeting the needs of a vastly diversified student population, and managing student behaviors, promoting appropriate pedagogical practices through professional developments has been identified as a relevant solution. The pedagogical practices of the Universal Design for Learning model were observed through a video during the survey, allowing the teacher respondents to reflect how the principles of UDL accommodate the recognized barriers to inclusion.



The teachers who completed the survey all agreed that the principles that guide UDL can effectively accommodate the learning needs of a diverse student population and assist in classroom management concerns. Only two of the teachers had reservations regarding UDLs adaptability to certain subject matters and the amount of on-going training needed to assist in the proper implementation of the UDL model. The teacher responses ranged from highly enthusiastic to exceptionally hopeful regarding the flexibility of UDL in the areas of student learning as it pertains to expression and engagement and teacher instructional practices. All the respondents said they would be willing to work in an inclusive setting if UDL practices were supported by the district through ongoing training and necessary teaching materials and resources were provided.

### **Discussion of the Results in Relation to the Literature**

The literature used for this case study support the feedback received from the interviews and the surveys regarding lack of support for teachers working in inclusive environments and the need for ongoing instructional training that support inclusive classrooms. Finch, Watson, MacGregor, and Precise (2013) noted that special education laws and regulations have increased the prevalence of inclusion within general education settings, thus requiring an increase of training in instructional strategies that support inclusion for general education teachers.

Likewise, Balami (2015) remarked that the educational stakeholders are those who have the responsibility and interest in the implementation of inclusive education at different levels, and the government as an administrator and policy maker is responsible for providing the impetus and support to make inclusive education work. Urton, Wilbert, and Hennemann (2014) continued by noting that the implementation process of establishing a successful inclusive classroom model depends on the support of the district and school, its principal, its teachers, and

its support staff. Inclusion is not simply a task to be performed by teachers, but one that needs to be fortified and supported by every educational entity for successful and long-term implementation to take place.

One study that reflected the reality of teacher willingness to work in inclusive programs despite their teaching assignment or educational setting that is present in my research was written by Kellyman (2014), who reported,

Findings showed that there was no correlation between teachers' self-efficacy and the level of inclusion practices within teaching teams, no difference between general and special education teacher perceptions of shared leadership or decision making, no difference between teacher perceptions of positive inclusion practices, and no statistically significant difference between teacher perceptions of the level of stress (pp 55-56).

Pantic and Florian (2015) stated that educators must honestly reflect upon their attitudes and beliefs about teaching and learning, as well as on their teaching method, and how they respond when their students encounter barriers to learning. This study indicated that teacher willingness to work in secondary inclusive classrooms is present, but willingness is not enough to take inclusive practices to the implementation state. Through greater comprehension and familiarity of both the legal and the practical aspects of educating children with disabilities, teachers can find increased comfort and confidence in working with a broader spectrum of learners, knowing that they are appropriately supporting every child towards intellectual, functional, and social growth. Thoroughly examining the reasoning behind LRE, considering the ethical purpose of inclusive education, and utilizing instructional programs such as UDL as a pedagogical answer to successfully meeting the needs of an intellectually diverse student

population is key to tearing down the ideological walls of teacher perception and attitudes towards students with special needs.

Because the principles of UDL support educational differentiation in the classroom, students who usually become frustrated during instructional time due to a lack of comprehension find themselves actively engaged in their own learning experience with increased access to their teachers. Fewer incidents in the classroom not only supports classroom management, but also avoids the loss of instructional time during periods of student misconduct. Nielson (2013) expanded that the pedagogical best practices of UDL used in inclusive classrooms not only improve learning and reduces behavioral issues, but also foster a sense of independence and self-confidence in students. As indicated by the surveyed educators in this study on the benefits of UDL when working with a broad spectrum of learners in a common setting, teachers recognize the instructional flexibility of UDL making it an exceptional program for differentiation purposes.

In addition to increasing student self-esteem, teachers who use UDL feel more confident and comfortable teaching students with special needs because they competently differentiate for learning needs through both their lessons and instructional delivery. Increasing teacher confidence in their ability to write and deliver instruction, while maintaining a holistically supportive learning environment for both typical and nontypical learners is key to both student success and teacher efficacy. McGhie-Richmond and Sung (2013) noted that teachers who apply the UDL framework to their inclusive classroom curriculum programming improve both their lesson plans and their teaching strategies, meeting the needs of all their students, while Zydney and Hasselbring (2014) add that UDLs instructional model is highly valuable when creating adaptable learning environments, such as inclusive classrooms.

Most of the articles about preferred instructional strategies that support inclusive classrooms are typically written by curriculum and instructional specialists who are well-versed in the application of constructivism, differentiation, and project-based learning in classrooms that support a diverse learning population. From differentiation expert Tomlinson to UDL specialists, Fovet and Katz, some of the most highly qualified individuals in the field of curriculum and instruction development are referred to in this paper. These experts do not only propose the importance of experienced teachers using universally appropriate instructional strategies such as UDL when accommodating a vast spectrum of learners in a collaborative setting; they also stress the importance of student success in inclusive settings using the UDL model. Nielsen (2013) reflects that although UDL cannot ensure universal student success, the pedagogical best practices used in the UDL model makes it more likely that higher numbers of students will not only succeed, but will also assimilate and generalize new material in ways that accommodate their strengths and interests, while synthesizing previously learned content with new subject matter.

The focal instructional framework in this study is the Universal Design for Learning model. Noted in an article written by Katz (2013), UDL provides an instructional framework that supports all learning styles while accommodating for most cognitive challenges and that UDL's three block model helps teachers differentiate curriculum and instructional delivery in a manner that best supports each student, especially in inclusive settings. Black et al. (2015) reported that UDL does not only support the needs of learners with special needs, but it builds confidence and diminishes the stigmas attached to disabilities, verifying that UDL is not only an effective strategy to deliver instruction, but a compassionate way to support vulnerable learners. Al-Azawei, Serenelli, and Lundquist (2015) corroborated the validity of the findings, noting that the

UDL framework is increasingly drawing the attention of researchers and educators as an effective solution for filling the gap between learner ability and individual differences. The research used to support the findings of these reports are based on years of data collection, observation, and feedback, and are supported by research-based instructional practices.

As noted earlier, one of the predominant barriers to inclusion and the greatest concern for teachers wanting to learn how to apply the UDL model in their classroom is lack of teacher training. Dixon, Yssel, and McConnell (2014) reported that teachers are more willing to work in an inclusive classroom and will perform tasks such as differentiating curriculum, adapt their instructional practices, and utilize nontraditional assessments when they are adequately trained in the use of UDL through ongoing professional development. They also noted that students perform better, both socially and academically, when teachers attend continuous training in the principles of UDL. This observation suggests that when teachers are more confident in their abilities to appropriately educate a diverse learner population, student self-efficacy is positively impacted in multiple areas.

### **Limitations**

Limitations refer to potential and predicted weaknesses in the study. The limitations for this study for consideration included the small sampling size, cultural biases, personal relationships, and transferability.

#### **Small Research Sample**

This study was limited to the experiences of a small sample of 12 educators from a common area in a large, high-income suburban Texas district. This case study yielded data through interviews and surveys. The information gathered from the interviews and surveys reflect upon each participant's experiences, not those of all teachers, so the findings are bound

only to the information and experiences of the participants within the small study sample. The accuracy of each participants' contributions depended on the reliability of their forthrightness and candor during both the interviews and surveys as well as their willingness to fully engage in the interview process and the subsequent survey.

### **Biases Held by Those of the Culture of Academia**

Prior to the interviews and surveys, I considered the culture of academia and the prejudices that are experienced by individuals whose social value maybe diminished due their low intellectual capacity as my limitation of cultural bias. I was concerned that the partiality of interviewees who work primarily with typical learners may affect their belief system towards the validity of educating individuals with special needs. I assumed that many educators who have little to no engagement with students with special needs may dismiss the growth potential for people with disabilities, leading them to be under the impression that the education of students with special needs is either inconsequential or insignificant. I had to consider that the beliefs held by individuals who are accustomed to the rigor of honors coursework or college readiness preparation may lead to dismissiveness of the entire concept of educating students with cognitive, behavioral, or emotional deficits.

The findings from the research indicated that cultural bias does not necessarily interfere with the promotion of inclusive education. Job assignment, gender, and ethnicity seemingly played no role in determining teacher opinions on the value of inclusion or teacher willingness to work in an inclusive classroom as demonstrated by the small sample of teachers interviewed and surveyed for this case study.

### **Prior Personal/Professional Relationship with Researcher**

The interviewees have either a professional or personal relationship with the researcher. The researcher has known all the interviewees at least three years and is aware of the basic educational philosophies held by each interviewee. The interviews were not impacted or effected by the acquaintance between the interviewer and the teacher respondents, with the personal relationships fostering a sense of ease during the one-on-one interviews, allowing the teachers to feel comfortable enough to be open and honest in their responses.

Unfortunately, many of the teachers originally invited to participate in the preliminary phase of the research eliminated themselves from selection by dismissing the questionnaire despite their previous commitment to take part in this study. The personal relationship with the researcher may have impacted the teachers' forthrightness regarding the overt action of accepting the invitation, but their passive response of snubbing the questionnaire demonstrated their true feelings towards the study and its subject matter.

### **Transferability**

The information gathered during the interviews determine the perceived academic challenges and philosophical barriers that hamper the process of implementing inclusive education, but the feedback does not directly determine the validity of the researcher's argument that educational frameworks such as the UDL to improve teacher efficacy. The surveys that were taken by the teacher respondents after their interview touched upon the principles employed by project-based, student-centric instructional practices as well as introduce the UDL model, allowing the participants to reflectively reframe the idea of supportive interventions in secondary inclusive settings. This does not mean that the teachers' recognition of the credibility of UDL means that the same teachers will implement this instructional model, especially since a few of

them note that using UDL properly means ongoing training, which if not offered by the district, makes using UDL inconsequential.

The transferability of UDL as a relevant instructional practice for inclusive setting with regards to the applicability of its principles does not promise the success of every student in an inclusive classroom. As Nielsen (2013) notes that although UDL cannot ensure universal student success, the pedagogical best practices used in the UDL model makes it more likely that higher numbers of students will not only succeed as students, but also grow as learners. The promise of success is only ensured with both proper teacher implementation and student willingness to participate in the learning process.

### **Implications of the Results for Practice, Policy, and Theory**

In this section, I discussed the implications of the results in context of practice, policy, and theory. I relate the results to the conceptual framework, constructivism, and explain implications of this study in relation to the case study research, policy, and in connection to the literature. The results explained in this section are based on information gathered from this research and past reports that support the findings of this case study.

#### **Practice**

As discussed in both the supporting literature and the findings from the case study research, inclusive education is only as sustainable as the group of people charged with the preplanning and preparation process prior to implementation. Simply deciding that an initiative as complex and calculated as inclusion is worthy of implementation and then mandating its enactment is not where the responsibility of administration ends. Deciding inclusive education's worthiness to the degree that it is mandated is the beginning, not the end, of the accountability element for district, state, or federal level educational administrators. Armstrong, Armstrong, and



Barton (2016) noted that policy making and legislation in education has failed to bring about changes in structure or practice that could fundamentally transform schools on the grounds of disability or difference. The lawmakers, politicians, superintendents, and principals' culpability to promote and provide ethical educational equity through inclusive programming is tied to their continued engagement with the teachers and students directly impacted by the success of the program during its development. Their support, both fiscal and morale, are imperative for the success of inclusive education and nowhere is their support more needed than during the planning process.

From on-going training to consideration of classroom staffing, the leaders in education are the frontline to making the potential success of inclusion a reality. In a study on the relevance of administrative support, Katz and Sugden (2013) verified the belief that it is imperative for executive staff to become actively involved in the planning and organizing process of utilizing a campus-wide initiative such as UDL for the program to be implemented appropriately. Jackson noted during our interview that he felt that administrative support is the most important thing when a teacher works in an inclusive classroom because there are always learning curves and knowing that administrators are supporting you makes a teacher less fearful about making mistakes.

Laura had the most interesting response to the relevance of appropriate instructional practices in inclusive classrooms and the importance of preparing teachers to use pedagogical models like UDL to support a spectrum of learners and increase educator confidence in teaching a diverse learning community. She compared the accommodative aspects of UDL in inclusive classrooms with the Air Force's teaching practices for pilots on jets that are universally manageable. She responded,

This issue reminds me of how the Air Force managed their flight training for pilots who had varied levels of expertise. The Air Force had to plan to meet the needs of all different types of pilots. By making the jets universally accessible with items we use today like sliding seats and moving controls, all pilots were able to fly the same mass-produced jets. I feel the same principal needs to be applied to curriculum in the classroom, there is no average student. You need to plan for the highest extreme and the lowest extreme to meet the needs of the students. I feel that this will streamline the process and save teachers time. Teachers and students wouldn't have to remediate and plan on corrections and additional tutoring. They could work on learning new materials and producing new products and applying the learning and concepts in real world settings, instead of fixing grades and catching up.

Being a campus team leader with experience as a special education teacher, Laura has a unique perspective. As the campus team leader for special education, she oversees the management and maintenance of student IEPs in both general and special education settings, and her frequent conversations with all teachers revolve around their frustration about excessive paperwork, data collection, and documentation. By using more accommodating instructional practices that allow independent learners to work autonomously while providing more opportunities for dependent learners to participate in small group instruction and one-on-one tutorials, UDL offers the more streamlined instructional process in diverse classrooms that Laura mentioned.

The burden of ensuring the thorough and appropriate implementation of inclusion, including the methods of instruction, cannot rest solely on the shoulders of the classroom teachers charged with the responsibility of educating typical and nontypical students inclusively but needs to be embraced by every person and entity invested in educational equity. Policies

must be reinforced with planning and preparations made by those individuals who have the power to enact change and to supply the funding, resources, and training in order to make the change both possible and meaningful.

### **Policy Makers**

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) reports that the World Declaration on Education for All, adopted in Jomtien, Thailand (1990), developed an overall mission regarding universalizing access to education for all children and adults, while promoting equity. This means being proactive in recognizing the barriers that many contend with regarding access to all academic, social, and functional opportunities, while determining what resources are needed to appropriately overcome those barriers as an overall principle. The report also deems inclusive practices as a moral compass for the establishment of worldwide educational policies and practices due to the ethical truth that education is a basic human right and the foundation for a fairer society (2009). Ralabate et al. (2012) summed up the sentiment expressed by the teachers in this study best by noting, “The nation’s challenge is not to change the students, but rather to redesign, adapt and personalize curricula and instructional methods and create a learning environment that helps each student develop his or her full potential”.

Using traditional teaching methodologies is ineffective and obsolete in today’s diversified classrooms. Considering the diversity of a typical classroom as it relates to student ethnicities, cultures, language barriers, familial lifestyles, and individual experiences, the addition of cognitive variances make evidence-based teaching practices, such as the UDL model, more accommodating and appropriate as teachers attempt to reach students on a wide intellectual spectrum. Kirby explains,

Evidence-based practices serve as a mechanism to steer teachers in their instructional decision-making. Resources empower teachers and those who develop curriculum to choose interventions that meet the needs of their students. When all students are included in the general education classroom the instructional decision-making will need to be differentiated for each learner. By utilizing universal design for learning (UDL), teachers can reach each student in a manner that will help them to be successful. UDL expands content accessibility by meeting the unique needs of students with varying backgrounds, styles, and abilities. (2016, p. 187)

As initiatives such as inclusion are mandated into educational policy, relevant and meaningful solutions need to be instituted as a compassionate component of thorough implementation. It is neither adequate or ethical to simply institutionalize an initiative without a relevant plan to assist in the implementation process.

Ralabate et al. (2012) continued that policy makers interested in leveraging additional dollars to support lasting positive change may therefore look to UDL as a potential high-impact strategy. By incorporating evidence-based pedagogical practices as a component of the enactment of inclusive education demonstrates not only a commitment to educational equity but to ethical consideration for those charged with the responsibility of servicing students utilizing the program. Since student success is highly contingent on teacher self-efficacy, finding ways to empathetically support educators needs to be made a top priority and not an after-thought.

### **Constructivist Learning Theory**

The results of this study suggest that both general and special education teachers find value in inclusive education and are willing to work in inclusive classrooms when appropriate instructional training is available and continuous. In relation to the conceptual framework of this

case study, which is based around the relevance of the constructivist theory, teachers are interested in becoming more knowledgeable with regards to finding opportunities to accommodate students of various capabilities, experiences, and intellects within a common setting by drawing upon instructional practices that connect new learning with previous experiences. By appropriately and confidently employing the evidence-based pedagogical practices of the UDL model, teachers can manage their inclusive classroom as not only an educator, but as a secure facilitator, mentor, and guide. This security and confidence can only be experienced through ongoing instructional training on UDL which is presently lacking in the Texas district where the case study teacher respondents are employed. This lack of instructional training was identified as one of the greatest barriers to inclusive education, in addition to the lack of support teachers feel when working with a diverse student population that require supplementary resources, extra staffing, and morale support.

The constructivist theory does not only apply to the appropriateness of the instructional methodology for secondary inclusive programs proposed by this study and identified as the preferred pedagogical practice by the surveyed teachers, but as the way educators prefer to be treated as professionals. Teachers are naturally inclined to constructivism since its philosophy is rooted in the ideals that knowledge is power. The area that most of the teachers identified as a barrier to inclusion and the application of UDL was lack of training. Because teachers have an innate thirst for knowledge, professional development and training is not only seen as an opportunity for teachers to indulge their want for knowledge, but it is regarded as a sign of respect when the training is relevant and can be appropriately applied in the classroom. Waitoller and Artiles (2013) researched a decade's worth of data regarding the credibility of teacher training for inclusive education and assessed the importance of professional development as a

relevant component of successful inclusive implementation. They uncovered that the prospects for professional development is a necessary and constructive instrument to improvement policy, especially as it relates to supporting teachers in inclusive programs.

### **Recommendations for Further Research**

Areas for improvement of this study for future researchers is to cast a wider net in a teacher population that is outside of a suburban district that may have significant problems regarding overcrowded classrooms and more severe challenges with lack of resources. As members of a wealthy suburban district, our perception of challenges are skewed compared to urban districts that are struggling with more extreme versions of our own problems. Where Elly, our interviewed art teacher, was frustrated with having up to 35 students within a class, all her students have chairs, abundant workspace, and more than enough art supplies.

Conversely, there are teachers in urban schools managing to teach more than 45 students in a traditional classroom that truly only accommodates 25 students, utilizing outdated, inadequate, or insufficient resources. Teachers who work for districts that are dealing with a depletion of both resources and funding, where teachers are working in classrooms that are already unmanageable due to overcrowding and there is a shortage of support staff that can assist the teachers may have more reservations about the implementation of inclusive education.

### **Areas of Improvement**

To accommodate my colleagues with regards to convenience, while demonstrating respect for their time, I allowed them to take the preliminary questionnaires that examined their understanding of special education and the post-interview surveys on UDL independently. The original plan to invite only 26 teachers to participate was modified with the significant lack of response from colleagues who had earlier agreed to participate in the questionnaire. This

unresponsiveness forced me to widen the pool to 34 teachers, with five of those teachers being colleagues who teach at other campuses within the same district. Of those five, Serena, Mia, and Robert completed the questionnaire and were asked to participate in the study.

I did not realize the lackadaisical approach a few of my peers would have regarding their participation in this study. As noted earlier, of the 34 invited teachers who agreed to participate in the study, only 16 completed the questionnaire by the deadline date, despite numerous reminders. Of the 16 recorded questionnaires, 12 teachers were selected for the interview and the subsequent survey, but of the 12 interviewed teachers, only 10 of the teachers took the survey which gauged the teachers' willingness to use the UDL model in a secondary inclusive program.

I would recommend that researchers using feedback from colleagues who they have a working/personal relationship with rethink giving sovereignty to their research participants. I have contemplated that these teachers agreed to be possible participants and then reconsidered their participation if chosen or they simply dismissed the research as unimportant or irrelevant, but when too much autonomy is given to research participants, at least half of the potential applicants refrain from involvement. A recommendation would be to provide a few dates for participants to select from and give a proctored group session for the participants to take their questionnaires or surveys, eliminating the potential for participants to dismiss their involvement to contribute to all study elements previously agreed to during the earliest stages of the research.

It has occurred to me that if I had received questionnaires from some of the invited teachers who refrained from taking the questionnaire for fear of being chosen as a research participant or due to simple dismissal, I may have gotten a more varied view of inclusion and the use of UDL as an instructional solution. The teachers who chose to take the questionnaire found enough value in inclusion to chance being chosen as a case study participant. Those who

participated in the study have similar traits that belong to educators who are open minded and willing to try nontraditional teaching methods in order to meet the needs of all students. Many of the teachers who were invited to participate in the preliminary questionnaire but chose not to participate hold common philosophies regarding their resistance to working with students with significant disabilities. Because these teachers chose not to make their thoughts and feelings known as a potential contributor to this case study, the feedback I received through the interviews and surveys from the participants who did participate was unbalanced and unrepresentative of the collective teaching profession.

As for the two surveys that were not taken by two of the interviewees, it did not highly impact the feedback, but since Robert is the only advanced placement teacher and Rita has experience as an inclusion and general education teacher, their perception on the relevance of UDL in a secondary inclusive program would have been very beneficial. Robert's feedback would have given me the unique perspective from a teacher who works with senior level honors students potentially working collaboratively with their non-typical peers using the UDL model. Rita could have relayed her perspective based on experiences she has already managed in inclusive settings and if the instructional challenges could have been thwarted using UDL.

Any feedback from experienced educators is valuable. As a researcher, I do not want feedback that aligns with my vision and belief; I want authentic responses that I can use for evaluative purposes in order to promote improvement and relevant resolutions. Whether it is the researcher or the participants attempting to skew feedback from either what is revealed or withheld during questionnaires, interviews, or surveys, research loses its effectiveness when informational transparency is not available or reported.



If I were to design a research study like this again, I would refrain from working with teachers I know either personally or professionally. Instead, I would survey teachers from other schools and from other districts that offer a more diverse teacher demographic to determine if demographics impact feedback or if teacher willingness to participate in the study would increase due to a lack of relationship with the researcher. After experiencing the unforeseen challenges that came with getting the teachers, who previously agreed to take part in the initial stage of the study, to simply complete the questionnaire, I believe that not knowing your participants could potentially yield greater responsiveness and forthrightness.

### **Additional Recommendations**

Another recommendation I would make, if I were to advise a fellow researcher interested in this topic, is to interview more teachers from multiple districts with at least one urban, one suburban, and one rural school district being represented. It would be interesting to compare the feedback from teachers working in a variety of demographic settings, managing different challenges, and seeing how they perceive the value of inclusive education and their willingness to work in an inclusive setting if trained in the use of the UDL model. It would also be interesting to consider how teachers' perceptions are impacted by the homogeneousness of rural student populations versus the more heterogeneous student populations seen in urban schools.

### **Conclusion**

LRE is not an academic suggestion or a philosophical concept for consideration. It is a mandated component of IDEA and a right promised through the Free and Appropriate Public Education Act since 1973. None of this is new to education, but administrators, districts, and teachers have dragged their collective feet towards the act of implementing inclusion, especially at the secondary level, where teachers are preparing their typical students for their postsecondary

lives as college undergraduates. Secondary teachers are so tied to the ideals attached to rigorous classroom performance and high test scores that they forget the purpose of 21st century learning is to build confident and creative problem-solvers who can acclimate to changing conditions in heterogeneous populations. This research case study divulged that both general and special education teachers find value in inclusive education and are willing to work in secondary inclusive settings with training and appropriate supports.

If secondary teachers are willing to work in inclusive settings and find value in academic inclusive programming for both typical and nontypical students, why are educators resistant to inclusive education, especially at the secondary level? Barriers to inclusive education were presumed to revolve around instructional differentiation, a resistance to working with high needs students, and reservations that student behaviors manifest from needs being unmet by educators who are unfamiliar or unwilling to work with students with special needs. The five primary identified barriers ended up being grouped into one of two categories; either lack of training or lack of support. Lack of training encompassed instructional differentiation, managing student behaviors, and accommodating a vast cognitive learning community, while lack of support comprised lack of administrative support, resources, staffing, and finances. Moral support was a heavily stressed discussion topic with regards to administrators finding opportunities to build up their staff members, especially in high stress environments like inclusive classrooms. As indicated by the tone of over half the respondents, the significance of lack of administrative support is a subject that needs further review, particularly in nontraditional settings that accommodate diverse student populations.

The literature of this dissertation discussed how inclusive education gives students of all cognitive levels the ability to work in a cohesive and collaborative setting and by using UDL as

the instructional model, all students' abilities, strengths, and interests will be employed by a teacher who acts as not a lecturer, but as an educational mentor, facilitator, and coach. It also disclosed that research prove that evidence-based pedagogical practices, such as UDL, build student self-esteem and helps them reach their full potential academically, functionally, and socially. Based on the feedback from this case study's survey, teachers find value in the principles of UDL with regards to instructional differentiation, multiple manners to demonstrate content mastery, and various means of student engagement. The qualitative research methodology used for this case study allowed the teachers to verbalize their feelings, beliefs, and frustrations and then reflectively consider how inclusion at the secondary level can be improved for both students and teachers by using the UDL model.

The research from this study demonstrated that teachers find value in inclusive education and are willing to work in inclusive classrooms when supports are put into place prior to implementation and are maintained throughout the program's tenure. Resistance to inclusive programming has less to do with the students and the increased responsibilities and more with lack of support. Support seemed to be a more inclusive concept regarding teachers feeling a lack of consideration and value from the administrators and the system that mandates and institutionalizes initiatives without considering the needs of those charged with the responsibility of executing them. This study discloses that the issues that befall the implementation of inclusive education have nothing to do with teachers not seeing the value in inclusive education or their willingness to work in inclusive settings, but the lack of value that the education system demonstrates towards classroom teachers.

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## **Appendix A: Preliminary Questionnaire**

Q1. How do you define inclusive education?

Q2. What is the difference between mainstreaming and inclusion?

Q3. What does LRE stand for and how does it impact inclusive education?

Q4. Why is it important to maintain IEP goals, accommodations, and modifications?

Q5. What is IDEA and how does it relate to the maintenance of educational equity for non-typical students?



## **Appendix B: Semistructured Interview Questions**

Q1. What are your feelings (philosophies, ideologies, opinions) about inclusive programming?

(Please be as frank as possible since the purpose of this interview is to determine definable barriers to effectively implementing and sustaining inclusive programming?)

Q2. Which do you think is the greatest barrier to inclusion for other teachers? Does it concern classroom behavior, the spectrum of cognitive levels, instructional differentiation, etc.?

Q3. Explain the difference between instructional differentiation and scaffolding.

Q4. What supports do you believe need to be in place for the successful and sustainable implementation of inclusion to take place?

Q5. Do you believe it is possible to appropriately educate and meet the needs of all students, both typical and non-typical, in an academically inclusive setting with the proper instructional supports?

Q6. Do you believe it is possible to obtain educational equity for all students? Why or why not?

Q7. Do you believe all children have the right to a free and appropriate public education despite the significance or severity of their disabilities? Please explain your response.

Q8. Do you believe that Special Education provides true academic equity for all students?

Q9. Do you believe that certain parameters or expectations must be in place for inclusion to work such as intellectual or behavioral student capacity, pedagogical practices, teacher compensation, professional development, financial investment, or administrative support?

Q10. Do you believe that some teachers do not have the empathy or capacity to appropriately support all students despite having all the necessary curricular and instructional support?

### **Appendix C: Post-Interview Survey**

Q1. The Universal Design for Learning model is an instructional framework that organically builds differentiation and scaffolding into curriculum and instructional practices. UDL is based on research in the learning and brain sciences that guides the development of flexible learning environments, accommodating individual learning differences, giftedness, and areas of interest. After the initial lesson is given, teachers act as facilitators, with students taking greater control of their education by having the autonomy to choose how they will demonstrate understanding of the content. Have you ever used the UDL model? If you have not, would you be interested in learning more about it? If you have used it, explain your experiences. (Please qualify your answers with reflective responses.)

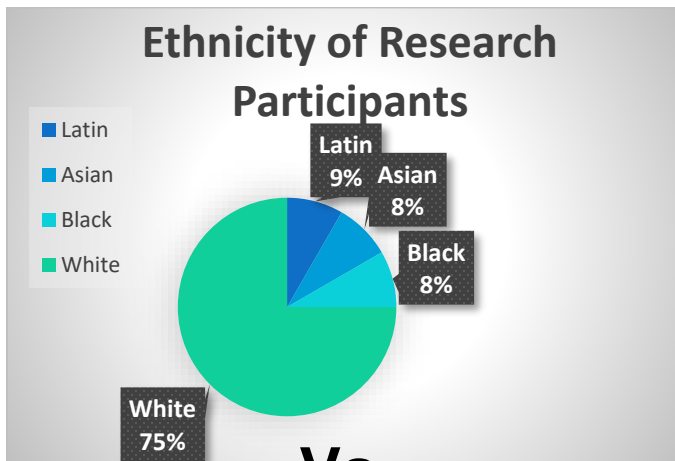
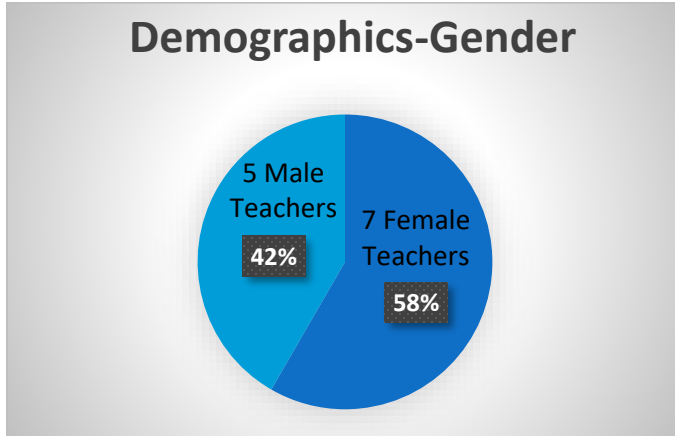
Q2. Project-based instructional practices devalue the promotion of "pen and paper" assessments in lieu of promoting individualized learning opportunities using relevant, but diversified, assignments choices. Is this something you currently use in your classroom? Why or why not?

Q3. Watch this video about UDL and consider what is being said about the marginalized student in traditional classrooms. Now consider how UDL could be used in an inclusive classroom. Do you think it is a viable option for an increase in both teacher and student efficacy? Why or why not.

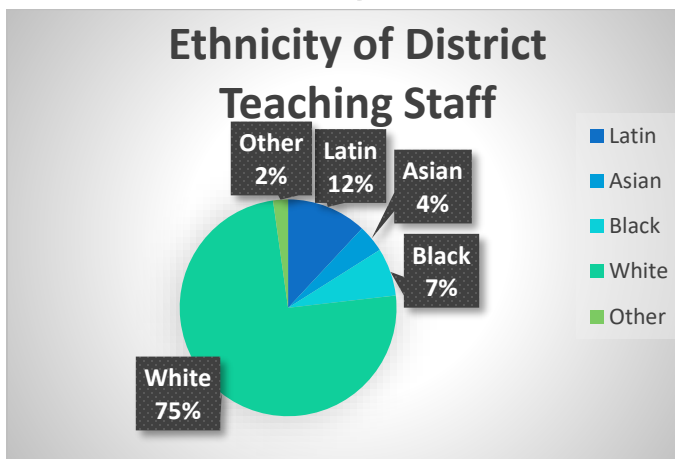
Q4. Project-based, student-centric educational practices allows for the instructor to work as facilitator and consultant for their students. In teacher-centric classrooms, the students become dependent on the teacher to provide insight and answers, lessening their ability to think critically and creatively. In project-based programs, students learn through self-discovery, hands-on experiences at a pace that is appropriate for each student. How do you feel about this type of program in your classroom?

Q5. If professional development and on-going training on the implementation of the UDL method was available in your district, would you be willing to attend these trainings? Why or why not?

## Appendix D: Participants' Demographic Information

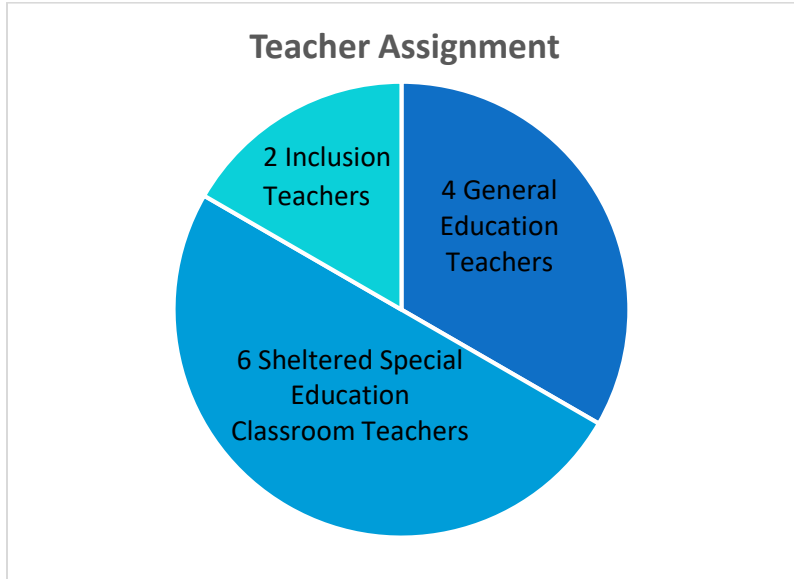


**Vs**



(Public records taken from the Texas Tribune, 2018)

## Appendix E: Teaching Assignments of Study Participants



## **Appendix F: Participant Consent to Interview**

**Research Study Title:** Utilizing the Universal Design for Learning Model to Improve Educational Environments in Secondary Inclusive Classrooms

**Principal Investigator:** Robyn Delahunt

**Research Institution:** Concordia University, Portland, OR

**Faculty Advisor:** Dr. Edward Kim

### **Purpose and what you will be doing:**

The purpose of this survey is to discover if the resistance to inclusive education is due to teacher attitudes or philosophies regarding individuals with special needs, and if these concerns or attitudes can be altered with more supportive instructional practices that organically foster differentiation in order to accommodate inclusive educational setting. We expect approximately 26 volunteers, with 12 being selected for the final interview phase. No one will be financially compensated for their participation in this study. We will begin recruitment on October 19, 2018 and end enrollment on October 23, 2018. To be qualified to be considered for this study, you will need to be an experienced educator with at least three years of service in a public school, currently working as a secondary teacher, and have worked with students with special educational needs. You will also need to be willing to complete a questionnaire through Qualtrics that assesses your understanding of special education law, its purpose, and verbiage. The questionnaire should take no longer than 30 minutes to complete. Once the questionnaires have been evaluated you will be contacted by email informing you of your participation status. The interviews will last between 45 minutes to one hour. Upon completion of the interview, you will be asked to complete a short survey on the Qualtrics site that proposes reflective questions about the instructional strategies of Universal Design for Learning model. Completing these tasks should take less than two cumulative hours of your time.

### **Risks:**

There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept securely via electronic encryption or locked inside a password protected zip drive on my personal computer. When we or any of our investigators look at the data, none of the data will have your name or identifying information. We will only use a secret code to analyze the data. We will not identify you in any publication or report. All information will be kept private and all study documents will be destroyed 3 years after we conclude this study.

### **Benefits:**

Information you provide will help the educational community better understand the real reservations that impede the implementation of inclusive education at the secondary level so that relevant and meaningful interventions can be employed with fidelity. You could benefit from your participation by knowing that you contributed to the betterment of both the academic and sociological growth of all students served in the public-school system as well as building greater educational equity and efficacy for everyone utilizing inclusive practices.

**Confidentiality:**

This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us abuse or neglect that makes us seriously concerned for your immediate health and safety.

**Right to Withdraw:**

Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, we will stop asking you questions.

**Contact Information:**

You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Robyn Delahunt at email [redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch at [obranh@cu-portland.edu](mailto:obranh@cu-portland.edu) or call 503-493-6390.

**Your Statement of Consent:**

I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Participant Printed Name

\_\_\_\_\_  
Investigator Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Investigator Printed Name



Investigator: Robyn Delahunt, M.Ed.  
Email: [redacted]  
c/o: Professor Dr. Edward H. Kim, Ph.D.  
Concordia University – Portland  
2811 NE Holman Street  
Portland, Oregon 97221

## **Appendix G: Statement of Original Work**

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

### **Statement of academic integrity.**

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

### **Explanations:**

#### ***What does “fraudulent” mean?***

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

#### ***What is “unauthorized” assistance?***

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.



**Statement of Original Work (cont.)**

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources have been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the Publication Manual of The American Psychological Association

Robyn A. Delahunt

Digital Signature

Robyn A. Delahunt  
Name (Typed)

4/30/2019  
Date