GENERAL EDUCATION TEACHERS’ PERSPECTIVE OF DIFFERENTIATED INSTRUCTION IN THE INCLUSIVE CLASSROOM

A Thesis
Presented to the
Faculty of
California State Polytechnic University, Pomona

In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts
In
Education

By
Benny Heredia
2021
SIGNATURE PAGE

THESIS: TEACHER PERSPECTIVE OF DIFFERENTIATED INSTRUCTION IN THE INCLUSIVE CLASSROOM

AUTHOR: Benny Heredia

DATE SUBMITTED: Summer 2021

Department of Education

Dr. Richard Navarro,
Thesis Committee Chair
Professor of Education

Dr. Sara Werner Juárez,
Assistant Professor of Special Education

Dr. Marisa Palacios,
Director Student Services
Alhambra Unified School District
ACKNOWLEDGEMENTS

As a child, I would envision many pathways. One of them always stood strong, in large because of my innate capacity to be a servant leader; devoting time to the well-being of others. And as I reflect, not much has really changed, from that perspective. However, during the last two years a number of events shifted my livelihood. One such event was the death of a younger brother (of which I still struggle with), and my father’s well-being, it too has had an effect on my livelihood. Yet, there are events that have been instrumental.

This thesis is one such event. Though it has been a challenge, I could not have done it without the support of a number of people.

First, I give glory to The All Mighty, because without Him, nothing is. Secondly, to Dr. Navarro, thank you for accepting me and reaching out. To my friend Lupe who pushed me and simply has been a friend. To my immediate micro-society; my family. They have truly been the rock upon which I rest. To Dr Juarez, for accepting to be on the review committee. To Dr Palacios, thank you. To all the professors at Cal Poly Pomona, who, on a day to day basis keep the torch of teaching lit, in the name of education and formation.
ABSTRACT

Special Education has seen its share of events shaping it into today’s arena. Civil Rights movements impacted legislative change, giving rise to policies such as Public Law 94-142, or the Education for All Handicapped Children Act of 1975. It set the stage for procedural safeguards for children with disabilities and is the foundation upon which current special education practices rest. The current Individuals with Disabilities Education Act (IDEA, 2004) mandates all students with disabilities be placed in the least restrictive environment to the maximum extent possible with general education students.

At the secondary level, this mandate challenges general education teachers, to use differentiated instruction (DI) best practices to provide an equitable education, for students with disabilities (SWD). The purpose of this study was to understand the general education teacher’s perception of DI, how they practice DI in the classroom, and the supports needed for DI to be effective as possible for academic achievement, for students with learning disabilities. The data collection included, interviews with six general education teachers: three social science and three science teachers. The results showed that while all six teachers knew the principles and components of differentiated instruction, some common themes emerged that curtailed the depth of its application.
# TABLE OF CONTENTS

SIGNATURE PAGE ........................................................................................................... ii

ACKNOWLEDGEMENTS .............................................................................................. iii

ABSTRACT ...................................................................................................................... iv

LIST OF TABLES ........................................................................................................... vii

LIST OF FIGURES ....................................................................................................... viii

CHAPTER 1: INTRODUCTION ...................................................................................... 1

  Statement of Problem ............................................................................................... 8

  Purpose of the Study ................................................................................................. 11

  Research Questions ................................................................................................. 11

  Terms ......................................................................................................................... 12

CHAPTER 2: LITERATURE REVIEW ............................................................................ 14

  Historical Background .............................................................................................. 14

  Effective Learning through Facilitating .................................................................. 19

  Differentiated Instruction ......................................................................................... 21

  Differentiating by Content ....................................................................................... 22

  Differentiation by Process ....................................................................................... 22

  Differentiation by Product ....................................................................................... 22

  Theoretical/Conceptual Framework ......................................................................... 29

  Summary .................................................................................................................. 29

CHAPTER 3: METHODOLOGY .................................................................................... 30

  Research Questions .................................................................................................. 31

  Setting ....................................................................................................................... 31

  High School X ........................................................................................................ 32
LIST OF TABLES

Table 5.1 Guidelines for Successfully Differentiating Instruction in Inclusive Classroom

........................................................................................................................................52
LIST OF FIGURES

Figure 1: Co-Teaching Approaches ................................................................. 5

Figure 2: Concept Map for Differentiated Instruction ...................................... 24
CHAPTER 1: INTRODUCTION

Education is an ever-changing process. Incrementally, it adjusts according to the trends in our society and current education reform ideas. Before the passage of the Education for All Handicapped Children Act of 1975 (PL 94-142), children with disabilities were predominately denied free public education and were subject to inequalities by public schools. Leading to PL 94-142 was the Elementary and Secondary Education Act (ESEA) of 1965, which created special education centers. One year later (1966), Congress amended ESEA to include a grant program that would help states with the "initiation, expansion, and improvement of programs and projects…for the education of handicapped children" (Wright & Wright, 2020, p. 13). Then in 1970, the ESEA was reauthorized to reflect education for students with disabilities and to receive related services necessary to progress. On January 8, 2002, the No Child Left Behind Act (NCLB), or Public Law 107-110, was signed into law by President George W. Bush, which ushered a new wave of educational reform ideas (NCLB, 2002). The hallmark features of this legislation compelled states to conduct annual student assessments, associated with state standards based on making Adequate Yearly Progress (AYP). As a result of these yearly progress reports, students were expected to achieve a predetermined level of proficiency. And even though the act was promising, it rattled the education field with many undesirable and unintentional problems (Darling-Hammond, 2007).

One such problem was the urgency to place students who receive special education services alongside their peers without disabilities in complex fast-paced general education classes. Yet, the leading reform ideas were centered around accountability, high stakes testing, and choice (Ravitch, 2010). As a result, the emphasis of curriculum leaned heavily
on teaching to standardized tests; especially in the areas of math and reading. Yet, the implementation of the Individuals with Disabilities Education Act of 2004, along with NCLB, stressed inclusive education. NCLB stressed that students with disabilities were to be included in high expectations content and achievement standards, while IDEA leans heavily on a continuum of services based on free and appropriate public education in the least restrictive environment. And though they both call for highly qualified teachers to teach to the heterogeneous population, initial teaching methods continued to reflect teaching to a homogenous student body. Supporting this, is the works of Waldron and McLeskey (2010), stating that “attempts at school reform did not achieve the desired results as teacher classroom practices were seldom changed and student achievement remained stagnant or declined” and “research-based practices have been infrequently used by teachers to improve student outcomes” (pp. 58-70).

President Obama (2010) stated, “the future belongs to the nations that best educate its citizens.” Yet, the question remains, how do we accommodate for the differences between students that are now present in our diverse classrooms and more specifically educating students with disabilities in general education classrooms? Burstein et al., 2004, concluded there is considerable evidence supporting challenges to general education educators. One of those challenges is having the confidence to adequately teach using research-based best practices for students with learning disabilities. According to Mitchell, (2014), some of these best practices are:

• **Behavioral approaches.** Behavioral approaches focus on how events that occur either before (antecedents) or after (consequences) learners engage in a verbal or physical act affect their subsequent behavior.
• **Review and practice.** This requires planning and supervising opportunities for learners to encounter the same skills or concepts on several occasions. It is aimed at helping learners to ‘internalize’ concepts and skills once they have been initially taught. This is particularly the case with basic skills that are taught hierarchically so that success at any level requires the application of knowledge and skills mastered earlier.

• **Direct Instruction.** is a multi-component instructional strategy centering on teacher-directed, explicit, systematic teaching based on scripted lesson plans and frequent assessment. Research studies have consistently shown that Direct Instruction has a positive effect across a range of learners and various subject areas.

• **Cooperative group teaching.** This is based on two main ideas about learning. First, it recognizes that when learners cooperate or collaborate, it has a synergistic effect. In other words, by working together they can often achieve a result that is greater than the sum of their individual efforts or capabilities. Second, it recognizes that a great deal of knowledge is socially constructed; that is, children learn from others in their immediate environments: their families, friendship groups, and classmates.

• **Peer tutoring.** Peers play multiple roles in supporting and teaching each other, a ‘natural’ social relationship that teachers should capitalize on. There is a substantial literature on peer tutoring, i.e., situations in which one learner (the ‘tutor’) provides a learning experience for another learner (the ‘tutee’), under a teacher’s supervision.
- **Memory strategies.** Here, consideration must be given to ways of enhancing primary memory, short-term memory, long-term memory and the executive system. The principal considerations for developing memory skills include mnemonics, motivation, attention, the pacing of lessons, rehearsal, transforming material into mental representations, and chunking. Also, consideration should be given to the relationship between memory and emotions.

Another challenge of inclusion is how to effectively co-teach. Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist to jointly deliver instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs (Friend, 2008). Co-teaching, as a whole embodies strategies for ensuring students with learning disabilities have access to equitable education, however, factors such as a delivery vehicle, inconsistencies in definitions, implementation, and lack of professional preparation make co-teaching challenging. Yet in a recent dissertation by a graduate student at Western University, based on the work of Friend et al, (2010), de Koning (2016) states that there are multiple co-teaching models that if effectively integrated into the general education, contribute promising and equitable education, such as:

1. **One teach-one observes:** one teacher teaches the class and the other teacher gathers data about the students.

2. **Station teaching:** students are divided into groups, teachers work in stations and one group of students work independently.
3. **Parallel teaching**: students are divided into groups teaching the same material and provide differentiation.

4. **Alternative teaching**: one teacher teaches most students and another teacher re-teaches or pre-teaches concepts to another group.

5. **Teaming**: two teachers teach a group of students simultaneously.

6. **One teach - one assist**: one teacher leads instruction and the other teacher provides support to students. (Friend et al., 2010).

![Figure 2 Co-teaching Approaches](image)

The preceding list of best practices and co-teaching models for inclusive education is conceptualized in the learner variability element of Universal Design for Learning (UDL), whose basis stems from the Information Age, and proposes the design of general education curriculum be as multi-faceted as possible in anticipation to the multi-learning student unique needs (Leinenbach & Corey, 2004). Also, according to the research by Hartman (2015), learner variability simply states, students’ varying abilities, preferences, cultures, languages, and experiences affect how they learn. Though UDL is not the main focus of this research, it is worth mentioning, as UDL principles refer to the learning process of the general education curriculum being optimized (Hartman, 2015). Also, UDL embodies flexibility, where a variety of teaching methods, can be explored to meet the challenges of inclusive classrooms using differentiated instruction.

Differentiated instruction, leans on the idea of constructing curriculum that emphasizes learner variability yet is elastic enough to adjust to student learners’ needs in accordance to their learning level (Tomlinson, 1999). Also, Tomlinson, (2001) states, differentiation takes place when teachers reach out to students by varying the teaching and ultimately creating a learning environment conducive to positive learning experience. She also argues that differentiation is not associated with one size fits all.

Though there exists a plethora of information about differentiated instruction, general education teachers at the secondary level feel inadequately prepared to meet the needs of students with disabilities, much less effectively collaborate with special education teachers in the inclusive class to systematically develop curriculum that supports students with disabilities’ needs according to Individualized Education Plan (IEP). Kilanowski et al. (2010), concluded that inclusive practices tend to vary in terms of application in the general education classroom. They state that the implementation of instructional practices for
students with and without disabilities can be a daunting task. Furthermore, the unique knowledge base of special educators is subject to push-in services in the general education classroom on limited time basis to assist students with goals outlined in their IEP’s. As a result, general education teachers find themselves frustrated with inclusion and feel inclusion fails to be a successful model, due to lack of best practices and clarity of inclusive practices by school leaders (Kilanowski et al. 2010).

Almazan (2009), describes the IEP as, “the heart of the IDEA entitlement”. She also states that “it encompasses the special education and related services that a local school system must provide to a student with a disability so the student can: benefit from his or her education, progress in the general curriculum, and have the opportunity to be educated alongside students without disabilities” (p. 6). It also makes the general education teacher part of a core IEP team, composed of special education teachers and other specialists. The main role of the team is to follow the goals outlined in the IEP. The fundamental framework of the IEP outlines differentiating instruction to meet the educational needs of students, as well as meeting the legal obligation expressed in the IEP. Given that learning disabilities vary from student to student, differentiated instruction must be rendered while mainstreamed in the least restrictive environment as a tool to support the IEP goals.

Mainstreaming students with cognitive and physical disabilities has not been without controversy in the American public education system. The Education for All Handicapped Children Act of 1975 (PL 94-142) and associated judicial decisions have directed the assignment of handicapped students to the least restrictive environment (Madden and Slavin, 1983). Traditionally, mainstreaming required rethinking placement for all students with disabilities, as a means to overcome barriers such as “lack of an
effective process for linking students’ IEP objective to the general curriculum” (Sullivan, 2003 p. 48). As a result, today, mainstreaming is considered part of the inclusionary approach on the basis of least restrictive environment. Here students receive differentiated instruction to meet their learning needs and are not subject to pull-out services. Furthermore, students with disabilities receive a continuum of services, set in place by the IEP team. To this, I add a quote from parent and author Snow, (2008) who stated, “our society is enriched by the diversity of its people. Individuals with disabilities can and should contribute to this richness, and inclusion is the way to make it happen” (p. 3).

Statement of the Problem

For many years, the topic of inclusion has been center-stage of educational realms. Consequently, IDEA was developed with the intent of providing an equitable education for students with disabilities, as a result, the California Department of Education mandates all school districts to include students with mild to moderate learning disabilities in the general education setting or Least Restrictive Environment. Unfortunately, general education teachers predominately lack best practices knowledge to teach students with disabilities in the inclusive classroom. As a result, inclusion and least restrictive environment are met with mixed teacher perceptions. For example, one study states, that teachers in the United States agreed, “most general education teachers lack an appropriate knowledge base to educate students with disabilities, effectively” (Hyunjeong et al., 2014, p. 17). Sovgir (2017), found that new and experienced teachers have voiced that professional development in inclusion needs to be offered for them to be more prepared to teach students with disabilities. And even though some teachers welcome
inclusion, they still do not agree with the model due to their lack of understanding and training with inclusion (Ross-Hill, 2009).

Individuals with Disabilities Education Act (IDEA), mandates that students with mild to moderate disabilities be placed in the least restrictive environment (LRE) and afforded a Free and Appropriate Public Education (FAPE) to “the maximum extent possible in the general education setting” (IDEA, 2004). IDEA establishes a legal framework to place students with mild to moderate disabilities in an LRE but leaves the application process abstract and up to the districts to interpret.

Story (2020) found that student placements within a district as well as across districts vary greatly. For example, Story (2020) indicates that “District A may decide that the LRE for a specific student is one hundred percent of the time in a general classroom with appropriate supports. That same student can move to another district near District A, the other district may decide the LRE is a placement in a classroom serving only other students with disabilities” (p.10). These two scenarios showcase how the placement of students with disabilities can fluctuate between school districts and Special Education Local Planning Agencies (SELPA).

Generally speaking, the secondary curriculum is driven by content in which general education teachers are considered specialists. As a result, students with learning disabilities are prone to academic setbacks and downgrading their self-esteem which can promote dropping out of school (Batchelor, 2012). Consequently, there is a need for the general education and special education teacher to identify the role each will be responsible for in the education of students with disabilities in the inclusion classroom.
The foundation to IDEA 2004, is PL 94-142 of 1975, the Education for All Handicapped Children Act, guaranteed a free and appropriate public education (FAPE) Ultimately, families of students with disabilities are free from financial obligations to receive a continuum of services (Kafer, 2002). However, due to discrepancies related to the interpretation, the LRE mandate is debated on the basis of what is the best fit setting for students with disabilities to be educated in. Neither the law nor its regulations outline a straightforward approach of how school districts are to determine the least restrictive environment; causing uncertainty and conflicts over interpretations of LRE; these conflicts have resulted in some court cases that have clarified the meaning of the mandate. The United States Courts of Appeals for the 3rd, 5th, 9th, and 11th circuits have issued rulings in cases concerning the LRE mandate (Yell, 1995).

Ultimately, schools like this southern California high school strive to establish a learning environment of least restriction. Unfortunately, this study found teachers who participated in the study do not feel fully prepared to teach students with special needs in their general education setting. Nonetheless, the teachers are expected to differentiate instruction to meet the educational goals of students with disabilities in the least restrictive environment.

In Hyunjeong et al., 2014, the study discloses teachers do not feel confident enough to effectively teach students with special needs. Furthermore, in his study, Sovgir, 2017, outlines two barriers to developing meaningful inclusive learning. One is relevant professional development and secondly, time for collaboration; both adding to the problem of secondary education teachers feeling fully equipped on how to differentiate.
Since the enactment of PL 94-142 and the reauthorization of IDEA (2004), considerable progress has been made, however, there continues to be an ongoing debate in regards to the LRE mandate; most notably the setting in which students with learning disabilities should be educated. Commonly, the absence of defined expectations of how to best provide services to students with mild to moderate learning disabilities in the general education setting is what makes successful inclusion and differentiated instruction difficult.

**Purpose of the Study**

According to IDEA (2004), students with disabilities are to participate to the maximum (usually at least 80% of their day) extent in the general education environment. However, there is no straightforward process of implementing the mandate. In fact, at the secondary level, there are gaps between philosophical and practical implementation. According to Bintz, (1997), secondary teachers are regarded as content specialists and at times find it problematic to view the entire development of the student. They are caught between the lines of meeting the needs of students with learning disabilities while having to attend the general education students. The purpose of this study is to not generalize but understand the teachers’ perspective of differentiated instruction as a tool to meet the needs of students with mild to moderate learning disabilities, in the least restrictive environment.

**Research Questions**

1. What are the general education high school teachers’ perceptions of differentiated instruction?

2. How do general education teachers practice differentiated instruction to meet the learning needs of students with mild to moderate learning disabilities in the least
restrictive environment?

3. What supports do the teachers believe are needed for differentiated instruction to be effective in the least restrictive environment?

Terms

**Differentiated Instruction:** Tomlinson (2005), a leading expert in this field, defines differentiated instruction as a philosophy of teaching that is based on the premise that students learn best when their teachers accommodate the differences in their readiness levels, interests, and learning profiles. A chief objective of differentiated instruction is to take full advantage of every student’s ability to learn (Tomlinson, 2001a, 2001c, 2004c, 2005). Also, she points out that differentiating can be performed in a variety of ways, and if teachers are willing to use this philosophy in their classrooms, they opt for a more effective practice that responds to the needs of diverse learners (Tomlinson, 2000a, 2005).

Tomlinson (2000) maintains that differentiation is not just an instructional strategy, nor is it a recipe for teaching, rather it is an innovative way of thinking about teaching and learning.

**Least Restrictive Environment (LRE):** According to the US Department of Education (2004), the least restrictive environment is defined as to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or the removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.
**Inclusive Classroom:** In IDEA, Section 504, and the ADA it is clear that students with disabilities must be educated in regular education settings to the maximum extent appropriate in light of their needs, and prohibit their exclusion unless an education cannot be achieved satisfactorily even with appropriate supplementary aids and services.

The number of special education students between the ages of 3-21 in 2019-20, who received special education services under the Individuals with Disabilities Education Act (IDEA) was 7.3 million, or an estimated 14 percent of the school. ([https://nces.ed.gov/](https://nces.ed.gov/)). In a push to provide equal access to all children of this age group and with equal access to the same education, the educational philosophy of inclusion has become pervasive throughout U.S. school districts. This legal requirement in the United States has forced the regular classroom teachers to rekindle their teaching and educate a very diverse population, which includes children with disabilities. Henceforth, teachers play an instrumental role in the implementation of the inclusionary philosophy. Their attitudes about inclusion is a function how it affects their students, but also a function of how it affects their teaching and the success of the inclusion process. Yet, having a positive attitude towards inclusion may be more important in the success of inclusion than any administrative or curricular strategy.

Implementing differentiated instruction in the inclusionary class can yield constructive student performance, however, teachers are met with challenges specific to best practices for students with disabilities. This qualitative study sought to gain insight of teacher understanding, perceptions and any challenges they face when implementing differentiated instruction in the inclusionary classroom.
CHAPTER 2: LITERATURE REVIEW

This chapter includes a review of related literature on differentiated instruction. In conjunction with the research question, this literature review will focus on the following category: historical background of education (General and Special) in the United States, Individuals with Disabilities Education Act, and differentiated instruction. To provide a background for this topic, the reviewed literature focuses on information about what differentiated instruction is, the parts of differentiated instruction, strategies for the classroom, the impact on students with special needs performance and engagement, and limitations involved with differentiated instruction. Some of the possible topics to consider are the historical background of education in America, the inclusion of students with disabilities in the general education setting, and the Least Restrictive Environment. Driving this shift is the Individuals with Disabilities Education Act (IDEA, 2004). Its fundamental framework ensures students receive a free and appropriate education in the least restrictive environment.

Differentiated Instruction is also a topic applicable to this work. It is the “go-to” curriculum framework that teachers rely on to meet the educational needs of students with disabilities. However, there exist inroads of teacher knowledge of how to apply “best practices” of differentiated instruction.

**Historical Background**

Education in the American colonies began in the 17th century with public education setting root when the Massachusetts Bay Colony instituted compulsory education laws (Katz, 1979). During the 19th century the establishment of specialized schools for those who would be considered at the time, mentally and physically handicapped, and expansion of compulsory education laws, in conjunction with freemen's schools were developed.
However, as recent as a hundred years ago, children with disabilities received little, if any, formal education; largely due to segregating students in special schools created in the early 1900s. These schools claimed to educate children; however, they primarily served as residential facilities and institutions. Even in 1918, as states began creating a nationwide public school system, children with disabilities were usually segregated. Rather it was through the lens of the civil rights movement of the 1950s and 1960s, that society began to look at the rights of women and minorities, leading to individuals with learning disabilities being granted their rights (Kaufman, 2003).

Moving forward to more modern times, in the Elementary Education Act of 1965, Congress created the Bureau of Education for the Handicapped, which emphasized a fair, equitable, and high-quality education as a means to close educational achievement, which led to focus on special needs being placed in public view. But public schools were never mandated to educate students with learning disabilities. However, in 1972 the cases of *Mills v. D.C. Board of Education* and *PARC v. Pennsylvania* promoted desegregation, and the view of equality regardless of capacity led to more prominent civil movements of equality. PARC brought a class-action lawsuit against the Commonwealth of Pennsylvania for failure to provide a public education to students with mental retardation. The Commonwealth of Pennsylvania previously stated that students must obtain a mental age of five years before they enter first grade. The federal district court ruled in favor of PARC and specified that all children from ages 6 to 21 were to be provided with a free public education regardless of their disability. The federal district court postulated that it was in the best interest of the student to be educated in programs like those provided to their peers without disabilities (Yell et al., 1998).
Mills v. Board of Education of District of Columbia was a civil action brought to the federal U.S. District Court for the District of Columbia on behalf of seven school-aged children with disabilities. These students sought their right to a Free and Appropriate Public Education (FAPE), which was being denied to them by the District of Columbia School Board. The Board of Education purported that the children were unable to be educated in the public schools due to their “exceptional” needs, which ranged from mental illness to severe intellectual disabilities. Furthermore, the Board claimed that the cost of providing private educational services was too expensive; therefore, the children remained without access to education (Yell et al., 1998).

The Rehabilitation Act of 1973 enacted Section 504, protecting individuals with disabilities from discrimination regardless of disability, yet, at that time, the public education system, largely disregarded the Act’s mandate, because school districts viewed it as an antidiscrimination law, that had no ties to federal funds (Peterson, 2007). It was not until 1975 that the Education for All Handicapped Children Act (Public Law 94-142, now the Individuals with Disabilities Education Act, 2004), mandated that individual states provide an appropriate public education for every school-aged child regardless of his or her disability. It also stresses that the act, follows a social justice agenda, calling for the teaching of students with disabilities to be taught in the least restrictive environment (Dunn & Griggs, 2004; Katims & Harris, 1997). The least restrictive environment stresses, to the greatest extent possible, satisfactorily educates children with disabilities together with children who are not disabled, regardless of the child’s home school and the disability. (Wright & Wright, 2019).
IDEA is the nation’s federal special education law. It ensures public schools serve the educational needs of students with disabilities. States are required to issue regulations that guide the implementation of federal law. IDEA requires states to establish performance goals and indicators. Additionally, states are accountable for reporting on students’ progress. Because the needs of every student with special needs generally vary, it influences a district’s implementation of general education processes and interventions, such as Student Success Teams (SSTs), Response to Intervention and Instruction (RtI2), and Multi-Tiered System of Supports (MTSS).

Regardless of the varying needs, it is primarily up to States, local education, and service agencies to render an equitable education for students with disabilities; in conjunction, the Federal Government plays a pivotal role in supporting State and local educational agencies’ efforts to educate students with disabilities to improve results, while upholding equal protection of the law. (Office of The Law Revision Counsel, United States Code, n.d.). In summary, for states to receive funding, states must provide free and appropriate education (FAPE), monitor activities, and set in place procedural safeguards. Monitoring activities include all children with disabilities in all general state and district-wide assessment programs, including those assessments required by NCLB — students must be given appropriate accommodations and alternate assessments as indicated in their IEPs, along with procedural safeguards to parents (Cortiellia, 2006).

According to the above processes and interventions, and federal law, “Least Restrictive Environment (LRE) requires that students with disabilities receive their education, to the maximum degree applicable, with nondisabled peers and that students with disabilities are not removed from regular classes unless, even with supplemental aids and services, education in regular classes cannot be achieved satisfactorily” (Individuals
with Disabilities Education Act, 20 U.S.C. § 1400 (2004). Also, the State law provides that: students with disabilities shall be offered “special assistance programs that promote maximum interaction with the general school population in a manner that is appropriate to the needs of both.” (Cal. Code § 56001(g). The bottom line is that IDEA is both a grants statute and a civil rights statute, supported by federal law, and requires states and learning educational agencies to provide a free appropriate public education and to meet students with disabilities’ needs with a continuum of services.

Special Education is based on three important concepts: individualized instruction, a continuum of program options and services, and a least restrict environment. In efforts of meeting the needs of students with disabilities; as a whole, a range of services or placement options are fundamental. These placement options range from general education, resource specialist program, special education classroom to residential setting, and are the responsibility of the Individual Education Plan team. An Individual Education Plan team determines what constitutes appropriate placement, services, and setting for each student; and based on “least restrictive environment” or “LRE”, children with disabilities should be educated with their nondisabled peers to the maximum extent appropriate depending upon the nature and severity of their needs.

The concept of LRE is clarified in the Individuals with Disabilities Education Act (IDEA). IDEA was originally enacted by Congress in 1975 to ensure that children with disabilities have the opportunity to receive a free and appropriate public education, just like the general education population. But because Special Education is a bit more complex than general education, numerous revisions have taken place over time. The legislation is re-enacted every five years. In December 2004, Congress reauthorized IDEA to include
free and appropriate education along with the least restrictive environment, making these
two criteria cornerstones to continuing support for special education.

**Effective Learning through Facilitating**

According to IDEA, 80 to 85% of students with disabilities can fulfill the same
achievement standards as non-disabled students granted they are afforded specially
designed instruction, appropriate access, supports, and accommodations.

IDEA requires districts and schools to develop an action plan of equity for students
with disabilities with mild to moderate learning disabilities, and place them in the least
restrictive environment. This environment should consist of a school in which inclusion is
successfully implemented and there exists a systematic approach by a staff member who
collaborates and constructs an inclusive environment in their schools. To achieve such a
sustainable inclusion environment, pedagogical, organizational, and psychological
restructuring should prevail, and a concrete inclusion-oriented leadership must be integral
(Shani & Koss, 2014).

Given the growing number of cases of students with learning disabilities, the
general education teacher is seeing an increased number of students with learning
disabilities in their classroom, and as a professional, must adapt their learning objectives
and their curriculum content to accommodate the needs of these students. With the growing
number of inclusion classrooms and children with special education needs to be integrated
into general education classrooms, stakeholders (districts, schools, teachers, and counselors
alike) must work together to facilitate an equitable curriculum; with an emphasis on
differentiated instruction.
Differentiated Instruction adopts the concept of "readiness"; a basis found in Lev Vygotky’s (1978) Zone of Proximal Development and described as, "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Supporting this idea is the works of Tomlinson and McTighe, (2006) who conclude differentiated instruction means a teacher is attuned to students’ varied needs as to the requirements of the required curriculum. Other studies such as Joseph et al (2013), have found that understanding student learning preferences is tied to a student’s ability to process information. Given this perspective, differentiated instruction can be applied as an instructional strategy that seeks to emphasize critical teaching as a learning philosophy as well, to meet the specific learning needs of students with learning disabilities.

Teaching, the art that it is, entails having an arsenal of tools. Tools, that when used constructively can be of much merit. The person who uses them determines their worth. However, no instructional strategy can compensate for a teacher who lacks proficiency in their content area, is unclear about learning goals, plans, and unfocused activity, or does not possess the leadership and management skills to coordinate effective classroom functioning.

Moreover, a teacher who is comfortable and skilled with the use of multiple instructional strategies is more likely to reach out effectively to varied students as opposed to a teacher who uses a single approach to teaching and learning. Teachers are particularly limited when the sole or primary instructional strategy is teacher-centered (such as lecture), or drill-and-practice (such as worksheets). Numerous instructional strategies invite
attention to student readiness, interest, and learning profile. Among these strategies are learning centers, interest groups, group investigation, complex instruction, compacting, learning contracts, tiered activities, tiered products, rubrics constructed jointly by teacher and student, use of alternative forms of assessment, and many others.

Having a forward-thinking approach, school administrators in union with general and special education teachers can facilitate the process of developing more academically responsive classrooms.

**Differentiated Instruction**

Not all students are alike. Based on this knowledge, differentiated instruction applies an approach to teaching and learning so that students have multiple options for taking in information and making sense of ideas. The model of differentiated instruction requires teachers to be flexible in their approach to teaching and adjusting the curriculum and presentation of information to learners rather than expecting students to modify themselves to the curriculum. This perspective to DI can be traced back to Washburne (1953), who comments pedagogical methods should reflect the child’s learning mode. Differentiated Instruction in classroom teaching is a blend of whole-class, group, and individual instruction on the premise that instructional approaches should vary and be adapted to individual and diverse students in classrooms. Tomlinson (2003), also noted that differentiated instruction must be linked to content, process, and product.
Differentiating by Content

To differentiate by content, teachers adapt or modify what is being taught in the lesson and how they give students access to the material they want the students to learn (Tomlinson, 2001). For example, differentiating content to address individual student needs, teachers can provide scaffolding such as engaging in group instruction, participate in group demonstrations, showcasing images for abstract concepts to help with the reading, or simply change the content, that coincides with an individualized education program. Differentiating by content compromises what is taught as a driver to varying how students gain access to materials that best suits their learning style.

Differentiating by Process

When differentiating the process, teachers alter the teaching strategies and methods for students depending on their needs. The process is differentiated by how the teacher delivers the instruction, and by the strategies the teacher has the students use to help with the exploration of the content (Tomlinson, 2001). That is, content embodies what students will learn and process determines how they will access content that best addresses their learning needs. For example, this may entail allowing students to use choice boards, work in different groupings, tiering activities to reflect multiple levels of complexity, vary pacing or time on task. Essentially, the process refers to how does the teacher decide to teach so that learners can make sense of tasks.

Differentiating by Product

According to Bailey and Williams-Black (2008), a product is what the student produces or develops to show their understanding of the content. When differentiating the product, students can choose different products to demonstrate that they have learned the
content. For example, students may choose to demonstrate understanding by delivering a presentation, a choice between a written document, or in the case of today’s technology, a digital media, or simply opting for a reformatted work piece, such as a quiz.

Tomlinson (2003) referred to this phase of differentiating as evaluation. However, in order for the product to be effective, Tomlinson (2005a) suggests, teachers should have clarity of criteria, conducive for student success. Proper instructional support should be significant and offer students clarity and appropriateness that leads to mastery of learning goals (Hawkins, 2009). Yet, there are studies such as in Baily and Williams-Black (2008) who found that failing to have clarity of content and process, the product or differentiating of evaluation, has the tendency to affect student mastery of materials. In their study, 14 teachers responded to a survey where only three gave descriptions of classroom practices that demonstrated differentiated instruction while teaching literacy. They were the only ones who were able to describe two reading activities where they differentiated content, process, and product (Stewart, 2016).

Students are diverse in their ability to learn, consequently, differentiated instruction offers a platform for teaching and learning based on multiple options for acquiring knowledge necessary for making sense of ideas. As a teaching model, the premises of differentiated instruction is subject to variation and adaptation concerning individual and diverse students in classrooms (Tomlinson, 2001).

Defining differentiated instruction is to recognize students’ varying background knowledge, readiness, language, preferences in learning, interests, and to react responsively. Differentiated instruction is a process to approach teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is
to maximize each student’s growth and individual success by meeting each student where he or she is, and assisting in the learning process. According to Tomlinson and Allan, (2000), the Learning Cycle and Decision Factors used in planning and implementing Differentiated Instruction are outlined in Figure 3.

![Differentiation of Instruction Concept Map](image)

Figure 3. A Concept Map for Differentiated Instruction

Reprinted by permission from *The Differentiated Classroom: Responding to the Needs of All Learners*, by C.A. Tomlinson (Alexandria, VA: ASCD, 1999). The Association for Supervision and Curriculum Development is a worldwide community of educators advocating sound policies and sharing best practices to achieve the success of each learner. To learn more, visit ASCD at www.ascd.org.
Differentiation incorporates instructional strategies such as tiered assignments, attending to differences through responsive teaching, collaborative learning, jigsaw activities, interest centers, group investigations, and complex instruction (Tomlinson, 2003). Consequently, as a means to bridge the achievement gap, teachers with a sound understanding of differentiation, use it in the classroom (Tomlinson, 2008). The research on effective differentiated instruction across disciplines calls for teachers to plan meaningful tasks for each student, flexible grouping, and continuous assessment.

Classroom accommodations can be made up of things such as, extended time on tests, preferential seating, class notes, or accommodating the setting for things such as test-taking. Generally speaking, extra time may be needed for a student who processes written text, slowly. In preferential seating, students are seated in the place most beneficial. For example, if a student is easily distracted, the seating may be arranged away from doors or windows. Testing in different settings could represent testing in a more subtle environment, with fewer students and noise. Accommodations are outlined in the IEP and serve as conditions or adjustments rather than a tool of differentiation.

Differentiation itself refers to learner variances; an approach that reflects having an understanding of Gardner’s eight learning styles or intelligence. In his book *Frames of Mind*, Gardner (1983) outlines the eight intelligences that make each students’ diverse learning unique: logical/mathematical, verbal/linguistic, musical, visual/spatial, bodily/kinesthetic, interpersonal, and intrapersonal. Gardner then added naturalist intelligence (Moran, 2014). These nine multiple intelligences are widely accepted pillars to today’s differentiated instruction framework, however, in her works, Christine Salisbury, states that there are “fundamental challenges in constructing a service delivery system that
aligns itself both legally and conceptually with federal and state educational policies best practices” (Salisbury, 1990, p. 3). She is referring to stakeholders coming together to establish a common grounds delivery system that supports teachers in the inclusionary class using differentiated instruction, to meet the learning needs of students with learning disabilities.

Learning disabilities are displayed in numerous ways. Students with a deficit in cognition struggle to learn course content which often leads to poor academic achievement when not accommodated. Pearl Subban (2006), author of Differentiated Instruction: A research basis, comments that differentiated instruction when used effectively, has the potential to generate a more compelling means of presenting materials according to students’ method of learning, that reflect inclusionary practices, however, the philosophy is lacking pragmatic approaches by teachers. In another study conducted by Mastropieri, et al., (2006), there is a reference to the problem of general education teachers such as science teachers, who teach inclusive classes lacking differentiated instruction best practices. For example, Mastropieri, Scruggs, Boon, and Carter (2001), suggested that students of mild to moderate disabilities displayed some relative difficulty learning science concepts associated with inductive and deductive reasoning. This evidence supports one criterion they observed, in that, teachers lacked differentiated instruction best practices. Some of these practices were vocabulary enhancements, text adaptations, text processing, real-world problem-solving. These findings reveal that teachers at the secondary level display mixed perspectives of total curriculum restructuring, that reflect best practices of differentiated instruction.
Fuchs & Fuchs (1998) state that a common thread among general education teachers is that they lack in-depth knowledge of best practices of differentiated instruction. As a result, they conclude there is a limit to how much a classroom can be expected to change in efforts of meeting all learner needs; general and special education peers. They do state few teachers differentiate, but more need to do so. Moreover, there is the inclusion and full inclusion realm. Inclusion leans on teaching students with learning disabilities to achieve substantial academic and social behavior accomplishments in the regular class. However, full inclusion is based on having the general education teacher help with the development of social skills, in the least restrictive environment. As a result, general education teachers find themselves in the midst of accountability.

The design and development of differentiated instruction as a model began in the general education classroom, with students considered gifted but were not sufficiently challenged by the content provided in the general classroom setting. Given classrooms in public schools have become more diverse with the onset of students with disabilities in inclusionary classes, differentiated instruction can be performed in a variety of ways, and if teachers are willing to use this philosophy in their classrooms, they opt for a more effective practice that responds to the needs of diverse learners (Tomlinson, 2000a, 2005). Research about differentiated instruction strongly recommend that teachers adapt the practices slowly, perhaps one content area at a time. For example, in Pablico et al. 2017 study, (as cited in King, 2010), emphasizes that a host of factors such as time, standards, and assessments impact “teachers’ decisions with implementing differentiated instruction” (p. 33). In addition, differentiation poses implementation challenges to diverse populations and is regarded as time consuming (Pablico et al, 2017, as cited in Maddox, 2015: Wan,
Also, these experts agree that teachers should work together to develop ideas and menus of options for students and share the creative load. For example, Mastropieri et al. (2005) found that when teachers work together with enthusiasm, both claim ownership of the students they teach, thus produces a positive effect on student behavior and learning. Furthermore, when teachers work together and acknowledge one another’s unique skills, helps establish knowledge of teaching styles, which over time, facilitates co-teaching (Mastropieri et al., 2005). Also, Broderick, Mehta-Parekh & Reid (2005) conclude that collaboration within the “general education classroom” (p. 197) is essential for differentiation. As a result, distinct working roles were defined, build trust, and mutual respect had a positive impact on differentiated instruction (Mastropieri et al., 2005).

For example, DI has the potential to increase scores on high-test assessments for students with disabilities, students at-risk for school failure, typical students, and students labeled as gifted and talented in comparison to students in schools that promote ‘one size fits all’ instruction (Strogilos, 2018). Furthermore, when modifications are structured into the curriculum, the level of production and on-task behavior tends to improve (Kern and Collegues, 2001). Also, relevant to curriculum modifications is the increased engagement and reduction of problematic behaviors of students with learning disabilities. However, differentiated instruction is not without its limits.

Consequently, DI requires ongoing and consistent professional development, dialogue, and consultation as a means to reflect which approach works best according to student learning style. Also, because of the complexities of DI, there are limiting factors that underscore its wholeness. It takes vast amounts of time to master, add into the mix
increasing class size, along with the ever-increasing teacher responsibilities, then the task becomes increasingly challenging (Bondie et al., 2019).

Theoretical/Conceptual Framework

Based on the literature, the researcher should expect to find general education teacher's perceptions of differentiated instruction, how they practice (DI) and the supports necessary for effective (DI) in the inclusionary class.

The idea of differentiated instruction is to develop a cohesive system that reinforces positive gains by general education teachers in meeting the needs of students with disabilities in their inclusive classes. The better the attitudes towards inclusive classes, the better differentiation will be. However, there needs to be a cohesive system in place, to which goals are defined, data about students’ academic levels should be made available to the teachers, and best practices should be part of the professional development and training. Differentiated instruction provides a basis for teachers to modify and adapt teaching that reflects teaching strategies that appeal to learner variances (Fox & Hoffman, 2011).

Summary

This chapter provides the reader an integral understanding of the challenges teachers encounter when their classes are converted to inclusionary classes. That is, general education teachers are seeing an increase of students with mild to moderate learning disabilities, being placed in their classes. They are expected to apply the concept of differentiated instruction, which follows the Universal Design for Learning framework. However, many of these teachers are faced with challenges of which they are not experts; more notably, special education expertise.
CHAPTER 3: METHODOLOGY

The purpose of this study is not to generalize but to understand the teachers’ perspective of differentiated instruction in meeting the needs of students with mild to moderate learning disabilities, in the least restrictive environment. The study was a qualitative study composed of six questions, with the interviewees being three Social Science and three Science teachers; six teachers in all. The questions focused on the six teachers’ knowledge of differentiated instruction and its application to meet the needs of students with learning disabilities, in the general education setting. In light of the questions, some notable challenges and limitations rendered the findings not generalizable.

According to Lodico, Spaulding, and Voegtle (2010) conducting a case study is generally the more broadly used design in qualitative methods. They continue by stating that case studies typically examine and compare cases as a means to uproot in depth awareness of a particular issue (Lodico et al., 2010). Furthermore, Yin (2003) explains that case studies are used to cross-reference cases and describe multiple case studies. Furthermore, Yin (2011), stressed a fundamental feature of qualitative studies reflects the idea of acknowledging the meaning of people’s lives according to their perspectives that are contributing insights of concepts. Due to the limited number of participants and questions, a collective mini-case study approach will be used. Stake’s 1995 study, (as cited in Karlsson, 2016) found one thing that speaks for the choice of mini-cases almost always present lack of resources, such as time and access for fieldwork.

Therefore, a qualitative collective mini-case study approach with open-ended questions to gather data was used to research the general education teachers’ perspective of differentiated instruction in meeting the needs of students with learning disabilities, in
the least restrictive environment. Yin (2014) stated that case studies allow for a deeper understanding of real-word-setting situations, such as the perceptions of teachers using and implementing DI in the inclusive classroom.

The high school in which the study took place was in its second year of piloting special day class inclusive classes, with the science and social science department as test pilots. Because they were responsible for providing students with learning disabilities an equitable education in the least restrictive environment, the scope of the study was limited to the six secondary general education teachers who agreed to the research and were participating in the least restrictive environment program. The following three questions form part of the study and attempt to provide insight and identify the teacher’s capacity to effectively apply differentiated instruction within the inclusionary classroom.

1. What are the general education high school teachers’ perceptions of differentiated instruction?

2. How do general education teachers practice differentiated instruction to meet the learning needs of students with mild to moderate learning disabilities in the least restrictive environment?

3. What supports do the teachers interviewed think are needed for differentiated instruction to be effective in the least restrictive environment?

Setting

High School X is one of three comprehensive high schools in a southern California school district. It is located in the San Gabriel Valley, with a population of about 60,401 (2018 Census), whose median household income is $57,265. Asian Americans and immigrants from East and Southeast Asia, make up nearly two-thirds of the city population;
Mexican Americans and Central Americans account for approximately one-fourth; White about 5%; and others make up less than 3%. Notably, 54% of the community population is foreign-born (WASC, 2014). According to High School X’s SARC report (2018-19), there are 88 appropriately assigned and fully credentialed teachers in their subject area and for pupils, they teach. High School X is a noteworthy comprehensive local educational agency ranked 73rd within California and 522 in National Rankings, and recipient of the California Distinguished School award (CDE, 2019).

**High School X**

Beginning in 2014-15, the CDE initiated the Performance Indicator Review process, which evaluates a Local Education Agency’s performance measures and State Performance Plan Indicator 5 (SPPI): Least Restrictive Environment. Level data submitted by a Local Education Agency is reviewed by the California Special Education Management Information System Report (CASEMIS) for compliance with state and federal requirements. Level data refers to any data used to identify a student's age, grade, test scores, learning disabilities, and many more categories about student information. It is essentially a student record. As a result, the district was found by the CDE to be in non-compliance with SPPI 5 indicator: Least Restrictive Environment. According to the CASEMIS, students with mild to moderate learning disabilities at this high school were spending more than forty percent in Special Day Class and not enough in the general education setting. As a result, the CDE determined the school to be in non-compliance; yielding an order from district personnel and the CDE to implement the LRE at High School X.
The high school has traditionally offered a Resource Specialist Program, for special education students, which entails special education students spending more than half the day in a special education setting. On the other hand, students participating in Special Day Class (SDC) classes and considered mild to moderate could qualify for placement in the least restrictive environment, or in a class setting at least 80% of their school day in the general education classroom. This means they will spend at least 80% of their school day in the general education setting. The social science and science departments at for High School x will pilot the Least Restrictive Environment mandate.

In a report generated by the California Department of Education (CDE), recommendations were made, requiring the district to place students with disabilities in the general education setting. The CDE set benchmarks and recommendations that reflect IDEA principles of the Least Restrictive Environment. As a result, High School X is complying with the CDE order of placing students with mild to moderate disabilities in general education social science, and science classes at least 80% of their school day. This is known as the Least Restrictive Environment. Many of these students were participating in SDC class for more than half their day. The school is in its second year of applying the mandated eighty percent of the time criteria.

**Participants**

The participants were three teachers from the Science department and three from the Social Science department. Based on this research, there were some challenges. A total of ten general education teachers within the Social Science and Science Department received a consent form. However, only six teachers agreed to participate: three social science teachers and three science teachers. Time constraints made scheduling a meeting
with teachers a challenge because some had after-school duties, such as club activities or tutoring. Another challenge came from teachers not responding to emails.

Teaching experience ranged from six years to twenty-five years. All six teachers were handed questions about differentiated instruction and the least restrictive environment, to which they responded in an interview. The questions were designed to gain insight into the teachers’ understanding of differentiated instruction and roles they hold in regards to the least restrictive environment. The social science and science departments were selected by district personnel to pilot the inclusive program, which places Special Day Class students in the general education setting. The teachers will be participating in the SDC inclusive program for 2 years. District personnel call the program SDC inclusive classes and is a result of the district being out of compliance with SPPI 5 indicator: Least Restrictive Environment. The program will be active for 2 years. The main focus of this research was the inclusive classes made up of social science and science teachers.

**Data Collection**

This study follows a qualitative design using teacher interviews. The researcher interviewed three social science teachers and three science teachers; all of whom were interviewed independently. The interview process took place in their respective classes on high school x grounds. The researcher handed each teacher a copy of the questions, so that they could follow, as the researcher read aloud. Teacher responses were recorded using Microsoft Word. Each teacher responded to six questions regarding differentiated instruction (Appendix A). They were recruited on the basis that their departments are in this high school’s second year of piloting the least restrictive environment mandate and
responsible for using differentiated instruction to teach students with disabilities in the general classes, which is consistent with IDEA’s least restrictive environment principle.

Each interview lasted approximately 30 minutes. No, follow-up questions were made, rather brief conversations took place when further elaboration was appropriate. Because many of the teachers would leave the campus immediately, meeting times took place in different intervals. In an effort to make use of technology, emails were sent out, however, only the Economics and US History teachers responded to schedule a meeting. Based on these outcomes, I felt the best approach was to walk the school grounds after work hours. Most would leave the school immediately and some would wander the campus or simply be in their rooms attending to student work. Regardless of the challenge, I was able to interview all six teachers.

The interviews probed questions related to the teacher's perspective of differentiated instruction. Each teacher received a consent form, of which all six signed. And before each interview, teachers were notified of confidentiality safeguards; pseudonyms were used to safeguard teacher identification.

**Data Analysis**

Qualitative research provides a basis for researchers to gain insight into the thoughts and feelings of participants, providing the researcher depth of people's experiences (Sutton & Austin, 2015). Moreover, it is a form of seeing things as a whole (Lichtman, 2006).

Due to the nature of the study, it can be said there is a phenomenon, in that the school is in its second year of implementing LRE for special day classes. However, observations were not a part of this study. Interviews were conducted in each teachers’
Transcription is the process of transforming interview notes into texts (Johnson & Christiansen, 2012). The data collected for this study were analyzed and hand-coding was used to identify commonalities based on teacher responses. All of the data was analyzed and reread to identify emerging themes of commonality. Once transcribed, the interview responses were coded and findings were written in narrative form to add depth and significance to the data. Coding was done manually by the researcher to identify the emerging themes.

**Limitations**

Based on this research, the limitations at high school x entailed no observations, no audio recordings, there were 6 total teachers, the number of questions, and the time frame. Due to the nature of class time, observations were not part of the research. Another limitation is the fact that I could not record. Teachers at this school are sensitive to recordings. As a result, the intimacy of research would be compromised if recorded. Moreover, the study was specifically focused on teachers from the Social Science and Science Departments. Another limitation is the number of questions and the length of interviews.

**Positionality**

Because I am part of the staff at high school x, I recognize unintended biases may arise. As a staff member, it is imperative to critically examine general education teachers’ responses in regards to working with students with disabilities, in the LRE. Consequently, I had to be mindful of not speaking on their behalf and avoided researcher bias. Researcher bias can arise from interpreting data that may conform to preconceived
experiences. Yet, my position must be objective and reflect the voices of the teachers participating in the research. On that note, because there may exist a degree of bias, the one bias that could be stated, is being a general education teacher myself, I too have students with learning disabilities in my class. But that does not constitute speaking for the six teachers.

**Summary**

Gathering data from teachers gave insight to generalizations and variations they embody about differentiated instruction, in the inclusionary classroom. Yet, it appears teachers are at a crossroad on how flexible and responsive they are at meeting students with learning disabilities’ educational needs.
CHAPTER 4: DATA ANALYSIS AND DISCUSSION OF RESULTS

The purpose of this research was to examine the general education teachers’ understanding and their perceptions of differentiated instruction as a tool to meet the needs of SWD in the inclusionary classroom of a southern California high school.

Data Analysis

The data collected came in the form of one-on-one interviews that probed questions that examined the six teachers’ perceptions and understanding of DI in the inclusive classroom. The teachers who agreed to the interviews were three social science and three science teachers. The subjects taught are Environmental Science, Biology, World History, Government/Economics, and Social Science.

The interview questions referred to three criteria: teacher perspective and practice of DI and supports needed for DI to be effective in the LRE. The first criteria allowed me to gain insight into teacher acceptance of DI as an effective learning tool for all students. The second criteria allowed me to gain insight into teachers’ understanding of DI, based on their knowledge of differentiated instruction best practices, and training, as it relates to incorporating it in their inclusive classrooms. The third criteria can be interlinked with the second one, for it addresses how DI can be better applied, given supports and professional development.

During the interviews, I hand-typed the notes. The data were analyzed and hand-coding was done using digital colored schemes, using Microsoft Word. The coding process allowed for an inductive approach of identifying repetitive patterns, with similarities in phrases and words used by each teacher. There were 20 notable codes. The coding allowed for a more systematic approach to identifying repetitive patterns and thematic relationships from the transcribed notes, making the codes emergent. Hewitt-
Taylor (2001) state that emergent reflects revisiting data. Moreover, highlighting allowed for themes to emerge when analyzing the codes. The 20 codes were: A) accommodations and modifications, B) classroom management, C) professional development, D) challenges, E) technology use, F) supports, G) engagement, H) best practices, I) grouping according to strengths, J) discrepancies, K) collaboration L) information sharing, M) curriculum according to IEP, N) guidance, O) time, P) attendance, Q) IEP sessions, R) data sharing, S) defaulting T) unclear of sharing work. They were collapsed in the following emerging themes are as follows: A) knowledge of DI, B) training/professional development, C) challenges using differentiated instruction, D) resources/supports, and E) misunderstanding or misapplication of DI. And were the drivers to developing the themes according to teacher interviews. All six teachers acknowledged differentiated instruction as a constructive tool to meet learner needs, but it also requires substantial time and planning for effective implementation of it.

During the interview process, the teachers acknowledged DI is an important instructional strategy that when used accordingly, can enhance academic levels for SWD. Yet, there was also mention of challenges arising when incorporating DI in the inclusive classroom, for SWD. I learned that all the teachers agreed that the benefits of using DI as a learning strategy are instrumental within their inclusive classes, however, they lacked the time for planning and preparing suitable materials. I also learned that teachers stated that the lack of professional development impeded their ability to prepare adequately. Moreover, I learned that the teachers’ understanding of the student as a whole, affected their capacity to properly differentiate as oppose to accommodate.
Some students needed social-emotional support while others needed specific scaffolding strategies. As a result, teachers either misunderstood or misapplied DI, as it relates to content, process, and product. Throughout the interview, I was able to gather data about each teacher's perspective, understanding of DI, and supports needed, such as professional development.

**Teacher Make-Up**

There was a total of six secondary teachers participating in this study. The underlying academia per teacher along with teaching experience is as follows: Teacher A teaches Environmental Science, with nineteen years of teaching experience. Teacher B teaches Biology with sixteen years of teaching experience. Teacher C also teaches Environmental Science with fifteen years of teaching experience. Teacher D is a Social Science teacher with twenty-five years of teaching experience and teaches Economics and United States History. Teacher E has been teaching for six years and teaches Economics and United States Government. Teacher F teaches World History with twenty-two years of teaching experience. In all, the average years of teaching among the six teachers is seventeen years. The levels of education range from bachelor’s degree to master’s degree.

**Classes**

Four of the six teachers had an average of eight students with a learning disability, while teacher’s B and F, had ten. The fluctuation may have been due to space availability, other than that, teachers had no control of how many SWD are placed in their classes. However, teacher F was the only teacher to have a Special Education teacher assigned for one class period. The reason for this was, those students who would normally go to the
resource room with that special education teacher, would now be placed with the general education teacher for that period. However, there were circumstances when the Special Education teacher was out, due to attending things such as IEP meetings.

**Themes**

**Knowledge of Differentiated Instruction:** All 6 teachers had a basic knowledge of DI. Based on the coding, I learned that all 6 teachers’ knowledge and understanding of DI were attained in their university studies as undergraduate or graduate students. And subsequent knowledge of DI had been attained through class experience. As a result, they all accepted and perceived DI to be integral to the inclusive classroom. Given they acknowledged and accepted the importance of DI, I asked the teachers to elaborate by asking, “What is your perspective of Differentiated Instruction”?

All of the teachers gave alike responses that learner variability is an area in which differentiated instruction offers benefits to all students. Teacher A stated, “It can be useful based on the amount of time needed to strategize for all levels.” Teacher B stated, “It can make learning confusing for general education students when grouped with SWD.” Teacher C stated, “I think differentiation often amounts to modification of what can be accepted from students, in terms of their ability to produce the product.” Teacher D stated, “It’s providing students a different way of learning, but it’s challenging.” Teacher E stated, “Differentiated instruction means that teachers need to change the way they teach to meet the student needs.” Teacher F stated, “Not all kids learn the same or at the same pace.” Generally speaking, what I learned from teacher knowledge of DI, was that their perceptions about DI were very similar to one another.
They agreed and understood the importance of it as a tool for learning, however, its underlying structure: content, process, and product, made the lesson planning challenging, because they lacked an in-depth understanding of best practices specific to students with disabilities and students as a whole.

**Training/Professional Development:** From the coding process, I learned that teachers stated there is a lack of professional development. They are expected to provide a DI curriculum, however, due to the lack of time for planning and the lack of PD, teachers felt unsupported and unclear about what are DI best practices to teach SPED in the inclusive class. There was consensus that more training and professional development is needed, where there is an emphasis on modeling DI best practices for SPED. Teacher B stated, “The district is short fallen with their promise of PD.” Teacher C commented, “Will the special education teachers provide DI best practices strategies?” Teacher F stated, “For differentiated instruction to be better implemented, more training and time to plan is needed for the general education teacher.” Teacher D stated, “We have not gotten the training we were told.” Teacher A stated, “It looks different in all classes, and we are trying to figure this out.”

What I learned from the teachers’ lack of training and professional development, was that all of the teachers would default to accommodations and modifications or send students to the resource room, as a means of differentiating. This was an indication of teacher misunderstanding or misapplication of DI content, process, and product as a whole. For example, teacher’s E and C would allow for extended time on task, which was an accommodation. However, allowing extended time on task was prevalent amongst all of the teachers.
**Challenges of Differentiated Instruction:** The challenges encountered were attributed to how often do the teachers differentiate. Because all six teachers agreed that differentiated instruction can be beneficial towards achievement, they differentiated as much as possible. They accepted DI as an effective tool for learning, however, learner variability made differentiating challenging.

For example, teacher A stated, “Differentiated instruction can be useful based on the amount teacher needs to do, given SWD level of science understanding; it looks different in all classes.” According to teacher A, science was considered a specialized content class. As a result, the challenges of differentiating depended on the SWD’s background and knowledge of science, to which teacher A spoke about “creating lessons that are specific to each student’s need, are highly dependent on their background knowledge and amount of time both general education and special education teacher collaborate.”

However, one example of differentiation by teacher A was making the lesson hands-on and maintaining the lecture to 15 minutes, which gave SWD more freedom to explore a topic using an outline that guided them. The guided outline had titles to the content in bold with brief subsequent details related to the topic.

Teacher E stated, “should I differentiate for content or behavior needs?” Furthermore, teacher E added, “Challenges of differentiation include not having enough help in the classroom, as well as keeping up with trying to meet the needs of all students.”

Yet, teacher E differentiated “daily.” His biggest challenge was creating lessons that emphasized foundational skills related to vocabulary. “This is especially true with English Language Learners and SWD.” Teacher F shared the same challenges as teacher E, especially with the SWD who were also ELL.
Teacher D expressed, “My biggest challenge is having SWD in my class being pulled out and having to update them for days missed, is difficult.” Sometimes the students get pulled out for testing or IEP meetings. Teacher D also stated, “sometimes I am out of class for IEP meetings, and that affects the overall learning and differentiated instruction.” The biggest challenge for teacher B was, “not watering down the content for students with disabilities and finding the time to work one-on-one with higher needs students.” Furthermore, she stated, “SWD are having trouble coping, due to discrepancies between general education and SWD.” To remedy the discrepancy, teacher B used a pacing system. Each SPED student has the choice of progressing through the content at their own pace.

However, the main challenge for teacher A using her pacing system was how to differentiate for the SWD who were in the higher socio-emotional needs of the spectrum.

All the teachers agreed that differentiated instruction can be beneficial for students with disabilities in the inclusive classroom, however, they also faced varied challenges.

The biggest challenge they shared, was having the time to collaborate amongst themselves to share what was working. The other big challenge was the lack of professional development, where best-practices for SWD were modeled. Through the coding process, I was able to see a pattern of teacher misunderstanding and misapplication of DI. This was mainly due in part to the lack of training and PD.

**Resources/Supports:** During the interview, all of the teachers commented on some of the challenges of DI in the inclusive classroom: lack of time to collaborate, lack of PD, differentiating using best practices specific to SWD, deciding to differentiate on the content or socio-emotional needs. They also felt that to overcome the challenges, more time to plan, more resources from PD, and increased support from aides and co-teacher were necessary.
Teacher E expressed, “if I am the only adult in the room, executing DI is harder to execute.” He also stated, “having more instructional aides or special education teachers, the more differentiation is possible.” All the teachers expressed the more adults available to provide instructional support, the better they could help support and assist one another and tailor lessons based on the student's IEP. “At some point early in the school year, we did have the special education teacher push in,” stated teacher D. But as the year went by, the SPED teacher push in would fluctuate. Teacher D stated, “when the SPED teacher would push in, he would co-teach.” This helped increase student engagement and increase the use of strategies by the student.

Teacher F stated, “To develop best fit DI, special educators need to help the general education teacher understand the special needs of SWD in his/her class.” The general education teachers could benefit from planning with a SPED teacher, which would make teaching SWD less stressful. Teacher C stated, “it seems that outreach to parents is essential.” He also stated, “to have input from someone who has expertise in evaluating students’ learning needs has to be helpful for teachers and often can be helpful in practice.”

I learned that all the teachers shared teacher C’s latter comment, also, all six teachers shared the following statement made by teacher C, “will the special education teachers provide strategies for differentiation?” Both teachers A and B expressed the need for more aides. Teacher A expressed, “adult aides are being limited and some are looking for jobs.” She also was clear on the district “being short falling on the promises to provide more instructional aides and supports.” Teacher B, expressed there is a shortage of instructional aides. When they were available, they did a good job of keeping SWD on track, especially if there was a need to support the general education teacher with behavior issues. They provided support for getting the students back on track, given a behavior issue.
Each teacher felt there was a need for continuous support from aides, the special education teacher, parents, and administration. The teachers were able to provide DI but with limited support and knowledge of DI best practices specific to SWD in the inclusive classroom, it was difficult to cover content standards effectively and meet the needs of SWD, especially if some of those needs are related to higher socio-emotional need. Furthermore, the lack of supports prompted teachers to default to accommodations such as, extended time on task, preferential seating or even sending SWD to the resource room for help. This tended to lead to a misunderstanding and misapplication of DI. As a result, each teacher felt it would have been beneficial to have more time to plan, more resources, and support in the form of aides, co-teacher, and administration.

**Misunderstanding/Misapplication of DI in the Inclusive Classroom:** In each interview, every teacher commented on perceiving DI as a beneficial tool for learning. They also expressed support for the idea of having inclusive classes. However, due to a lack of in-depth PD and training on DI best practices for SWD, the teachers felt being at impasse when differentiating. This led to prompt the question. “What does differentiated instruction look like in your classroom?”

Teacher E commented on using varied learning strategies to support SWD. He expressed, using choice boards because this “allows students a choice of what type of an assignment they want to turn in.” “Perhaps one student does a verbal presentation, while another turns in a written report.” However, teacher E, along with the other teachers, default to accommodations and modifications, as a means of differentiating. For example, they defaulted to extended time on task, allowing notes to be used on exams, using the resource room, and preferential seating; which can be concluded as a misunderstanding of DI strategies for SWD.
Teacher F commented, “working with a SWD student one-on-one, giving opportunities to work individually, in pair-share groups, and flexible small groups.” At the same time, teacher F stated, “for DI to be better implemented, more training and time to plan is needed for the general education teacher.” Teacher B stated, “there is a discrepancy between students with disabilities and the general education students, that creates disengagement.” In her inclusive class, she had SWD who fell in the higher end of the spectrum, for whom social integration is challenging. Nonetheless, she grouped general education with SWD and used a pacing system to differentiate. The idea was to set time constraints on activities and have the GE students work with the SWD to complete tasks.

Thru the use of this pacing system, SWD demonstrated learning in terms of content because they expressed understanding the big idea of the subject and making a connection to the human body; at the same time, some GE students became confused and unmotivated. They did not understand why they are grouped with SWD. Furthermore, it showcased misunderstanding because it did not work for all SWD. She lacked an in-depth understanding of how to scaffold DI for the students who fell in the higher socio-emotional needs of the spectrum, who at the same time had a reading level much lower than the GE students.

Teacher A stated, “we are still trying to figure this out.” She is referring to what are DI best practices for SWD and how to effectively apply them. DI in her class looks, “having SWD work with the GE students.” but it’s a challenge because there was a tendency of SWD being pulled out. Teacher C stated, “reading aloud and providing sentence frames of new material,” is what he did to differentiate. He also stated, “I use warm-ups, exit slips.” However, he also stated, “I would like to have more strategies to
differentiate,” and did differentiate as much as he would like. According to teacherC's statements, it can be concluded that there were misunderstandings and misapplications of DI. He also stated preferential seating, reducing the number of assigned questions, and testing in a different location.

The issue of not having enough help in the classroom, training, time to collaborate and plan, professional development, to meet learner variability, can be concluded as a function of teacher misunderstanding and misapplication of DI. For example, they defaulted to extended time on task, preferential seating, and sending SWD to the resource room for help. Making those decisions, teachers felt at an impasse in the application of DI. For example, not having full access to students’ IEP, limited their knowledge of the SWD student as a whole. As a result, hindering the application and understanding of specific DI strategies that are conducive to the students learning and learning style.

Summary

The six teachers acknowledged differentiated instruction as an effective pedagogical tool, however, the data collected showed a disparity in the timing, planning, and lack of knowledge about differentiated instruction, best practices specific for students with learning disability. Individual interviews were conducted and provided data on the use, or lack thereof, of DI within an inclusion classroom. The data collected explored the perspectives of high school x teachers and the challenges they faced, or lack of, when using differentiated instruction to support students with disabilities in an inclusionary classroom.

The responses of the participants in the interviews afforded me an in-depth understanding of challenges associated with incorporating differentiated instruction to support a diverse population. Participants perceived DI to be beneficial to all students such that it has the potential to enhance learning for students with disabilities. Yet, they
expressed the challenges to differentiation, are related to time for planning, lack of best practices knowledge, resources/materials, and professional development training to be able to incorporate the elements of DI effectively. Through my findings, I discovered that teachers did have basic knowledge of differentiated instruction. However, it can be concluded that a couple of the teachers had a better understanding. However, regardless of DI knowledge, the participants tended to misunderstand or misapply DI best practices for students with disabilities. For example, defaulting to accommodations and modifications and sending students to the resource room, were indicative of misunderstanding and misapplication.
CHAPTER 5: SUMMARY AND CONCLUSIONS

The Individuals with Disabilities Education Act (IDEA) requires public schools in the United States to make available to all eligible children with disabilities a free education in the least restrictive environment. Under IDEA, public school systems are mandated to develop an appropriate individualized education program (IEP) for each of these students. IDEA also outlines specific procedures for schools to follow when constructing IEPs. Though all six teachers at this secondary school agreed differentiated instruction is noteworthy, hard-pressed challenges such as time, instructional and administrative support, constricted their efforts.

The purpose of this study was to determine the general education teachers’ perceptions and individual practices of differentiated instruction and the necessary supports to meet the academic needs of students with mild to moderate learning needs in an inclusive classroom of a southern California high school that has been awarded high ranks by US News 2019. Six secondary teachers at this high school agreed to participate in an interview. The areas of study were Environmental Science, Government, United States History, Biology, and Economics.

They all had an understanding of differentiated instruction concepts and principles, however, there were also some misunderstandings and misapplications. Also, due to the variation of student needs, they were at an impasse when constructing lessons that emphasized best-differentiated instruction practices stemming from scientifically proven strategies to meet the diverse learning needs of students with learning disabilities, in the inclusionary class. The teachers indicated time was the biggest factor that affected
their ability to provide increased differentiation, coupled with lack of professional development, best practices, instructional support, and collaboration lead to misunderstanding and misapplications. As a result, the teachers saw themselves at an impasse when developing lessons that would embrace learner variability. For example, if and when instructional supports such as aides, were available, the aides would be used more to keep students on task and assist with materials as needed and provide emotional support.

Historically, education in the United States is based on the notion that it contributes to the common good of society. Public Law 94-104 guarantees education for students with learning disabilities. To that, Public Law 107-110, better known as No Child Left Behind, ensured these students would learn from a highly qualified content specialist. Research throughout the decades has found that for a child with learning disabilities to achieve progressive learning, there must be an understanding of initial drivers and learning styles. “In 2013, the Equity and Excellence Commission acknowledged that the lack of appropriate instruction aligned with student abilities negatively affects students with learning disabilities in the inclusionary classroom”.

Education in the United States has seen much change. Civil Rights movements are cornerstones of overcoming segregation, through policy reform. Whatever the educational policy is, its mandates pose challenges. Not much of educational policy is truly straightforward, to that, districts and their schools can find themselves scrambling on how to best implement policy mandates. Due to the many learning needs of students with disabilities, differentiated instruction itself can be challenging; but flexibility and
cohesion between administrative teams, motivated general and special education teachers, can increase the likelihood of success in the inclusive classroom. Tomlinson (2001) outlines five fundamental guidelines for successfully differentiated instruction in the inclusive classroom.

Table 5.1

<table>
<thead>
<tr>
<th>Guidelines for Successfully Differentiating Instruction in Inclusive Classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clarify all key concepts and generalizations</td>
</tr>
<tr>
<td>2. Use assessment as a teaching tool to extend instruction</td>
</tr>
<tr>
<td>3. Make critical and creative thinking a goal of lesson design</td>
</tr>
<tr>
<td>4. Engage every student in learning</td>
</tr>
<tr>
<td>5. Provide a balance of tasks between what is assigned by the teacher and selected by the student</td>
</tr>
</tbody>
</table>

Source: Tomlinson (2001)

Differentiation, fully understood, is concerned with developing not only content mastery but also student efficacy and ownership of learning (Tomlinson, 2008, p. 30). Given this statement, one can conclude that differentiated instruction offers the tools for learning that benefit students with learning disabilities in the inclusive classroom.

I learned that in our American History, the public education system has seen its share of legislative reform. Numerous laws and mandates have made their way into special education; each affording particular rights and protections.

None have been more instrumental than the Individuals with Disabilities Education Act. Its main function guarantees special education children a free and appropriate education; it’s the most important legal right. Also, embedded in IDEA, is the Least Restrictive Environment criteria. SWD whose learning disability is considered mild to moderate is to participate in the LRE 80% of their school day, in inclusive classes, and differentiated instruction must be used to meet the needs of SWD in the inclusive classroom.
In this study, I learned that a group of 6 teachers accepted and perceived DI as being beneficial for SWD. However, they lacked professional development in best practices specific to special education, they lacked the time to collaborate, resources, and supports. As a result, they demonstrated misunderstanding and misapplying strategies to content, process, and product. Given the aforementioned, one key takeaway is that for inclusive classes to be highly effective, there must be a comprehensive system made up of administrators, teachers, parents and instructional aides, and even school psychologists. All stakeholders must be highly active and engaged, for inclusion to be transcendent. Another key takeaway from this study is acknowledging that it's reasonable to state that inclusive classes are nothing short of challenging; local, state, and federal mandates tend to shift constantly, that the time needed for deep impact on education is difficult to achieve. However, it is very much attainable.

I also learned that there are practices in special education called high-leverage practices. They take into account: collaboration, assessment, social/emotional/behavioral practices, and instruction. Furthermore, there is a reference made to co-teaching, that when general educators and special educators work closely to coordinate the delivery of curriculum and have resources such as time to plan, positive effects on student academic outcomes are achieved. This statement is relative to this study because co-teaching is an area these teachers expressed needing more of. Yet, there are common threads amongst successful inclusive schools, such as administrative support, ongoing professional development, collaboration, communication, instructional responses, authentic assessments, which are essential for successful inclusive schools. It can be concluded that, based on the interviews, the above-written elements are lacking in school X.
Implications for Further Research

I firmly believe that differentiated instruction in the inclusive classroom provides the needed tools that benefit all learners: special education and general education students, but as with any system, there needs to be cohesion among the parts that make up the system. Moreover, I learned that differentiated instruction is not a stand-alone methodology, its complex composition is probably the biggest reason teachers feel overwhelmed in maximizing its use. It requires understanding the pedagogical front, the cognitive front, which itself encompasses a plethora of information on how learning can develop. But the fundamental aspect I take from this is that educators persevered to provide students an equitable and meaningful education.

There are several recommendations for future research. While this study is a meaningful start, it is but a simple indicative of current practices and undertakings at this high school.

The results of the teacher interviews appeared to align with some of the challenges found in the secondary inclusionary classroom. In the confines of their classrooms, highly qualified, secondary level, content specialists are proactive in using some of the tools of differentiated instruction but always revert to teaching their subject from a whole group approach. Further research is needed to understand ways in which to promote the whole-student growth within the classroom of highly qualified content specialists.

Subsequently, it would be beneficial to provide the teachers at this site training in differentiated instruction, time to implement it into the classroom, and have a second interview to measure if any, a paradigm shift in curriculum or methods of facilitating learning.
By training staff in differentiated instruction best practices and emphasizing equity and Zone of Proximal Development, the third possibility for further research would be to study changes in student engagement, competence, and overall successes at this site. This high school has traditionally been and still is, an academically competitive school, from the general education perspective. However, given the opportunity to learn in a way that matches their learning style through differentiated instruction, this school’s students with disabilities could move toward deeper understanding, higher testing scores, and learning success. A fourth possible research idea would be to assess academic gains and even standardized test scores for growth made by students with learning disabilities in secondary schools after using differentiated instruction to see if significant growth is evident. To have an even deeper insight of possible gains, compare previous years’ graduation rates where differentiation was not a factor compared to it being factored into the students’ education in the least restrictive environment.

Because administrators were not part of the study, it would be advantageous to include administrator interviews, to understand their knowledge of differentiated instruction and determine the impact on the school by increasingly implementing differentiated instruction and having a systematic approach to inclusionary classes; at the school site. Yet, administrators are overburdened with paperwork and ever-changing federal and state-mandated requirements, however, meaningful actions have taken place to address the least restrictive environment mandate.
REFERENCES


Storrs: University of Connecticut, National Research Center on the Gifted and Talented.


https://www.ecfr.gov/cgi-bin/text-idx?SID=ffb9fd8ca724bce48a0c6b70075b24aa&mc=true&node=se34.2.300_1114&rgn=div8


Individuals with Disabilities Education Improvement Act, H.R. 1350, 108th Congress (2004).


*Remedial and Special Education, 22,* 130–138.


https://commons.und.edu/theses/1817


https://4.files.edl.io/33bf/12/06/19/180800-74f16a19-d37e-4370-9623-f0ff47e82efc.pdf

November 30, 2020, from
https://nebula.wsimg.com/5b8b61a82b6601c83e0dad9e6efa0fca?AccessKeyId=9D6F6082FE5EE52C3DC6&disposition=0&alloworigin=1


Georgia Southern University, Statesboro, Georgia.

Stewart, O.S (2016). Teachers’ Perception of Differentiated Instruction in Elementary Reading. (Unpublished dissertation). Walden University, TX


Strogilos, V. (2018). The value of differentiated instruction in the inclusion of students with special needs/ disabilities in mainstream schools. SHS Web of Conferences, 42, 00003. doi:10.1051/shsconf/20184200003
https://nces.ed.gov/


https://sites.ed.gov/idea/regs/b/b/300.114


http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_195312_washburne.pdf

https://doi.org/10.1177/00224669020360020101

Wright, P. W., & Wright, P. D. (2020). The History of Special Education Law. Retrieved October 20, 2020, from
https://www.wrightslaw.com/law/art/history.spec.ed.law.htm


APPENDIX A

TEACHER QUESTIONS

1. What is your perspective of differentiated instruction?

2. Give an example of a way that you have used differentiated instruction for a student with a learning disability in your classroom?

3. What differentiated instruction example(s) have you used in a test to determine if a concept requires more learning of a concept in your classroom?

4. How often do you differentiate your instruction for students who appear to lack grasping a particular concept?

5. What does differentiated instruction look like in your classroom?

6. If you had the help of instructional aides or special education teachers, would you find the likelihood of differentiated instruction being more available in your classroom? If yes, how would that look?
APPENDIX B

TEACHER CONSENT

INFORMED CONSENT

You are being invited to participate in a research study, which the Cal Poly Pomona Institutional Review Board (IRB) has reviewed and approved for conduct by the investigators named here. This form is designed to provide you - as a human subject/participant - with information about this study. The investigator or his/her representative will describe this study to you and answer any of your questions. You are entitled to an Experimental Research Subject’s Bill of Rights and a copy of this form. If you have any questions about your rights as a subject or participant, complaints about the informed consent process of this research study, or experience an adverse event (something goes wrong), please contact the Research Compliance Office within Cal Poly Pomona’s Office of Research at 909.869.4215. More information is available at the IRB website, http://www.cpp.edu/~research/irb/index.shtml

Least Restrictive Environment and Differentiated Instruction
Primary Investigator: Benny Heredia Faculty Advisor: Dr Navarro
IRB protocol # [once assigned]

Voluntary Status: You have met the requirements for enrollment as a volunteer in a research study conducted by the researchers listed above. You are now being invited to participate in this study.

Before you can make your decision, you will need to know what the study is about, the possible risks and benefits of being in this study, and what you will have to do in this study. The research team will discuss with you the details, and they will provide you this consent form to read. You may also decide to discuss it with your family and/or friends. Some of the language may be difficult to understand and if this is the case, please ask the researcher and/or the research team for an explanation. If you decide to participate, you will be asked to sign this form. Your participation is voluntary. You may withdraw any time without penalty and there will be no loss of any benefits to which you are entitled.

Purpose: The Primary Investigator states: “In my graduate program at Cal Poly Pomona, I am developing a project on Least Restrictive Environment and Differentiated Instruction.

Procedures: You will be asked a few qualitative questions regarding What is Least Restrictive Environment? What is Differentiated Instruction? How effective do you feel Differentiated Instruction is in an Least Restrictive Environment? How is it being implemented? How is it being measured?

After the raw data have been collected, all names will be removed. Your name will be assigned a code number. Only the code number will be left as identifiers.
Commitment and Compensation: Your total participation in the study will take [2] session(s), which will last approximately [30] minutes. You will not receive financial compensation for participation in the study.

Possible Risks and Benefits: It is expected that participation in this study will provide you with no more than minimal risk or discomfort, which means that you should not experience any more difficulty than what would occur in your normal daily life. However, there is always the chance of an unexpected risk. The foreseeable risks in this study include an accidental disclosure of your private information, or discomfort by answering questions that are embarrassing. If you feel uncomfortable or distressed, please tell the researcher and he/she will ask you whether you wish to continue. You can withdraw from the study at any time without penalty.

You will not receive any direct benefits from participating in this study. However, your participation is intended to add to the knowledge about [list expected outcomes in the study]. It may also benefit other people with similar concerns.

Confidentiality and Consent: The investigator and staff involved with the study will not reveal the personal information which they collect about you. Any information that is obtained in connection with this study -- and that can be identified with you -- will remain private and will be disclosed only with your permission or as required by law. Your identity will be kept strictly confidential by removing your name and all identifiers. Once the project is completed, all interview materials will be destroyed. Do be aware, that the results, in either an anonymous or a summarized format, will likely be published or presented at conferences.

New Information: During the course of this study, the investigators may discover information that could be important to you. They will notify you as soon as possible when such information becomes available.

Consent: I consent to participate in the study. I understand that my participation in this study is entirely voluntary and that I may refuse to participate or withdraw from the study at any time without penalty. I have received a copy of this consent form for my records.

<table>
<thead>
<tr>
<th>Printed name of participant</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of primary investigator</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>