

TEACHERS' AND ADMINISTRATORS' PERCEPTIONS OF THE
DELIVERY OF SPECIALLY DESIGNED INSTRUCTION
IN INCLUSIVE SETTINGS

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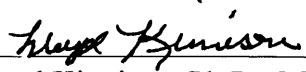
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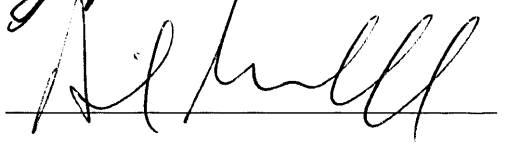
I am submitting herewith a dissertation written by Kathleen Talbert entitled "Teachers' and Administrators' Perceptions of the Delivery of Specially Designed Instruction in Inclusive Settings." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Special Education.




Lloyd Kinnison, Ph.D., Major Professor

We have read this dissertation and recommend its acceptance:








Department Chair

Accepted:



Dean of the Graduate School

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DEDICATION

This dissertation is dedicated to the ones I love:

To my God, my Savior, and my Friend, for giving me your unfailing love and strength throughout this journey.

To my husband, David, for all your love and patience during this journey. I truly appreciated all your support, including driving me to my dissertation defense meeting and being there with me to celebrate afterwards.

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ABSTRACT

KATHLEEN TALBERT

TEACHERS' AND ADMINISTRATORS' PERCEPTIONS OF THE DELIVERY OF SPECIALLY DESIGNED INSTRUCTION IN INCLUSIVE SETTINGS

MAY 2010

The purpose of this study was to examine the degree to which teachers and administrators have knowledge of specially designed instruction, to determine the degree to which they implement specially designed instruction in the general education setting, and to identify barriers for implementation. Therefore, three research questions guided this study:

1. What do special education teachers, general education teachers, and administrators perceive to be their level of knowledge on the identified categories of specially designed instruction?
2. What do special education teachers, general education teachers, and administrators perceive to be their level of implementation for providing identified categories of specially designed instruction?
3. How do special education teachers, general education teachers, and administrators rank identified barriers for implementing specially designed instruction in the general education setting?

A pilot study utilizing focus group methodology was conducted to obtain the teachers' and administrators' perceptions on the delivery of specially designed instruction in inclusive settings and any perceived roadblocks they encountered in the implementation process. Focusing on the individuals' perceptions through the focus interview captured educational practices in the participants' own words.

Using a non-experimental research design, survey methodology was chosen to provide descriptive data on educators' perceptions of their level of knowledge and level of implementation for providing specially designed instruction in the general education setting, and roadblocks for implementation. The survey was developed based on information gained from the focus groups, principles found in the framework of universal design for learning based on the work of Wehmeyer (2006), who targeted students with mild mental retardation, and findings on evidence based instructional practices from research syntheses in the field of learning disabilities and mild mental retardation.

Several important findings regarding teachers' and administrators' level knowledge and level of implementation of specially designed instruction are revealed, along with roadblocks for implementation. A critical implication suggests a focus on how to evaluate the effectiveness of educator training programs to ensure teachers and administrators possess high levels of knowledge of what constitutes specially designed instruction.

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CHAPTER I

INTRODUCTION

In the past several decades, there have been considerable changes in the philosophies and practices regarding the inclusion of students with disabilities into general education classrooms. Historically, special education was often specialized classes for students with disabilities. The passage of P.L. 94-142, the Education for All Handicapped Children Act of 1975 mandated an appropriate education in the least restrictive environment (LRE). Students with disabilities were legally required to be educated to the maximum extent possible in general education settings with access to their non-disabled peers. With this LRE mandate, students with disabilities were typically mainstreamed into general education classes for more than half of the school day, with specialized instruction provided in resource classrooms for parts of the day. During the 1980s, the debate continued over the best service delivery model for special education students. The Regular Education Initiative (REI) and supporters called for the elimination of pull-out programs and pushed for full-time inclusion in general education classrooms (Zigmond, 2003).

Presently, federal legislative changes including the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA) 2004 and No Child Left Behind (NCLB) place a greater emphasis on the academic performance of students with disabilities, with the goal of raising educational expectations for students with

disabilities. Currently, students with disabilities are included in the state accountability system. The inclusion of students with disabilities on statewide assessments contributes to the pressures of favoring one placement over another placement (Zigmond, 2003).

Along with this increased accountability for the inclusion of students with disabilities in general education curriculum and assessment, the debate intensifies over which service delivery model is the most effective for students with disabilities. Some proponents call for the full inclusion of students with disabilities in the general education classroom and reject other pull-out services such as resource classrooms. Yet, with the renewed focus on which instructional setting is most effective, Zigmond (2003) notes how little attention is given to the research evidence on the efficacy of one special education instructional setting over another.

Zigmond (2003) argued that researchers should move beyond asking the question of what instructional setting is most effective, and instead ask how students spend their time and what kinds of instruction and learning opportunities are made available to students with disabilities in each setting. Similarly, Soukup, Wehmeyer, Bashinski, and Bovaird (2007) suggest moving away from discussions on where and how students access the general education curriculum, and instead focus on how the curriculum is delivered and what supports are necessary for students to make progress in the general education setting.

In a series of studies, Baker and Zigmond (1990) asked whether general education classrooms were equipped to provide specially designed instruction to students with disabilities. Their analysis indicated no evidence of differentiated instruction with mostly

large whole-group instruction and the same assignments for the entire class (Baker & Zigmond). For example, rather than providing specially designed instruction based on the individual needs of the students, the teachers had uniform expectations for all students (Baker & Zigmond).

The reauthorized Individuals with Disabilities Education Improvement Act (IDEIA) 2004, requires general educators to increase their efforts to individualize instruction for students who are struggling through the Response to Intervention (RTI) framework, an alternative model of determining eligibility for a learning disability. Now, *general* education teachers are encouraged to provide individualized supports through early intervening services prior to a student's referral to special education such as remedial instruction and small grouping strategies. Moreover, IDEIA 2004 requires that schools provide a free and appropriate public education (FAPE) for students with disabilities. FAPE is provided when a student receives specially designed instruction based on his or her unique needs to ensure meaningful progress in the general education curriculum. These key concepts found in IDEIA 2004 suggest general education classrooms must be equipped to provide the learning opportunities and necessary supports for *all* students in the general education classroom.

Special education is defined in the Individuals with Disabilities Education Improvement Act (IDEIA) 2004 as “specially designed instruction, at no cost to parents, to meet the unique needs of the child with a disability” (CFR section 300.39, p. 46761). The federal regulations state that specially designed instruction means adapting the content, methodology, or delivery of instruction to meet the unique needs of a child with

a disability, and to ensure access of the child to the general education curriculum.

IDEIA's mandate for students with disabilities and their involvement and progress in the general education curriculum emphasize the following: 1) what is taught, 2) how it is taught, and 3) what supports are provided for students (Soukup, Wehmeyer, Bashinski, & Bovaird (2007).

Areas of Investigation

Specially designed instruction is the foundation of special education with a focus on the individual needs of the student. By definition, to be eligible for special education, a student requires specially designed instruction (Bateman, 2004). Case law makes it clear that school districts must demonstrate that the specially designed instruction or methodology utilized in the student's Individual Education Program (IEP) must be individually tailored to meet the student's goals and objectives (Herr & Bateman, 2003).

A major requirement of IDEIA (2004) is access to the general education curriculum, and the student's IEP must contain information to enable the child to be involved in and make progress in the general education curriculum (Ahearn, 2005). Additionally, IDEIA requires educating students with disabilities in the least restrictive environment (LRE), and public agencies must ensure to the maximum extent appropriate, children with disabilities are educated with children who are non-disabled in the general education classrooms. IDEIA mandates providing children with disabilities supplementary aids, services, and other supports in the regular education classes to enable them to be educated with nondisabled children to the maximum extent appropriate (CFR Section 300.42).

The National Center on Accessing the General Education Curriculum (NCAC) and the work of Karger and Hitchcock (2003) suggest the original provisions found in IDEA (1997) expand the concept of access to the general education curriculum to include the implementation of specially designed instruction to allow the student to meet the same educational standards of non-disabled students (Ahearn, 2005).

The purpose of this study was to examine the degree to which administrators and educators have knowledge of specially designed instruction, to determine the degree to which they implement specially designed instruction in the general education setting, and to identify barriers for implementation.

Statement of the Problem

Improving meaningful access to the general education classroom for students with disabilities through the delivery of specially designed instruction based on their unique needs is a challenge for educators. General and special education teacher preparation is critical to solving the challenge of not meeting the individual needs of students with disabilities in inclusive settings. Administrators need professional development on monitoring the implementation of specially designed instruction in inclusive settings. In addition, teachers and administrators need support for overcoming identified barriers for implementation.

Past studies show educators have different interpretations of access to the general education curriculum, and often interpret access as student *placement* in a general education classroom without a focus on effective instruction and supports (Soukup et al., 2007). Other studies indicate that general education classrooms are unsupportive

environments for implementing effective teaching interventions and individualized instruction for students with disabilities (Zigmond, 2003). Notably, specially designed instruction utilizing research based practices do not transfer easily to the general education classroom, and individualization is often not observed in general education classrooms (Fuchs & Fuchs, 1995).

According to Tomlinson and McTighe (2006), effective general education teachers utilize differentiated instruction to meet the needs of various learners in the classroom. Differentiated instruction is an instructional design that guides effective teaching procedures to ensure success with diverse learners (Tomlinson & McTighe). However, Tomlinson and McTighe (p. 19) note “differentiation does not advocate individualization.” While general education teachers can meet the multiple needs of many students in the classroom through differentiation, fully meeting the individual needs of every single student would be an overwhelming task for the general classroom teacher (Tomlinson & McTighe).

Yet, Minow (2001, p. 3) reports that Art Levine, President of Teachers’ College at Columbia University, envisions a future time in which teachers for *all* students will utilize special education as a model for their instruction and “develop individualized instruction tailored to each student’s learning style” based on emerging scientific research. Similarly, Hudson (as cited in Tollefson, 1998, p. 2) predicted a time in which general education and special education would be a “unified field called education,” and he envisioned general and special education teachers working together to overcome learning challenges.

To equip educators with the necessary skills to provide specially designed instruction, along with supplementary aids and supports in the general education setting, educators must first have a clear focus on what types of educational supports are necessary for all students to access and learn the general education content (Downing & Peckham-Hardin, 2007). Additionally, teachers must have the knowledge and skills necessary to provide significant and individualized instruction to students with disabilities in the general education classroom.

Results of this study determined the extent of knowledge and the degree to which administrators and educators implement specially designed instruction in the general education classroom. These results will be helpful in providing future staff development. Specifically, staff development for administrators and teachers place more emphasis on evidence based practices for specially designed instruction.

Significance of the Study

There is a mixed body of research on the effectiveness of inclusion programs for students with disabilities. Many of these studies are qualitative in nature, and pose questions to gain the teachers' attitudes toward integration (Kavale & Forness, 2000). Other qualitative studies answer questions about inclusive programming in the various school contexts and what it takes to implement these programs (MacArthur, 2003). Yet, it is important to understand what instructional and learning opportunities are provided to students with disabilities in inclusive settings (Zigmond, 2003). In 2005, Project Forum conducted research with the National Association of State Directors of Special Education (NASDSE) and U.S. Department of Education's Office of Special Education Programs

(OSEP) on the status of strategies for improving access to the general education curriculum for students with disabilities. Ahearn (2005) suggested the findings show inconsistencies and variations in the types of training and supports provided to teachers, along with inconsistencies on the use of instructional strategies to support students with disabilities.

By examining educators' levels of knowledge of specially designed instruction, evaluating the level of degree to which specially designed instruction is implemented, and identifying roadblocks for implementation, data was gathered to support teachers in improving access to the general education curriculum for students with disabilities. This information will be useful in planning future staff developments that focus on teachers' and administrators' understanding and consistent implementation of research based instructional strategies to support access to the general education curriculum for students with disabilities.

Statement of Purpose

The purpose of the study was three-fold: first, to gather general education teachers, special education teachers, and administrators' level of knowledge regarding specially designed instruction; second, to evaluate the degree to which general and special education teachers implement specially designed instruction in the general education setting; and third, to identify roadblocks for providing specially designed instruction in inclusive environments.

Research Questions

The research questions for the quasi-experimental design were as follows:

1. What do administrators, general education teachers, and special education teachers perceive to be their level of knowledge on identified categories of specially designed instruction?
2. What do administrators, general education teachers, and special education teachers perceive to be their level of implementation for providing identified categories of specially designed instruction?
3. How do teachers and administrators rank identified barriers for implementing specially designed instruction in the general education setting?

Definition of Terms

Access to the general education classroom – A major component of IDEIA 2004 which requires the Individual Education Program (IEP) of a student with a disability to include information to enable the child to be involved in and make progress in the general education curriculum.

Cognitive Strategy Instruction - Systematic instruction on learning skills to promote higher order thinking and problem-solving to teach students how to learn (Lenz, 2006). Examples include mnemonics, rehearsal strategies, metacognitive strategies for comprehension, self-management, and content enhancement strategies.

Control Task Difficulty - Mixing easy tasks with hard tasks, providing appropriate levels of prompts or assistance, providing simplified demonstrations (Vaughn, Gersten, & Chard, 2000).

Co-teaching – Two or more professionals delivering instruction to a diverse group of students in a single space (Cook & Friend, 2010).

Direct Instruction - Systematic instruction found in published curriculum programs. Adams and Engleman (as cited in Adams & Carnine, 2004) cite examples including DISTAR, Corrective Reading, and Reading Mastery.

Inclusion –Integration of students with disabilities in the general education classroom.

Inclusion Support - Inclusion support refers to arrangements in which either a licensed or non-licensed individual assists in a general education classroom in a very limited role.

Least Restrictive Environment - IDEIA 2004 requires educating a student with a disability in the least restrictive environment requirements (LRE), and states that public agencies must ensure that

to the maximum extent appropriate, children with disabilities are educated with children who are non-disabled, and special classes, separate schooling, or other removal from the regular education environment occurs only if the nature and severity of the disability is such that education in regular classes with the use of supplemental aides and services cannot be achieved satisfactorily. (CFR Section 300.114, p. 46764)

Progress Monitoring – Assessing the growth of students in based skills through the use of curriculum based measurements, and using the results to inform instruction (Fuchs & Fuchs, 1995).

Resource – Traditional pull-out instruction outside of the general education classroom in which the special education teacher provides the technical expertise required to instruct students with disabilities in a separate setting (Manset & Semmel, 1997).

Small Interactive Groups - Instruction provided in small groups of six or less, peer-tutoring, cooperative learning groups, (Johnson & Johnson, 1986; Scruggs & Mastropierie, 2003; Vaughn, Gersten, & Chard, 2000).

Special Education – Special education is defined in the Individuals with Disabilities Education Improvement Act (IDEIA) 2004 as “specially designed instruction, at no cost to parents, to meet the unique needs of the child with a disability” (CFR section 300.39, p. 46761).

Supplementary Aides and Services - “Aids, services, and other supports that are provided in the regular education classes, other education related settings, and in extra-curricular and nonacademic settings, to enable children with disabilities to be educated with nondisabled children to the maximum extent appropriate.” (CFR Section 300.42, p. 46762).

Univeral Design for Learning (UDL) – An architectural concept that allows persons with disabilities to be fully included in their communities by ensuring accessibility. In schools, UDL involves making general education content and materials accessible to students with disabilities (Turbull, Turnbull, & Wehmeyer, 2007).

Summary

The purpose of this study was to examine the degree to which teachers and administrators have knowledge of specially designed instruction, to determine the degree to which they implement specially designed instruction in the general education setting, and to identify barriers for implementation.

A pilot study utilizing focus group methodology was conducted to obtain the teachers' and administrators' perceptions on the delivery of specially designed instruction in inclusive settings and any perceived roadblocks they encountered in the implementation process. Focusing on the individuals' experience through the focus interview captured educational practices in the participants' own words. Using a non-experimental research design, survey methodology was chosen to provide descriptive data on educators' perceptions of their level of knowledge and level of implementation for providing specially designed instruction in the general education setting, and roadblocks for implementation.

By examining educators' levels of knowledge of specially designed instruction, evaluating the level of degree to which specially designed instruction is implemented, and identifying roadblocks for implementation, data gathered was useful for planning future staff developments that focused on teachers' and administrators' knowledge and consistent implementation of specially designed instruction to support access to the general education curriculum for students with disabilities.

CHAPTER II

REVIEW OF LITERATURE

In the past several decades, there have been considerable changes in the philosophies and practices regarding educating students with disabilities in inclusive environments. Before the 1960s, there was no special education legislation. During this time period, over 1.75 million students with disabilities were excluded from public schools, and more than 3 million students with disabilities attending schools did not receive an individualized education based on their unique needs (Katsiyannis, Yell, & Bradley, 2001). Parents and advocacy groups embraced the civil rights movement of the 1950s and 1960s to create changes in the education for students with disabilities. While litigation and federal legislation impacted educational programming for students with disabilities, contributions by researchers in the field of special education also led to important changes.

Turnbull (1993) declared that the first legislation impacting the needs of students with disabilities was in 1966 when Congress amended the Elementary and Secondary Act of 1965. The purpose of this amendment was to improve programs for children with disabilities by providing assistance to states through federal funding. Katsiyannis et al., (2001) acknowledged that this 1966 amendment established the Bureau of Education for the Handicapped in the Department of Health, Education, and Welfare, which ultimately became the Office of Special Education Programs (OSEP). Currently, OSEP provides

direction and financial assistance to states and local school districts to improve results for students with disabilities.

During the 1960's, researchers constructed assessments for identifying psychological processing difficulties and developed interventions (Swanson, Hoskyn, & Lee, 1999). Hallahan and Mock (2003) suggested there was an emphasis in the 1960s on the identification and programming for students with disabilities. In 1962, Samuel Kirk was the first person to define "learning disability," and shortly thereafter, Barbara Bateman proposed a definition that linked learning disabilities to a discrepancy between IQ and achievement (Hallahan & Mock). Additionally, William Cruickshank was an important influence in linking past research on mental retardation to present day learning disabilities (Hallahan & Mock).

Bateman (2004) reported special education instruction during the 1960s as deliberate and intensive instruction. However, Hallahan and Mock (2009, p. 23) suggests there were several researchers during this time period that developed "follies" which focused on visual-motor development and interventions. Similarly, Swanson et al. (1999) confirms there were criticisms with visual-motor, auditory sequencing, visual perception, and cross modality training interventions. These authors report the primary rationale for these types of interventions was to remediate the individual's processing deficits to improve learning in reading and math (Swanson et al.). These criticisms shifted the focus away from remediating processing deficits toward "minimizing the discrepancy between general ability and poor academic achievement" (Swanson et al., p.9).

Consequently, interventions during the 1970s included remediating skills in reading and math through “individualized programming and direct continuous measurement” such as precision teaching and criterion based instruction (Swanson et al., 1999, p. 9). During this time, students with learning disabilities typically spent the majority of the instructional day in a general education classroom, with the remainder of their time spent in pull-out services in the resource classroom to work on deficit skills (Swanson et al.). Hallahan and Mock (2003, p. 24) maintain that most researchers during this time period used scientifically based practices rather than “follies” of past interventions.

Turnbull (1993) believed Congress was not satisfied with the states’ progress in developing special education resources and personnel in 1974. At this time, there were two important court cases—*Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania* and *Mills v. D.C. Board of Education*—that impacted federal legislation. The courts ruled in both cases that children with disabilities should have access to public education (Turnbull).

In 1975, Congress enacted P.L. 94-142, the Education for All Handicapped Children Act (EAHCA) of 1975, which mandated full educational opportunities to all handicapped children, along with an appropriate education in the least restrictive environment (LRE). Therefore, students with disabilities were legally required to be educated to the maximum extent possible in general education settings with access to non-disabled peers. Crockett and Yell (2008, p. 382) described P.L. 94-142 as a “remedy” for the past exclusions of millions of students from public schools due to their

disabilities. In addition, P.L. 94-142 required the development of an individualized education plan (IEP) through a collaborative process, and consideration of providing specially designed instruction with specialized supports in the least restrictive environment (LRE; Crockett & Yell, 2008). Notably, Kavale and Forness (2000) reported schools were legally required to have a continuum of instructional options for students with disabilities. These authors suggest LRE does not always require placement in the general education setting, and LRE for some students may include placement in a self-contained or pull-out classroom based on the individual needs of the student. Because students with learning disabilities often require individualized and specific interventions to remediate deficit skills, resource classrooms during the 1970s represented an important service option on the continuum of services.

During the 1980s, the debate continued over the best service delivery model for students eligible for special education. The Regular Education Initiative (REI) and supporters called for the elimination of pull-out programs and pushed for full-time inclusion in general education classrooms (Will, 1986). Bateman (2004, p. 3) described special education during this time as “hardly recognizable.” She reported teacher caseloads of fifty to one hundred students resulting in students with disabilities receiving less specialized instruction due the increased duties of the teachers.

Additionally, Swanson, Hoskyn, and Lee (1999) acknowledged a shift in focus during the 1980s from the remedial-academic instructional approach to an approach that included cognitive and direct instruction. Swanson et al. (1999) cites the work of Deshler,

Schumaker, and Lenz as promoting research based instructional strategies to improve student's skills in self-monitoring, self-regulating, and problem-solving.

In 1990, the federal government amended P.L. 94-142 and renamed the act to the Individuals with Disabilities Education Act (IDEA). IDEA was again reauthorized in 1997 with a focus on student achievement and monitoring student progress (Bateman, 2004), along with a major emphasis on students with disabilities accessing the general education classroom (Zigmond, 2001). With the continued progression of requiring students with disabilities to be educated in inclusive settings, educators sought ways to implement appropriate instructional supports inside the general education classroom (Zigmond).

However, Swanson et al. (1999) reported that the 1990's brought a return of direct instruction in reading. This resulted in an emphasis on phonological processing as a critical component of an intervention program for students who are struggling in reading. These authors also noted that reading research suggested that struggling readers need "intensive and individualized" phonics instruction to improve their phonological awareness (Swanson et al., p. 10).

Presently, federal legislative changes including the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA) 2004 and No Child Left Behind (NCLB) place a greater emphasis on the academic performance of students with disabilities. Today, students with disabilities are included in the state accountability system, and IDEIA emphasizes access to the general education curriculum, in the regular classroom. Additionally, IDEIA 2004 has the requirement that special education services

must be based on peer-reviewed research, and that educators must monitor and report on the progress of students receiving special education (Crockett & Yell, 2008).

Moreover, providing a continuum of services for students with disabilities remains a mandate in IDEIA 2004. Included on the continuum of instructional settings for students with disabilities are inclusion support, co-teaching, and the traditional pull-out resource classroom.

Inclusion support refers to arrangements in which either a licensed or non-licensed educator assists in a general education classroom in a very limited role. Inclusion support does not involve direct instruction, but some responsibilities may include adapting materials, helping with organization, etc.

Co-teaching is one type of inclusive service delivery model that facilitates access to general education. It is a collaborative effort between special and general education teachers to support students with disabilities in general education classrooms. In this model, two teachers share the instructional responsibilities and discipline for students. Cook and Friend (2010) defined co-teaching as two or more professionals delivering instruction to a diverse group of students in a single location. Co-teaching differs from other types of instructional interventions by the level of instructional support provided in the general education classroom.

Tollefson (1998) and Swenson (2000) suggest the principles of co-teaching are based on Floyd Hudson's 1989 Class-within-a-Class (CWC) model for inclusion. Graham and Harris (2001) and Tollefson (1998) credit Hudson for thirty years of contributions on inclusive programming for students with learning disabilities, and for

changes he predicted in educating students with disabilities. Hudson, (as cited in Tollefson, 1998, p. 1) states, “I am convinced that the future for us is in instructional delivery, not curriculum content. The other direction we’re going to see much more of is co-teaching.”

Hudson recognized that general and special educators need supports in place for the Class-within-a-Class to be successful (Tollefson, 1998). Specifically, Hudson emphasized the importance of planning time for general and special education teachers. He suggested several innovative ways to overcome barriers for shared planning time. Hudson’s ideas included the following as cited in Tollefson:

1. Some districts run a program called “Fifth Day Floats,” in which special education teachers teach four days intensively, sometimes every hour. On the fifth day, special education teachers schedule co-planning time with general education teachers and take care of the paperwork required for their jobs.
2. Some districts have hired “building subs” full time in each school to fill in for teachers to do co-planning.
3. Some districts hire substitutes for a full day every four weeks to allow for full-day planning,
4. School assemblies monitored by the principal and counselors provide co-planning for teachers. (p.1)

Hudson believed that while students with disabilities benefit from inclusion programs such a Class-within-a-Class model, inclusion must be implemented in a

responsible way that provides the necessary accommodations and supports for students (Swenson, 2000; Tollefson).

While co-teaching has become an increasingly popular service delivery model, there is only a small body of research on whether it leads to academic improvement for students with disabilities (Welch, 2000). Similarly, Zigmond (2001, p. 72) reported the research base for co-teaching is “virtually nonexistent” and noted that existing studies simply describe implementation, collaborative relationships, and attitudes or perceptions. Without research supporting positive effects of co-teaching on student achievement and instructional improvements, Zigmond noted that co-teaching falls short of the requirement for using evidence-based practices for students with disabilities.

Manset and Semmel (1997) described traditional pull-out resource instruction as the special education teacher providing the technical expertise required to instruct students with disabilities in a separate setting. The pull-out class allows for several advantages including smaller teacher-student ratios, flexibility in pacing of instruction, specially trained teachers, and more individualization (Kavale & Forness, 2000; Zigmond, 2003).

While providing a continuum of services for students with disabilities remains a federal mandate, Wehmeyer (2006) contends the major focus of IDEIA 2004 is to promote access to the general education classroom in addition to ensuring student progress in the general education curriculum. Wehmeyer endorses the alignment between the curriculum for students with disabilities and the state standards as a critical component for ensuring accessibility. More importantly, Wehmeyer suggests access does

not ensure a student's progress in the general education curriculum, and emphasizes the importance of educational practices that enable students with disabilities to make progress in general education curriculum.

The increased pressure for providing access and progress for students with disabilities in the general education makes the delivery of specially designed instruction in inclusive settings a top priority for educators. Crockett and Yell (2008) maintain that when specially designed instruction is guided by research based practices, students with disabilities will receive a greater benefit.

With schools being held to higher academic standards for students with disabilities, educators must be prepared to meet the challenge of providing a free and appropriate public education (FAPE) through an individualized program while demonstrating excellence rather than access (Katsiyannis et al., 2001). Providing educators with the necessary tools to implement high quality, specially designed instruction in inclusive settings so that students with disabilities make progress in the general education curriculum is the ultimate challenge.

Specially Designed Instruction and Supplementary Aids and Services –

Legal Perspective

Eligibility for special education includes a two prong requirement: 1) a child with a disability, and 2) the child needs special education and related services. The federal regulations define a child with a disability as being

mentally retarded, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious

emotional disturbance, an orthopedic impairment, autism, traumatic brain injury, and other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, who by reason thereof, needs special education and related services. (C.F.R. Section 300.8, p. 46756)

Once a student is determined to be a student with disability, IDEIA (2004) requires that the student receives a free and appropriate public education (FAPE), and the student's program must be individualized through the collaborative process of developing an Individualized Education Plan (IEP; Katsiyannis et al., 2001). Crockett and Yell (2008, p. 385) purport that IDEIA is founded on the basic principle of "human individuality," and describes how this federal law promotes meeting the unique needs of students with disabilities in order to prepare them for "further education, employment, and independent living." In an important case in 1982, *Board of Education v. Rowley*, the Supreme Court set a standard for a free and appropriate public education. Crockett and Yell report the court decided that appropriate means *individualized* according to the unique needs of the child.

Special education is defined in IDEIA (2004) as "specially designed instruction, at no cost to parents, to meet the unique needs of the child with a disability" (CFR section 300.39, p. 46761). The federal regulations provide further clarification on specially designed instruction, to mean

adapting, as appropriate to the needs of an eligible child under this part, the content, methodology, or delivery of instruction 1) to address the unique needs of the child that result from the disability, and 2) to ensure access of the child to the

general education curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all children. (CFR section 300.39, p. 46762)

Specially designed instruction is the foundation of special education with a focus on the individual needs of the student. By definition, to be eligible for special education, a student requires specially designed instruction (Bateman, 2004). Crockett and Yell (2008, p. 385) describe special education as a means by which IDEIA delivers “individualized” interventions to “mitigate the effects of a student’s disability.”

Supplementary aids and services are defined as “aids services, and other supports that are provided in the general education classes, other education related settings, and in extra-curricular and nonacademic settings, to enable children with disabilities to be educated with nondisabled children to the maximum extent appropriate” (CFR Section 300.42, p. 46762).

If a child qualifies for special education, IDEIA (2004) requires educating the student in the least restrictive environment requirements, and states that public agencies must ensure that

to the maximum extent appropriate, children with disabilities are educated with children who are non-disabled, and special classes, separate schooling, or other removal from the regular education environment occurs only if the nature and severity of the disability is such that education in regular classes with the use of supplemental aides and services cannot be achieved satisfactorily. (CFR Section 300.114, p. 46764)

IDEIA (2004) guides placement decisions to ensure students with disabilities are placed in the general education setting, and students are removed only when satisfactory progress cannot be made with specialized supports (Crockett & Yell, 2008). Katsiyannis et al. (2001) states districts must have a continuum of placement options for students with disabilities that range from the general education classroom to more restrictive self-contained settings. After an IEP is developed for a student, IEP teams must consider the appropriate instructional setting to implement the student's individualized program (Katsiyannis et al.).

In a recent court case, *City of Chicago Sch. Dist. 299*, 50 IDELR 300 (SEA IL 2008), the hearing officer found the school erred by placing more importance on the student's placement in the LRE rather than considering the student's educational needs, which resulted in a denial of FAPE. The case involved a student with above average intelligence who lacked basic skills in reading, writing, and spelling. The hearing officer ruled the district denied the student a free and appropriate public education because the district decided to "include the student in the general education classroom rather than provide intensive services in a more self-contained setting," and noted that the "modifications and accommodations merely masked the student's academic struggles" ("LRE Compliance Advisor," 2009, p. 4).

Along with LRE considerations, effective instruction is a focus for providing FAPE under IDEIA (2004). IDEIA requires IEPs of students with disabilities to have a statement of the

special education services and related services and supplementary aids and services, based on peer-reviewed research to the extent practicable, to be provided to the child, or on behalf of the child, and a statement of the program modifications or supports for school personnel that will be provided to enable the child to advance appropriately toward attaining the annual goals and to be involved in and make progress in the general education curriculum. (C.F.R. Section 300.320, p. 46787)

While IDEIA (2004) does not define peer reviewed research, the federal Elementary and Secondary Education Act (ESEA), as amended by No Child Left Behind (NCLB), defines scientifically-based research as

research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs, and includes research that has been accepted by a peer-reviewed journal or approved panel of independent experts through a comparably rigorous, objective, and scientific review. (20 U.S.C. Section 7801 (37;B).

Moreover, Odom et al. (2005), along with the Council for Exceptional Children (CEC) division for research, published guidelines and quality indicators for evidence-based practices.

Crockett and Yell (2004, p.387) stated that IDEIA 2004 will “significantly alter the ways in which special education teachers work with their students” based on the requirements of peer-reviewed research and educators monitoring and reporting on the educational progress of the student. In addition, IDEIA’s mandate for collecting data and

monitoring student progress toward the goals in their IEPs has significant implications. Crockett and Yell speculate that this data requirement will improve instructional decision making for teachers and ensure students with disabilities have positive outcomes.

Garda (2006) declared the broad definition of special education found in IDEIA 2004 (i.e. adapting the content, methodology, or delivery of instruction to meet the unique needs of the child) leads to mixed interpretations of special education. Specifically, there are questions in the field on whether *any* adaptation to the content, method, or delivery of instruction is considered *special education*. Consequently, Garda conducted a review of court cases and discovered various interpretations of special education. Garda (p.318) suggests decision-makers are divided on these issues with some authorities using a “broad” definition of special education while others adopt a more “narrow” definition of special education.

First, decision-makers agreed that adaptations to the content which include “instructing a child in a unique skill” or life skill is special education (Garda, 2006, p. 320). However, there are conflicting hearing officer decisions over whether *any* curriculum accommodations or modifications to the content is special education. Garda noted that some courts define special education as slight modifications to the content while other courts find no need for special education in cases of minor modifications available to all students.

Second, Garda (2006) stated it may be classified as special education when using general education curriculum to meet a student’s unique needs when the method of instruction is adapted. However, hearing officers have differing opinions of when these

accommodations shift from routine, classwide use to methods that are classified as “special education.” For example, there is agreement that oral tests, longer time to complete tests or assignments, and assistance with organization are not considered “special education” since these accommodations do not result in a change in instructional methodology, and instead represent universal accommodations (Garda). Thus, hearing officers contend that common accommodations that apply to all general education children, and are not “special education” (Garda).

Third, Garda (2006) reported courts are divided over whether or not adapting the delivery of instruction constitutes special education, and suggested there is disagreement over whether adaptations by the special education teacher automatically constitute “special education.” Decision-makers are split on whether adaptations by general education teachers result in special education, with some contending general educators cannot provide “special education.” Similarly, there is mixed decisions on whether the delivery of instruction in special settings constitutes “special education.”

Consequently, Garda (2006) proposed an interpretation of eligibility for special education since the federal definition is vague. With the resulting confusion in the field and mixed court interpretations, Garda (p. 331) purported the narrow definition of “special education”—“*significant* adaptations in content, methodology, and delivery that are not provided to all general education children”—should prevail. Garda noted good teachers routinely adjust instruction to meet the diverse needs in the classroom, and minor modifications or accommodations should not be considered “special education.”

Only when “significant” adaptations are required that are not used with other children should it rise to the level of being identified as “special education” (Garda, p. 332).

Specially Designed Instruction and Supplementary Aids and Services –
Perspective from the Field of Special Education

Over the past thirty years, the field of special education has undergone major changes in philosophies and practices of providing specially designed instruction for students with disabilities. A review of the literature from the perspective of the field of Special Education reveals a common definition of specially designed instruction, along with hallmark features of evidence based instructional practices. First, this section is organized to provide exact descriptors of special education. Second, studies involving the implementation of specially designed instruction in the general education classroom are reviewed. Third, critical components of instructional practices constituting specially designed instruction are explored based on the key findings of published research for educating students with disabilities.

Historically, special education involved highly trained teachers to provide individualized instruction to students with disabilities (Volonino & Zigmond, 2007). Fuchs and Fuchs (1995, p. 526) characterized special education as “individualized instruction, smaller classes, and more highly trained teachers.” Hallahan and Kauffman (as cited in Zigmond, 1995, p.111) described special education as “special materials, teaching techniques, equipment, and/or facilities” for students with special needs. Kavale and Forness (2000) and Deno, Foegen, and Robinson (1996) describe “individualization” as the fundamental characteristic of special education.

Lerner (as cited in Baker & Zigmond, 1995, p. 163) maintained the focus for special education in the 1970s was “diagnostic and prescriptive teaching.” Volonino and Zigmond (2007, p. 292) described diagnostic and prescriptive teaching as “diagnosing student’s learning needs through a variety of initial and ongoing assessments followed by carefully designed instruction tailored to meet individual student needs.”

Additionally, Zigmond, Vallecorsa, and Silverman, as well as Fass (as cited in Baker & Zigmond, 1995, p. 163) included “response-contingent instruction” and the development of “individually tailored instructional plans implemented with one-to-one instruction in resource classrooms” as interventions utilized during the 1970s. Baker and Zigmond noted that during the 1980s teachers administered assessments to drive a plan of remedial instruction to correct the learner’s weaknesses. The intensive remedial instruction was provided for students in one-on-one or in small groups. Manset and Semmel (1997, p. 157) described special education as “instruction that differs in both intensity and content-qualities that require additional teacher time, expertise, and technical resources.”

Zigmond (2001, p. 75) maintained that special education is characterized by the following critical components: 1) instruction focusing on “individual need,” 2) instruction that is “carefully planned,” 3) instruction that is “intensive, urgent, relentless, and goal-directed,” 4) instruction that is “empirically supported practice and drawn from research.” In addition, Volonino and Zigmond (2007) and Zigmond (2001) described the importance of providing students with disabilities something “special” that is not

available to all students such as the changing pacing, grading standards, texts, presentation of information, etc.

In summary, specially designed instruction has its foundation in assessing and diagnosing the student's weaknesses. Once these deficits skills are identified, special educators develop goals and objectives to remediate these weaknesses. With a focus on the unique needs of the student, highly trained special education teachers provide intensive and individualized instruction and accommodations through one-on-one or small groups.

Yet, educators in the 1990s "eliminated diagnostic-prescriptive skill building" in resource pull-out classrooms, and instead provided specially designed instruction to students with disabilities in the general education setting (Baker & Zigmond, 1995, p. 163). Volonino and Zigmond (2007) expressed concern in promoting research-based practices through inclusion, and questioned whether the components of effective special education can be implemented in large general education classrooms. Several studies confirm the features of specially designed instruction erode in the general education classroom. Specifically, studies have found a lack of individualization in inclusive settings (Baker & Zigmond; Espin, Deno, & Albayrak-Kaymak, 1998; Manset & Semmel, 1997).

Baker and Zigmond (1995) conducted research at five sites to reveal the implications of educating students with disabilities in general education settings, and to determine whether or not these students received a special education.

In the category of accommodating individual needs, students received modified materials, assignments, and tests. Specifically, students were given shortened assignments in spelling, number of math problems for homework, and opportunities to rehearse the upcoming week's materials (Baker and Zigmond, 1995). The researchers noted most accommodations involved a whole class approach, and adaptations were rarely directed at an individual student. Baker and Zigmond (p. 173) described one example of an adaptation for a single student which consisted of "explicit instructions repeated."

Baker and Zigmond (1995) identified remediating deficit skills as a second category of specially designed instruction in the context of inclusion. Remediation for reading and math occurred before or after school, and in some cases during lunchtime. In most cases, efforts were made to create opportunities for supplemental instruction without pulling students away from general education activities. Educators and parents agreed that some students with disabilities needed more time for remedial support than was allowed with the inclusion/co-teaching model (Baker & Zigmond).

The third category of specially designed instruction included involving peers and paraprofessionals to provide one-to-one instruction since each site recognized that students with disabilities required more support (attention, coaching, and correction) than what occurred in the co-teaching arrangement (Baker & Zigmond, 1995). All sites used peer-mediated strategies for students struggling in the general education setting. Baker and Zigmond (p. 174) note that teachers and administrators recognized that the needs of students with learning disabilities could not be totally addressed by the general or special

education teacher in the general education classroom; therefore, “direct teaching and coaching” was the responsibility of the student’s “study buddy.” Paraprofessionals also provided direct instruction to students with disabilities at several sites in the study.

Consequently, Baker and Zigmond (1995) contended there was very little specially designed instruction delivered to students with disabilities in the general education setting in their study. There was “almost no specific, directed, individualized, intensive, remedial instruction” for identified students with disabilities (Baker & Zigmond, p. 178). While the educators in the study expressed willingness to help all students in the general education curriculum, there was no evidence of individualization and systematic monitoring of student progress (Baker & Zigmond).

Espin, Deno, and Albayrak-Kaymak (1998) compared Individualized Education Programs (IEPs) of students with mild disabilities in resource settings and inclusive settings. The findings show that differences exist between IEPs written for students in the two different settings. Specifically, IEPs written for students in resource classrooms provided more time for services and more annual goals than IEPs written for students in the general education setting. The IEP objectives for students in the resource setting targeted specific deficit skills such as decoding, comprehension, and sight word recognition. However, IEP objectives for students in inclusive settings were more generic with a focus on making progress in the general education curriculum, and the student’s progress was monitored through student grades (Espin et al., 1998). The authors noted that inclusive teachers used fewer sources of data to develop a student’s IEP, and the students were taught through whole group instruction.

The authors concluded that teachers in resource settings individualized the IEP goals and objectives according to the student's needs, while the teachers in inclusive settings plan the student's program according to information provided by the general education teacher who teaches in whole group and tracks student's progress through the curriculum (Espin et al., 1998). Specifically, teachers in the resource setting provided 1 ½ times the number of services and 1 ½ the number of IEP goals to students in resource compared to students with similar needs who were served in the general education setting. The authors noted that students with Mild Mental Retardation (MMR) who were served in the resource setting had more service minutes and IEP objectives than students with learning disabilities served in the same setting. Yet, in inclusive programs, there were no significant differences in the IEP objectives written for students with Learning disabilities (LD) and MMR.

In conclusion, Espin et al. (1998) reported that teachers are less likely to provide the individualized programs for students with disabilities required by federal policy in the general education classroom. It appears the more time the student spends in the general education classroom, the less individualized is the IEP. The data from the study answers Fuchs and Fuchs' (1995) question of "What's special about special education?" Espin et al. (p. 173) state "clearly, the 'specialness' of special education, with its emphasis on individualized programming, seems to decrease in inclusive settings."

Manset and Semmel (1997) reviewed eight inclusive models for elementary schools to determine if inclusive programming is effective for students with mild disabilities. The challenge for developers of these eight model inclusive programs was

how to address resource allocations within general education classrooms and implement instructional changes. The results were inconclusive; inclusive programming was effective for some students and not effective for others (Manset & Semmel).

Commonalities in these inclusive models included restructuring general education classes so they incorporated the following effective components of special education classrooms: “low student-to-staff ratio, intensive and prescribed basic skills instruction, performance monitoring, and the opportunity for intensive one-to-one instruction” (Manset & Semmel, 1995, p. 155). The results of these studies emphasize the continued importance of providing students with disabilities opportunities to receive “intensive, individualized instruction” by a special education teacher on deficit skills (Manset & Semmel, p. 178).

Furthermore, the Class-within-a-Class (CWC) model based on Hudson’s work in 1989 recognized that general education classrooms must incorporate specialized supports for students with disabilities to be successful (Tollefson, 1998). Hudson advocated for responsible inclusion through scheduling that allows general and special education teachers time for planning and shared instruction to meet the needs of the students. In addition, Hudson recognized the need to have schedules that allow “the right kinds of students to be in the right places at the right time” (Tollefson, p.2).

Lastly, critical components of instructional practices constituting specially designed instruction based on the key findings of published research for educating students with disabilities include direct instruction, cognitive strategy instruction, control task difficulty, small interactive groups instruction, and progress monitoring. These

findings for providing specially designed instruction and improving outcomes for students with disabilities are based on a review of research studies and summaries conducted by Volonino and Zigmond (2007), Scruggs and Mastropieri (2003), Vaughn, Gersten, and Chard (2000), Adams and Carine (2004), Lenz (2006), Wong, Harris, Graham, and Butler (2003), Swanson, Hoskyn, and Lee (1999), Mastropieri and Scruggs (2003), Johnson and Johnson (1996), Jenkins & O'Conner (2003), and Fuchs and Fuchs (1995).

Volonino and Zigmond (2007) maintain much research has been conducted on what constitutes effective special education. Swanson and Hoskyn (as cited in Volonino & Zigmond) and Scruggs and Mastropieri (2003) reported that a combination of direct instruction and strategy instruction had positive results for students with learning disabilities.

Additionally, Vaughn, Gersten, and Chard (2000) summarized the findings of a research synthesis conducted by the Office of Special Education Programs and the National Center for Learning Disabilities to identify common principles of effective instruction. Vaughn et al. (2000) specifically credits H.L. Swanson and his researchers for their efforts in the research synthesis and acknowledges his meta-analysis involving all research published in the field of learning disabilities since 1963 with a particular focus on instructional components. In a review of Swanson's research, Vaughn et al. (2000) reports three critical factors that produced the most impact on student learning.

First, control of task difficulty involving the sequence of student work to maintain high levels of student success was identified. The second instructional component was

teaching students with disabilities in small groups of six students or less to ensure interactive responding. The third instructional component for effective instruction was direct response questioning. Vaugh et al. (2000, p. 101) described direct response questioning as the use of teaching procedures to promote “thinking aloud” or the ability of students to monitor their own thinking during an instructional task. Vaugh et al. described direct response questioning as a combination of cognitive strategies instruction and Direct Instruction techniques (Vaugh et al.).

Direct Instruction refers to published materials by Engelmann and associates that has been field tested for student mastery (Adams & Carine, 2004). Masteropieri and Scruggs (1997, p. 201) described direct instruction as “explicit, skills-based teacher-directed instruction on individual reading skills and use of phonetically regular, predictable texts to promote application of newly acquired skills.” Examples of direct instruction programs are Reading Mastery, Corrective Reading, and Corrective Math programs. Adams and Carnine reported consistent research findings in the superiority of Direct Instruction model, and specifically cite the meta-analysis conducted by Swanson, Lee, and Hoskyn. Additionally, Adams and Carnine conducted a meta-analysis of Direct Instruction for students with learning disabilities, and their findings clearly support the effectiveness of this approach. Moreover, research suggests the components of direct instruction including “structure, clarity, redundancy, careful task sequencing, and feedback” have positive outcomes for promoting reading comprehension for students with learning disabilities (Masteropieri & Scruggs, p.202).

Cognitive strategies instruction is based on the work of Scott G. Paris and Ann L. Brown, who taught students the rationale behind the strategy to be learned, related the strategy to their improved academic performance, and connected the strategy to uses in other situations (Wong, Harris, Graham, & Butler, 2003). Wong, et al. (2003) and Mayer (2001) defined cognitive strategies as cognitive processes the learner purposely uses to influence their learning and cognition. Lenz (2006) describes learning strategies as a process to teach students how to think and act in order to learn. With the increased emphasis on students with disabilities making progress in the general education content, learning strategies and content enhancement routines (CER) are critical in helping students overcome learning challenges (Bulgren, Deshler, & Lenz, 2007). Hock and Deshler (2003) suggested these strategies assist students with acquiring, remembering, and expressing course information to allow the student to independently understand the content. Research in strategy instruction for students with learning disabilities has increased in the past twenty years, particularly in mnemonics, reading, composition, and mathematics, and content enhancement routines, and research suggests these strategies prove to be beneficial to students (Bulgren et al.; Hock & Deshler; Vaughn et al., 2000; Wong et al.). Hudson (1989) recognized that special educators' role is to teach students how to learn through the use of learning strategies and content enhancement routines (Jolleson, 1998).

Swanson, Hoskyn, and Lee (1999, p. 18) reported both strategy instruction and direct instruction have the commonalities of effective methods of instruction including “1) daily reviews, 2) statements of an instructional objective, 3) teacher presentations of

new material, 4) guided practice, 5) independent practice, and 6) formative evaluations.”

Additionally, Swanson, et al. (1999) maintain that strategy instruction and direct instruction both follow a sequence of similar events:

1. State the learning objectives and orient the students to what they will be learning and what performance will be expected of them.
2. Review the skills necessary to understand the concept.
3. Present the information, give examples, and demonstrate the concepts/materials.
4. Pose questions (probes) to students and assess their level of understanding and correct misconceptions.
5. Provide group instruction and independent practice. Give students an opportunity to demonstrate new skills and learn the new information on their own.
6. Assess performance and provide feedback. Review the independent work and give a quiz.
7. Give feedback for correct answers and reteach skills if answers are incorrect.
8. Provide distributed practice and review.” (p. 178-179)

Swanson et al.’s (1999) research findings suggested a Combined Model of Direct Instruction and Strategy Instruction an effective approach for students with learning disabilities. The critical instructional components reflected in the Combined Model include

sequencing or breaking down the task and fading of prompts or cues, drill-repetition-practice, segmenting information into parts or units for later synthesis, controlling task difficulty through prompts and cues, making use of technology, systematically modeling problem-solving steps, and making use of small interactive groups. (Swanson, et al., p. 218)

Mastropieri and Scruggs (2003) summarized the following variables in their research that produced consistent positive outcomes when used with students with disabilities in the area of science and social studies. These findings are consistent with the work of Swanson and Hoskyn in 2000. The key components of effective instruction are: 1) clearly specified instructional objectives, 2) maximized student engagement which is easily accomplished through peer tutoring, 3) concreteness and meaningfulness including mnemonic instructional strategies to manipulation of science materials, 4) active thinking through many forms such from text structure to retrieving steps in a mnemonic strategy, and 5) explicit provision of learning strategies through explicit demonstration, practice, and prompting (Scruggs & Mastropieri).

Scruggs and Mastropieri (2003) noted their conclusions support a model of effective instruction that is widely promoted in special education. This model includes “careful task analysis and specification, coupled with a variety of strategies targeted to promote engagement, active thinking, and strategic learning” (Scruggs & Mastropieri, p. 375).

Vaughn et al. (2000) described nineteen studies conducted by Elbaum and colleagues that suggested small group or peer mediated instruction increases student

engagement in learning. Scruggs and Mastropierie (2003) reported research on peer tutoring with text comprehension integrated having positive outcomes for students. Similarly, Vaugh et al. affirmed that when students with learning disabilities serve in the role of tutor for reading, it is associated with higher effects than other groupings such as whole group.

Small interactive groups also include cooperative learning (CL), which allows students the opportunity to learn together to accomplish shared goals (Johnson & Johnson, 1986). The four basic elements of cooperative learning are positive interdependence, individual accountability, collaborative skills, and group process (Johnson & Johnson). Jenkins and O'Conner (2003) reviewed research on the use and effectiveness of cooperative learning. Their work included experimental studies, observational studies, and interviews with teachers using cooperative learning. Jenkins and O'Connor maintain that cooperative learning has a large research base for promoting academic learning and social skills for students with disabilities.

Finally, Fuchs and Fuchs (1995) identified two signature features of effective special education practices as instruction which includes empirically validated procedures and intensively focusing on the individual student through data-based decisions. Fuchs and Fuchs suggested collecting student data through the use of curriculum based measurement (CBM). CBMs are ongoing measurements of student performance in broad literacy and numeracy goals in the curriculum to develop individualized instructional programs (Fuchs & Fuchs).

Focusing on individualized instruction is the single most important characteristic of effective special education practices, and includes decisions on the effectiveness of instructional methods based on how the individual student responds to instruction. Fuchs and Fuchs studied CBM's in the general education setting, and question whether general educators are able to incorporate individualized decision-making. They reported that instructional adaptations made by general educators are usually made for the whole group rather than the individual student, and were minor in substance rather than significant with little chance to meet the needs of students with poor learning histories (Fuchs & Fuchs).

Fuchs and Fuchs (1995) recognize that many effective instructional practices for students with disabilities do not easily transfer to the general education setting because these classrooms typically have 25 to 30 students; therefore, focusing intently on the individual student is often impractical. While 90% of students in general education classes respond to general education activities that keep learners engaged, the remaining students need special education with an emphasis on empirically based practices and data-based individualized decisions (Fuchs & Fuchs).

In summary, the critical components for providing effective, evidence based practices for the delivery of specially designed instruction are found in Table 1.

Table 1

Critical Components of Evidence Based Practices for Specially Designed Instruction

Specially Designed Instruction	Definitions and Examples
Direct Instruction	Systematic instruction found in published curriculum programs such as SRA, Reading Mastery, Corrective Reading, Corrective Math programs (Adams & Carnine, 2004 as cited in Adams & Engleman, 1996).
Cognitive Strategy Instruction	Systematic instruction on learning skills to promote higher order thinking and problem-solving to teach students how to learn. Examples include mnemonics, rehearsal strategies, metacognitive strategies for comprehension, self-management, content enhancement strategies (Lenz, 2006).
Control Task Difficulty	Mixing easy tasks with hard tasks, providing appropriate levels of prompts or assistance, providing simplified demonstrations (Vaughn, Gersten, & Chard, 2000).
Small Interactive Groups	Instruction provided in small groups of six or less, peer-tutoring, cooperative learning groups (Johnson & Johnson, 1986; Scruggs & Mastropierie, 2003; Vaughn, Gersten, & Chard, 2000).
Progress Monitoring	Assessing the growth of students in based skills through the use of curriculum based measurements, and using the results to inform instruction (Fuchs and Fuchs, 1995).

Specialty Designed Instruction and Supplementary Aids and Services –

Perspective from M. Wehmeyer (2006)

Promoting student access to and making progress in the general education curriculum is a “focal point of federal and state policy and national school reform efforts impacting students with disabilities” Wehmeyer (2006, p. 226). IDEIA (2004) mandates that all student IEPs identify the special education and supplementary aides and supports the student requires to make progress in the general education curriculum. However, this author notes how little attention is given to applying these regulations to students with more severe disabilities.

Wehmeyer (2006) described an observational study by Soukup, Wehmeyer, Bashinski, and Bovaird (2005) that examined the degree of access to the general education curriculum for 19 elementary students with mild retardation through accommodations and curriculum modifications. Wehmeyer suggested that while students gained access to the general education classroom, the IEP goals were not linked to grade level standards, there was little evidence of curriculum adaptations, and no curriculum augmentations were being used.

Consequently, Wehmeyer (2006) examined ways to promote access to the general education curriculum for students with mild retardation that include the alignment of content standards to instructional goals and incorporating principles of Universal Design for Learning (UDL) to ensure access to the general education curriculum through the use of supplementary aides and services.

First, the content standards should serve as the beginning point of access for students with mild mental retardation, and the IEP should specify the special education and supplementary aids and services the student requires to make progress in the general education curriculum. Wehmeyer (2006) described how the Committee on Goals 2000 and the Inclusion of Students with Disabilities (1997) recommended the following processes to set defensible standards for students with disabilities by considering the following:

1. Do content standards represent skills critical to the student's success once he or she leaves school?
2. Do content standards represent critical skills appropriate for the age of the student?
3. Can the curriculum designed from the standards be fully taught to students with disabilities without jeopardizing their opportunities to master other critical, functional behaviors? (p. 226)

Once the standards and curriculum are set, Wehmeyer suggested writing them in an "open-ended" manner to allow students the opportunity to interact with the content in different ways.

Second, Wehmeyer (2006) purports the qualities of Universal Design for Learning (UDL) as a critical component in providing special education and supplementary aides and services to promote student access. In addition to UDL, Turnbull, Turnbull, and Wehmeyer (2007), and Wehmeyer (2006) identified five other domains relevant to providing supplementary aides and services to ensure access to the

general education curriculum. These domains include: access (modifications to the physical environment), classroom ecology (modifications to the classroom environment that impact learning), educational and assistive technology (technology that minimizes a person's impairment), assessment and task modifications (modifications to the time or task), and teacher, paraprofessional, or peer support (instructional support from others).

Wehmeyer (2006) focused primarily on the domain of UDL for providing access through supplementary aids and services. Orkwis and McLane (as cited in Weymeyer, p. 227) define Universal Design for Learning as "the design of instructional materials and activities that allows the learning goals to be achievable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember."

Scott, McGuire, and Shaw (2006) emphasized that UDL refers to designing flexible curriculum and instructional activities to easily promote the learning of *all* students including students with disabilities. Wehmeyer proposes multiple means of representation, multiple means of expression, multiple means of engagement, curriculum adaptations, and curriculum augmentations as important categories of UDL.

Multiple means of representation involves providing the content information in multiple and flexible formats such as providing key information through different sensory modalities (visual, auditory, or manipulatives), enlarged print, amplified sounds, digital books, and highlighted text. Multiple means of expression provides alternative ways for students to demonstrate what they know (i.e. say it, write it, draw it, drama, artwork, etc.) Multiple means of engagement is used to gain student's interest and increase motivation

(i.e. use of computer, provide choices, provide ongoing feedback, rewards, varied activities to incorporate student's interest).

Multiple means of representation, multiple means of expression, and multiple means of engagement are aligned with essential qualities of UDL based on the work of the Center for Applied Special Technology (CAST). This nonprofit organization endorses the use of UDL for ensuring access and progress in the general curriculum for all learners (McGuire et al., 2006).

Additionally, Wehmeyer (2006) proposed curriculum adaptations and curriculum augmentation as an essential component of UDL. Curriculum adaptations are modifications to the representation of the content or student's engagement. Examples include advance organizers, graphic organizers, outlines, concept maps, etc. Curriculum augmentations provide students with skills or strategies to access the curriculum. Content enhancement strategies, mnemonic strategies, and student-directed learning strategies are examples of curriculum augmentations that enhance student access to the general education curriculum (Wehmeyer). Commonalities between Wehmeyer's essential components for UDL and perspectives from the field of special education found in Table 1 are the use of cognitive strategy instruction including student-directed learning strategies.

McGuire et al. (2006) suggested the field of special education needs to examine the implications of Universal Design including whether it reduces the need for specially designed instruction. The authors note that under the paradigm of Universal Design, *all* learners have access to the general education curriculum that is flexible and adaptable,

and a disability is treated a normal component of human diversity. Therefore, the inclusive classroom considers the needs of a broad range of students, including students with disabilities. McGuire et al. caution embracing Universal Design as an alternative paradigm over special education without significant research in this area.

Turnbull et al. (2007) agreed that UDL promotes access to the academic content for *all* students through multiple means of expression, representation, and engagement. Yet, Turnbull et al. (p. 41) noted “these three elements require individualization...and special education is defined by individualization.”

A Framework for Specially Designed Instruction

Based on a review of the literature, the important characteristics of specially designed instruction are summarized in Table 2 from a legal perspective, a perspective from the field of Special Education, and a perspective from Wehmeyer. IDEIA 2004 provides a legal definition for specially designed instruction. Researchers from the field of special education identify the principles of specially designed instruction to include direct instruction, cognitive strategy instruction, control of task difficulty, small interactive groups, and progress. Universal Design for Learning (UDL) provides a theoretical framework for accommodating students in the general education classroom which includes multiple means of expression, multiple means of representation, multiple means of engagement, and curriculum adaptations (Wehmeyer, 2006). The literature review revealed key descriptors of specially designed instruction including the terms “significant” and “individualized.” Educators need a high level of knowledge of what

constitutes specially designed instruction in order to meet the individualized needs of students with disabilities in the general education classroom.

Table 2

Framework for Specially Designed Instruction

Critical Components	Key Descriptors
<p>Legal Perspective</p> <ul style="list-style-type: none"> -Adapting the content, methodology or delivery of instruction -Address unique needs of child -Ensure access in the general education curriculum (C.F.R. section 300.39) 	<p>Significant and Individualized</p> <p>Garda (2006), Board of Education v. Rowley, (Crockett & Yell, 2008; Katsiyannis, Yell, & Bradley, 2001), IDEIA 2004, IDEA 1997,</p>
<p>Perspectives from the Field of Special Education</p> <ul style="list-style-type: none"> -Direct Instruction -Cognitive Strategy Instruction -Control Task Difficulty -Small Interactive Group Instruction -Progress Monitoring (Adams & Carine, 2004; Fuch & Fuchs, 1995; Jenkins & O'Conner, 2003; Johnson & Johnson, 1996; Masteropieri & Scruggs, 1997; Scruggs & Mastropieri, 2003; Swanson, Hoskyn, & Lee, 1999; Vaugh, Gersten & Chard, 2000; Volonino & Zigmond, 2007; Wong, Harris, Graham, & Butler, 2003). 	<p>Individualized</p> <p>Espin, Deno, & Albayrak-Kaymak, 1998; Fuch & Fuchs, 1995; Katsiyannis, Yell, & Bradley, 2001; Kavale & Forness, 2000; Manset & Semmel, 1995; Swanson, Hoskyn, & Lee, 1999; Volonino & Zigmond, 2007; Zigmond, 1995, 2001, 2003; Zigmond & Baker, 1995</p>

Table 2, continued

Perspective from Wehmeyer's Framework for Universal Design for Learning (UDL) (2006)	Individualized
-Multiple Means of Representation -Multiple Means of Express -Multiple Means of Engagement -Curriculum Adaptations	Turnbull, Turnbull, & Wehmeyer (2007)

Summary

The review of the literature reveals a common definition of specially designed instruction. Notably, *individualized* was a key descriptor of specially designed instruction that was frequently cited among researchers in the field. Additionally, the descriptor of *significance* was provided from the legal perspective in order to provide guidance on when adaptations to the content, methodology, or delivery of instruction move away from effective instruction for *all* students and rise to the level of specially designed instruction. Principles of specially designed instruction and its empirical bases are summarized in the work of key researchers in the field of learning disabilities, along with Wehmeyer's (2006) framework for universal design for learning to provide access and accommodations for students with mild mental retardation. These principles of specially designed instruction served as the basis of the survey methodology in this research study.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine the perceptions of special education teachers, general education teachers, and administrators on the delivery of specially designed instruction in general education classrooms. Presented in this chapter is a description of the pilot study conducted prior to the development of the survey instrument to help delineate the research questions and variables used for this study. Additionally, this chapter fully describes the research design, the purpose of the study, the research questions, the sampling procedures, instrumentation, data collection procedures, data analysis, and limitations of this study.

Pilot Study

A pilot study was conducted to obtain the teachers' and administrators' perceptions on the delivery of specially designed instruction in inclusive settings and any perceived roadblocks. Focusing on the individuals' experience through the focus interview captured educational practices in the participants' own words. The data collected through the pilot study provided useful insight for the developing the survey for this study.

The three research questions guiding the pilot study included:

1. How do special education teachers, general education teachers, and administrators describe the delivery of specially designed instruction to students with disabilities in the general education classroom?
2. What do special education teachers, general education teachers, and administrators describe as barriers related to the delivery of specially designed instruction to students with disabilities in the general education classroom?
3. What do special education teachers, general education teachers, and administrators perceive they need in order to overcome barriers when delivering specially designed instruction in the general education classroom?

The pilot study employed focus group methodology to examine educators' level of knowledge of specially designed instruction, evaluate the level of degree to which specially designed instruction is implemented, and identify roadblocks for implementation. The pilot study was approved by the TWU Institutional Review Board (IRB) for Human Research Protection and met requirements for the protection of individuals' rights.

Focus Group Question Development

Three sets of focus group questions were developed to obtain the perceptions of special education teachers, general education teachers, and administrators of the delivery of specially designed instruction in general education classrooms.

Focus Group A – Special Education Teachers

Focus Question A1 – What are you currently doing to provide specially designed instruction to students with disabilities in the general education classroom?

Focus Question A2 – What roadblocks do you encounter when you provide specially designed instruction to students with disabilities in the general education classroom?

Focus Question A3 – How can the school/district assist you in providing specially designed instruction to students with disabilities in the general education classroom?

Focus Group B – General Education Teachers

Focus Question B1 – What are you currently doing to provide specialized instruction to students with disabilities in the general education classroom?

Focus Question B2 – What roadblocks do you encounter when you provide specially designed instruction to students with disabilities in the general education classroom?

Focus Question B3 – How can the school/district assist you in providing specially designed instruction to students with disabilities in the general education classroom?

Focus Group C – Administrators/Support

Focus Question C1 – What are your teachers currently doing to provide specially designed instruction to students with disabilities in the general education classroom?

Focus Question C2 – What roadblocks do your teachers encounter when providing specially designed instruction to students with disabilities in the general education classroom?

Focus Question C3 – How can the school/district assist your teachers in providing specialized instruction to students with disabilities in the general education classroom?

Focus Group Participants

Three separate focus group meetings were planned: 1) Group A was for special education teachers and speech pathologists, 2) Group B was for general education teachers, and 3) Group C was for administrators at an elementary school in a large north central district in Texas. Each focus session utilized the structured 10-step Metaplan process (see Appendix B). The special education teachers, general education teachers, and administrators/instructional support specialists received an email inviting them to participate in the focus group research. The “blind cc” was used for participants’ emails to maintain confidentiality. In addition, an overview of the focus group plan was provided, along with an invitation to participate.

The email addresses were obtained through the campus staff directory provided by the campus principal. A total of 9 general education teachers involved in co-teaching or inclusion on the campus was identified by the campus principal to receive an email inviting them to participate in the focus session. The principal also identified 4 special education teachers and 1 speech pathologist assigned to the campus, and these individuals received an email inviting them to participate in the focus session. The campus administrator provided the name of the assistant principal to receive an email inviting them to participate in the focus session (see Appendix C).

The special education teacher focus group meeting included 4 special education teachers and one speech/language pathologist assigned to the campus (N=5). Each participant indicated a willingness to participate by signing an informed consent letter (see Appendix D) that described the purpose of the study, how the data would be collected, how confidentiality would be maintained, and the risk of participation.

The general education teacher focus group meeting included 9 general education teachers assigned to the campus (N=9). Each participant indicated a willingness to participate by signing an informed consent letter (see Appendix D) that described the purpose of the study, how data would be collected, how confidentiality would be maintained, and the risk of participation.

The administrator focus group meeting included 2 administrators and 2 instructional support specialists assigned to the campus (N=4). Each participant indicated a willingness to participate by signing an informed consent letter (see Appendix D) that described the purpose of the study, how data would be collected, how confidentiality would be maintained, and the risk of participation.

Setting

The setting of this study was an elementary school in a north central school district in Texas. Each focus group session took place in a large conference room. Refreshments were provided, and participants were seated at a small table.

Meeting Time

Participants who volunteered to participate did so at times pre-established by the principal as a staff development time. Efforts were made to begin each of the three separate

sessions on time. Participants were not held longer than the established staff development time. Participants were instructed that they may leave at any time they choose without penalty.

Meeting Procedures

Before each of the three meetings began, the participants were given an individual folder containing the following items: Informed Consent letter, the focus group agenda, Metaplan steps, color-coded rating and voting sheets, and color-coded sticky post-it note cards. The focus meetings began with an introduction and thank you to the participants for agreeing to participate in the research study entitled “Teacher and Administrator's Perceptions of Delivery of Specially Designed Instruction in Inclusive Classrooms.” At that time, participants read and signed the Informed Consent letter (see Appendix D).

Next, the moderator read the Focus Group Procol (see Appendix E). Participants were told that their ideas were important because they would further inform the school/district on what is required to deliver specially designed instruction in the general education classroom. Participants were given a brief overview of the definition of specially designed instruction and the recent federal and state legislation that requires educating students with disabilities to the maximum extent possible in the general eduation setting. The participants were informed of their participation in a research methodology called Metaplan. The Metaplan steps inside their folders were then reviewed (see Appendix B). Assurances of confidentiality were given by the moderator, and participants were assured their comments would not be shared with anyone outside of the meeting room. The moderator modeled how to write responses to focus questions on the colored note cards

using a “think aloud.” When participants had no further questions, the moderator proceeded with the Metaplan process for gathering data.

Focus Group Measures and Data Collection Procedures

Two different types of data were collected. The first type of data was the written responses and categories generated by the three separate focus group participants utilizing the Metaplan steps. Specifically, the participants recorded their individual responses to the questions on color-coded 3” x 5” sticky post-it note cards using statements of 7 words or less. After focus group participants recorded responses on color-coded note cards, these note cards were clustered into categories by the participants, moderator, and assistant moderator, and assigned a categorical label (see Appendix F).

The second type of data collection was from the participant rating and voting sheets. The rating and voting sheets corresponded to the questions asked during each focus group. Part A of the rating and voting sheet allowed the participants to rate their individual perception of the importance of each category generated by the group for each focus question. A five-point Likert scale was utilized with values ranging from 1 (not very important) to 7 (very important). Part B of the rating and voting sheet allowed the participants to rank order these categories by voting on their top most important categories. Based on the number of categories generated by the group, the participants wrote their vote for the most important categories for each focus question, and ranked the importance from first most important, second most important, third most important, etc. The number of blank spaces for participants to vote was one-half of the categories generated from the group (see Appendix G).

Following the focus group meeting, the data generated from the focus groups was analyzed. Mean score ratings were calculated to determine how each individual viewed the importance of each category. Group ranks were determined by counting participants' votes for each category. The results of the data collected from the three focus groups were used in the development of the survey instrument.

Survey Methodology

Research Design

Using a non-experimental research design, survey methodology was chosen to provide descriptive data on educators' perceptions of their level of knowledge and level of implementation for providing specially designed instruction in the general education setting, and roadblocks for implementation.

Descriptive data is designed to "document conditions, attitudes, or characteristics of individuals or groups of individuals" (Portney & Watkins, 2000, p. 265). Descriptive data often involves the use of surveys to gather descriptive information. Portney and Watkins described surveys as a series of questions that are posed to a group of participants, and suggest the data is used to either generalize to a larger population or provide a description of a particular group. The data gathered for this study described teachers and administrators in a large, north central school district in Texas.

The survey data was collected from three different sources: special education teachers, general education teachers, and administrators. Utilizing a quantitative framework, the dependent variables for specially designed instruction included information gained from the focus groups, principles presented in Wehmeyer's (2006)

framework for universal design for learning (which targets students with mild mental retardation), and findings on best instructional practices from research syntheses in the field of learning disabilities and mild mental retardation.

This study was approved by the Institutional Review Board (IRB) for Human Research Protection and met requirements for the protection of individuals' rights. The remainder of this chapter outlines: 1) the purposes of the study, 2) the research questions, 3) sampling procedures, 4) instrumentation, 5) the data collection procedures, 6) the data analysis procedures, and 7) limitations of the study.

Purposes of the Study

The purposes of this study were three-fold: first, to measure the perceptions of special education teachers', general education teachers', and administrators' of their levels of knowledge regarding specially designed instruction; second, to determine the degree to which general and special education teachers implement specially designed instruction in the general education setting; and third, to identify perceived roadblocks for providing specially designed instruction in inclusive environments.

Research Questions

The research questions guiding this descriptive research study were as follows:

1. What do special education teachers, general education teachers, and administrators perceive to be their level of knowledge on the identified categories of specially designed instruction?

2. What do special education teachers, general education teachers, and administrators perceive to be their level of implementation for providing identified categories of specially designed instruction?
3. How do special education teachers, general education teachers, and administrators rank identified barriers for implementing specially designed instruction in the general education setting?

Sampling Procedures

In February of 2009, the American Recovery and Reinvestment Act (ARRA) of 2009 (also known as the “stimulus bill”) was signed into law. As a result, selected schools in a large, north central school district in Texas received an additional inclusion/co-teacher as part of the 2009-2011 Special Education ARRA/Stimulus Grant funding that became available on April 15, 2009. These campuses representing the sample included two high schools, four middle schools, and five elementary schools from a population of 5 high schools, 15 middle schools, and 38 elementary campuses.

During September 2009, campus principals received an email explaining the purpose of the research study (see Appendix H). The campus principals were also provided with the Participant’s Cover letter (see Appendix I) for potential participants which explained the purpose of the study, why the participant was chosen for the study, an assurance of anonymity, how long the survey will take to complete, and the process for collecting the survey. The campus administrator and principal investigator or designee determined an agreed upon faculty meeting date to distribute the Participant Cover letter and survey to potential participants.

At the agreed upon faculty meeting, the principal investigator or designated special education director assigned to the campus explained the purpose of the study, why the campus staff was chosen for the study, an assurance of anonymity, how long the survey would take to complete, and collection procedures for the completed surveys. The procedures were outlined in the Participant's Cover letter and were read to participants by the principal investigator or special education director assigned to the campus to ensure the procedures were standardized at each campus (see Appendix I). Campus staff was informed that participation was voluntary and participants could withdraw participation at any time. Campus staff willing to participate completed the surveys during the scheduled faculty meeting. Participants were given the opportunity to complete the surveys in the faculty meeting room, or in another setting. The data collection procedures included that each participant received an individual envelope to place his/her completed survey inside, and then each participant sealed their envelope. All sealed envelopes were placed in a large box located in the back of the meeting room.

Instrumentation

A survey methodology was used in this study. To assist in the development of the survey instrument, a comprehensive review of the literature was performed on what constitutes specially designed instruction for students with disabilities. In addition, the results of three separate focus groups were used to obtain first-hand knowledge of educators' perceptions of specially designed instruction. Therefore, the dependent variables for specially designed instruction included information gained from the focus groups, principles found in the framework of universal design for learning based on the

work of Wehmeyer (2006), who targeted students with mild mental retardation, and findings on best instructional practices from research syntheses in the field of learning disabilities and mild mental retardation.

The cover page of the survey gathered the following information from the participants: 1) campus, 2) grade level assignment, 3) current position, 4) gender, 5) ethnicity, 6) age, 7) level of education, 8) whether the participant attended the co-teaching training offered in the school district, and 9) years experience in education (see Appendix J).

Sections 1 and 2 of the survey instrument used a five-point Likert Scale assessing participants' perceptions of their knowledge of specially designed instruction, and participants' perceptions of their level of implementing specially designed instruction (see Appendix J). Participants were given five response choices and were instructed to choose the one response that was appropriate for them. The rating scale used to assess participants' perceptions were as follows: low, somewhat low, moderate, somewhat high, and high.

Section 1 of the survey consisted of 8 questions on Wehmeyer's (2006) framework for Universal Design for Learning (UDL). Participants were given a definition of UDL, along with definitions and examples of each component of UDL including multiple means of representation, multiple means of expression, multiple means of engagement, and curriculum adaptations.

Section 2 of the survey consisted of 10 questions on evidence based practices for students with disabilities based on research syntheses in the field of learning disabilities

and mild mental retardation. These components included direct instruction, cognitive strategy instruction, small interactive group instruction, progress monitoring, and control of task difficulty. Participants were given a definition and example of each component of evidence based practices.

Section 3 required participants to rank the following identified barriers for providing specially designed instruction based on the findings of the pilot study: 1) high caseload, 2) personnel support, 3) competing demands, 4) materials/resources, and 5) scheduling. Each identified barrier was assigned a number from 1 to 5. One indicated a low barrier, 2 indicated somewhat low barrier, 3 indicated a moderate barrier, 4 indicated a somewhat high barrier, and 5 indicated a high barrier. Participants were given an example of how to rank identified barriers for each component of specially designed instruction. At the end of the survey, there was a space for participants to offer comments (see Appendix J).

The draft survey instrument included input from key faculty members in the Department of Teacher Education of Texas Woman's University. Next, the survey was reviewed by a panel of experts, and then field testing of the instrument was completed with a group of doctoral students at Texas Woman's University. These students assisted in determining the content validity of the survey. Portney and Watkins (2000, p. 82) state content validity "indicates that the items that make up an instrument adequately sample the universe of content that defines the variable being measured." Therefore, content validity establishes that the instrument contains all the elements being studied (Portney & Watkins). The doctoral students provided useful information on whether each component of the

survey represented specially designed instruction, and whether the directions and questions were clear and understandable, along with the amount of time needed to complete the survey. Based on the field testing, the survey was revised. Specifically, the barriers section was modified as a separate section, along with an example to demonstrate how to complete this section of the survey. Finally, a second field testing was completed with the same group of doctoral students, and based on these analyses no further changes were made to the survey.

Additionally, validity was established through a factor analysis. Portney and Watkins (2000, p. 91) describe factor analysis as a statistical procedure based on the idea that a “construct contains one or more underlying dimensions, or different theoretical components.” With the different dimensions of a construct, it is important to determine whether an instrument is an accurate translation of the construct being measured.

In this study, the dimensions of specially designed instruction included the following components: 1) UDL included multiple means of expression, multiple means of engagement, multiple means of representation, and curriculum adaptations; and 2) evidence based practices included direct instruction, cognitive strategy instruction, small interactive group instruction, progress monitoring, and control of task difficulty.

By measuring these components through a factor analysis, the interrelationships of these variables were determined. The factorial analysis provided data on whether the items on the survey represented specially designed instruction (SDI) accurately, and mathematically reflected the construct of SDI. Munro (2001) and Portney & Watkins (2000) report factor loadings greater than .30 or .40 suggest some degree of relationship.

Eigenvalues reflect the variance accounted for by each component with a common cutoff at 1.0 (Portney & Watkins). The results of the factor analysis reflect adequate construct validity. Table 3 summarizes the findings of the factor analysis for administrators and teachers.

Table 3

Summary of Factor Analysis for SDI for Administrators and Teachers

Survey Item	Factor 1	Factor 2	Factor 3	Factor 4
1. Level of knowledge on how to provide multiple means of representation (MMR)	.956 – Admin .825 - Teachers			
2. Implementation of MMR			.957- Admin .841 - Teachers	
3. Level of knowledge on how to provide multiple means of expression (MME)	.880- Admin .855 - Teachers			
4. Implementation of MME			.947 – Admin .876 - Teachers	
5. Level of knowledge on how to provide multiple means of engagement (MME)	.890- Admin .845 - Teachers			

Table 3, continued

Survey Item	Factor 1	Factor 2	Factor 3	Factor 4
6. Implementation of MME			.954- Admin .829 - Teachers	
7. Level of knowledge on how to provide curriculum adaptations	.757- Admin .802 - Teachers			
8. Implementations of curriculum adaptations			.787 – Admin .825 - Teachers	
9. Level of knowledge on how to provide Direct Instruction		.856 –Admin .684 - Teachers		
10. Implementation of Direct Instruction				.873- Admin .715 – Teachers
11. Level of knowledge on how to provide Cognitive Strategy Instruction		.869 – Admin .811 – Teachers		

Table 3, continued

Survey Item	Factor 1	Factor 2	Factor 3	Factor 4
12. Implementation of Cognitive Strategy Instruction				.928- Admin .835 – Teachers
13. Level of knowledge on how to provide Small Interactive Group Instruction		.916 –Admin .783 - Teachers		
14. Implementation of Small Interactive Group Instruction				.874- Admin .795 – Teachers
15. Level of knowledge on how to provide students with progress monitoring		.826- Admin .791 - Teachers		
16. Implementation of progress monitoring				.825 – Admin .801 – Teachers
17. Level of knowledge on how to provide students with Control of Task Difficulty		.770 – Admin .797 - Teachers		
18. Implementation of Control of Task Difficulty				.874 – Admin .789 – Teachers

For administrators, Factor 1 represented knowledge of universal design for learning and included four items with factor loadings ranging from .757 to .956. The first component accounted for 76.319% of variance in the data with an initial Eigenvalue of 3.053. Factor 2 represented administrators' knowledge of evidence based practices and included five items for SDI with factor loadings ranging from .770 to .916. The first component accounted for 72.034% of variance in the data with an initial Eigenvalue of 3.602. Factor 3 represented administrators' comfort level in monitoring universal design for the learning and included four items with factor loadings ranging from .787 to .957. The first component accounted for 83.521% of variance in the data with an initial Eigenvalue of 3.341. Factor 4 represented administrators' comfort level in monitoring implementation of evidence based practices and included five items with factor loadings ranging from .873 to .928. The first component accounted for 76.634% of variance in the data with an initial Eigenvalue of 3.832.

For general and special education teachers, Factor 1 represented teachers' knowledge of universal design for learning and included four items with factor loadings ranging from .802 to .855. The first component accounted for 69.239% of variance in the data with an initial Eigenvalue of 2.770. Factor 2 represented teachers' knowledge of evidence based practices and included five items ranging from .684 to .797. The first component accounted for 59.983% of variance in the data with an initial Eigenvalue of 2.999. Factor 3 represented teachers' level of implementation of universal design for learning and included four items ranging from .825 to .876. The first component accounted for 71.037% of variance in the data with an initial Eigenvalue of 2.841. Factor 4

represented teachers' level of implementation of evidence based practices and included five items ranging from .715 to .835. The first component accounted for 62.076% of variance in the data with an initial Eigenvalue of 3.104.

Following the factor analysis, internal consistency and reliability was established through Cronbach's alpha coefficient. Munro (2001) and Portney and Watkins (2000) described this measure as analyzing the extent to which items are correlated, while evaluating consistency over time the results for the different items within the same construct. Portney and Watkins reported an Alpha value that approaches .90 is high, and shows substantial mean inter-item correlation representing strong evidence of reliability.

For administrators and teachers, the reliability for survey items representing the components of specially designed instruction was strong with an Alpha value close to .90 (see Table 4 for Administrators and Table 5 for Teachers).

Table 4

Cronbach's Alpha Reliability for Administrators

Administrator Survey Items	Component of SDI	Cronbach's Alpha
1,3,5,7	Administrators' knowledge of UDL	.889
2,4,6,8	Administrators' comfort level in monitoring UDL	.932
9,11,13,15,17	Administrators' knowledge of evidence based practices	.897
10,12,14,16,18	Administrators' comfort level in monitoring evidence based practices	.920

Table 5

Cronbach's Alpha Reliability for Teachers

Teacher Survey Items	Components of SDI	Cronbach's Alpha
1,3,5,7	Teachers' knowledge of UDL	.851
9,11,13,15,17	Teachers' level knowledge of evidence based practices for providing SDI	.830
2,4,6,8	Teachers' level of implementation of providing UDL	.863
10,12,14,16,18	Teachers' level of implementation of providing evidence based practices for SDI	.845

Data Collection Procedures

Data collection was conducted during September, 2009 at scheduled campus meetings for eleven separate campuses that received an additional inclusion /co-teacher as part of the 2009-2011 Special Education ARRA Stimulus Grant funding. The surveys with individual envelopes were distributed at each faculty meeting by the principal investigator or designated special education director assigned to the campus. The principal investigator or designated special education director informed participants that participation is *voluntary*, all responses are *confidential*, and there is no place on the survey for

participants' names. Potential participants were informed the estimated time completion for the survey was 20 minutes.

The principal investigator or designated special education director assigned to the campus explained the purpose of the study, why the participant was chosen for the study, an assurance of anonymity, how long the survey will take to complete, and collection procedures for the completed surveys. These procedures were outlined in the Participant's Cover letter and were read to participants by the principal investigator or special education director assigned to the campus to ensure the procedures are standardized at each campus (see Appendix I). The principal investigator or designated special education director assigned to the campus explained how participating in the research would be beneficial and helpful in planning future staff trainings.

The principal investigator or designated special education director assigned to the campus explained to participants where to put their completed and sealed surveys. A box with a slit cut in the top was placed in the back of the meeting room. The principal investigator or designated special education director directed potential participants to place their completed surveys in their sealed envelopes in the sealed box upon completion. The principal investigator retrieved the boxes from each special educator director assigned to the campus by September 30, 2009. These boxes were securely delivered by the principal investigator to the principal investigator's residence. Lastly, the surveys were taken from the boxes and placed in large, manila envelopes. The principal investigator grouped the envelopes together according to elementary, middle, and high schools. The large, manila

envelopes with the completed surveys inside were placed within a locked filing cabinet at the principal investigators' residence.

Data Analysis

The survey data was analyzed through a One-Way Analysis of Variance (ANOVA) to describe the mean differences between special education teachers, general education teachers, and administrators to determine whether any observed differences among the groups are significant. The ANOVA is based on the assumption that samples are randomly drawn from a normally distributed population with equal variances (Munro, 2001). The variability of scores between the groups was compared to determine if the observed differences in the mean scores were due to the independent variable or chance. The sum of squares will be used to analyze the variability with among the three groups. The survey data was analyzed using the Statistical Package for Social Scientists (SPSS) software package to address the research questions descriptively.

Group differences were examined by the independent variable of position. The dependent variables include: 1) multiple means of representation, 2) multiple means of expression, 3) multiple means of engagement, 4) curriculum adaptations, 5) direct instruction, 5) cognitive strategy instruction, 6) control task difficulty, 7) small interactive group instruction, and 8) progress monitoring.

Scheffe was the posthoc test used with the alpha level set at .05 as the basis for rejecting the null hypothesis, concluding that at any observed differences between the means are not due to chance.

Limitations

While descriptive studies provide data on the performance of different groups, they do not supply information regarding true experimental differences or the relationships between two variables. Therefore, this result of this descriptive research study cannot be used to make predictions or generalizations.

CHAPTER IV

RESULTS

The purpose of this study was to examine the degree to which administrators and teachers have knowledge of specially designed instruction, to determine the degree to which they implement specially designed instruction in the general education setting, and to rank identified barriers for implementation. Presented in this chapter are the results of the pilot study conducted prior to the development of the survey instrument to help delineate the research questions and variables used for this study. Next, demographic descriptions of the survey respondents are presented. The remainder of this chapter is organized around the three research questions posed in Chapter 1. These research questions will serve as a framework for providing a narrative description of the research study findings.

Pilot Study Results

The pilot study resulted in qualitative data on teachers' and administrators' perceptions on the delivery of specially designed instruction in inclusive settings and any perceived roadblocks. The data collected through the pilot study provided useful insight for developing the survey. Two different types of data were collected.

The first type of data was the written responses and categories generated by the three separate focus group participants utilizing the Metaplan steps found in Appendix B. The written responses and categories generated by the three separate groups are provided as

follows: 1) group participant responses for providing specially designed instruction to students with disabilities in the general education classroom located in Appendix K; 2) group participant responses for roadblocks to specially designed instruction in the general education setting located in Appendix L; and 3) group participant responses by categories for how the school/district can assist in providing specially designed instruction to students with disabilities in the general education classroom located in Appendix M.

The second type of data collection was from the participant rating and voting sheets. The rating and voting sheets corresponded to the questions asked during each focus group. Part A of the rating and voting sheet allowed the participants to rate their individual perception of the importance of each category generated by the group for each focus question. A five-point Likert scale was utilized with values ranging from 1 (not very important) to 7 (very important). Part B of the rating and voting sheet allowed the participants to rank order these categories by voting on their top most important categories. Based on the number of categories generated by the group, the participants wrote their vote for the most important categories for each focus question, and ranked the importance from first most important, second most important, third most important, etc. The number of blank spaces for participants to vote was one-half of the categories generated from the group.

Following the focus group meeting, the data generated from the focus groups were analyzed. Mean score ratings were calculated to determine how each individual viewed the importance of each category. Group ranks were determined by counting participants' votes for each category. Appendix N contains mean ratings, group votes, and group ranks on

categories for providing specially designed instruction to students with disabilities in the general education setting. Appendix O contains mean ratings, group votes, and group ranks on categories on roadblocks encountered when providing specially designed instruction in the general education classroom. Appendix P contains mean ratings, group votes, and group ranks on categories relating to how the school/district can assist in providing specially designed instruction to students with disabilities in the general education setting. The results of the data collected from the three focus groups were used in the development of the survey instrument.

The following are the three research questions that guided the pilot study, and a brief summary of the results.

Pilot Study Research Question One: How do special education teachers, general education teachers, and administrators describe the delivery of specially designed instruction to students with disabilities in the general education classroom?

Appendix N provides mean scores and group ranks on categories describing the delivery of specially designed instruction to students with disabilities in the general education setting. With regards to the first focus group question, special education teachers ranked differentiated instruction (GV = 3) as the most important description of providing specially designed instruction to students with disabilities in the general education setting, followed by collaboration (GV = 1) and assignment modifications (GV = 1). In comparison, general education teachers ranked planning (GV = 2), accommodations (GV = 2), modifications (GV = 2), and differentiated instruction (GV = 2) as the most important descriptions of providing specially designed instruction to students with

disabilities in the general education setting. Administrators ranked accommodations (GV = 3) as the most important category, followed by collaboration (GV = 1) as the second most important descriptions of providing specially designed instruction to students with disabilities in the general education setting (see Appendix N).

Pilot Study Research Question Two: What do special education teachers, general education teachers, and administrators describe as barriers related to the delivery of specially designed instruction to students with disabilities in the general education classroom?

Appendix O provides mean scores, group votes, and group ranks on categories of roadblocks for providing specially designed instruction for students with disabilities in the general education setting. Special education teachers ranked time (GV = 3) as the highest barrier for providing specially designed instruction to students with disabilities in the general education setting. In comparison, general education teachers ranked time (GV = 4) and personnel support (GV = 4) as the highest barriers for providing specially designed instruction to students with disabilities in the general education setting. Administrators ranked scheduling (GV = 1), unexpected circumstances (GV = 1), role delineation (GV = 1), and concerns (GV = 1) as the highest barriers for providing specially designed instruction for students with disabilities in the general education settings (see Appendix O).

Pilot Study Research Question Three: What do special education teachers, general education teachers, and administrators perceive they need in order to overcome barriers when delivering specially designed instruction in the general education classroom?

In response to focus question 3, special education teachers ranked providing teachers with targeted instructional resources and accommodations (GV = 4) as the highest need for overcoming barriers when delivering specially designed instruction in the general education classroom. The special education teachers described targeted instructional resources as a bank of resources for instruction and accommodations per grade, subject area, and ability level. In comparison, general education teachers ranked preparation for students (GV = 3) as the highest need for overcoming barriers when delivering specially designed instruction, followed by more personnel support (GV = 2) and more staff development (GV = 2). Administrators ranked staff development (GV = 2) as the highest need for overcoming barriers when delivering specially designed instruction (see Appendix P).

Demographic Description of Survey Participants

A total of 222 teachers and 25 administrators completed the survey. The respondents reported their position as the following: 66 special education teachers, 154 general education teachers, 16 assistant principals, and 8 principals. The ethnicity and gender of teacher and administrator respondents are presented in Table 6. Table 7 presents respondents' level of education, and their route to certification. Based on the demographic description of survey participants, the majority of teachers and administrators who completed the survey were female Caucasians. Moreover, the majority of teacher participants had undergraduate degrees, while the majority of administrators held Master's degrees.

Table 6

Teachers' and Administrators' Ethnicity and Gender

	Teachers n=222	Administrators n=25
Ethnicity		
Caucasian	86.0%	92.0%
African American	4.5%	8.0%
Hispanic	1.8%	0.0%
Asian	2.3%	0.0%
Other	1.4%	0.0%
Gender		
Male	15.3%	36.0%
Female	83.3%	60.0%

Table 7

Teachers' and Administrators' Level of Education and Route to Certification

	Teachers n=222	Administrators n=25
Level of Education		
Undergraduate	74.3%	0.0%
Master's Degree	16.7%	68.0%
Master's Plus Post Master's Hours	8.6%	24.0%
Doctoral Degree	0.0%	4.0%
Route to Certification		
University Based	48.6%	22.5%
Alternative Certification	56.0%	44.0%

Data Analysis

Descriptive statistics and a one-way between subjects ANOVA was utilized for Research Questions One and Two to examine the level of teachers' and administrators' knowledge of specially designed instruction, and their level of implementation of specially designed instruction. Munro (2001) states the ANOVA is based on the null hypothesis with the assumption that all groups have equal mean scores and that any differences come from random sampling differences. The null hypothesis for this study was that position made no difference on teachers' and administrators' knowledge and level of implementation of specially designed instruction. The mean scores between the groups were compared to determine if the observed differences were due to the independent variable of position or chance. Specifically, the ANOVA determined whether the mean scores of the two separate samples differed from each other. In sample one, general education teachers' and special education teachers' mean scores were compared. In sample two, assistant principals' and principals' mean scores were compared. The significance level of less than or equal to .05 set the level of significance for accepting or rejecting the null hypothesis, and concluded that any observed differences between the means were not due to chance. Research Question Three utilized descriptive statistics to rank order barriers for implementing specially designed instruction.

Definitive Analysis

The four clusters analyzed for specially designed instruction included 8 survey items derived from Weymeyer's (2006) framework for Universal Design for Learning (UDL), and 10 survey items derived from a research syntheses in the field of learning disabilities and mild mental retardation for evidence based practices (EBP). Specifically, these four clusters consisted of: 1) teachers' and administrators' knowledge of Universal Design for Learning (UDL), 2) teachers' implementation of UDL and administrators' comfort level in monitoring the implementation of UDL, 3) teachers' and administrators' knowledge of Evidence-Based Practices (EBP), and 4) teachers' implementation of EBP and administrators' comfort level in monitoring the implementation of EBP.

A five point Likert scale was used: a score of 0 indicated a low level of knowledge and implementation of specially designed instruction, a score of 1 indicated a somewhat low level of knowledge and implementation of specially designed instruction, a score of 2 indicated a moderate level of knowledge and implementation of specially designed instruction, a score of 3 indicated a somewhat high level of knowledge and implementation of specially designed instruction, and a score of 4 indicated a high level of knowledge and implementation of specially designed instruction.

Table 8 reports the number of respondents, means, and standard deviations for each cluster of specially designed instruction for general education teachers and special education teachers. Similarly, Table 9 reports the number respondents, means, and standard deviations for administrators in answer to Research Questions One and Two.

Table 8

Means and Standard Deviations for Survey Clusters for Teachers

	N	Mean	SD
Cluster 1 – Level of Knowledge of Universal Design for Learning (UDL)			
General Education Teachers	153	1.68	0.67
Special Education Teachers	66	2.12	0.67
Cluster 2 – Level of Implementation of Universal Design for Learning (UDL)			
General Education Teachers	153	1.67	0.73
Special Education Teachers	66	2.23	0.76
Cluster 3 – Level of Knowledge of Evidence Based Practices (EBP)			
General Education Teachers	154	1.97	0.67
Special Education Teachers	65	2.26	0.67
Cluster 4 – Level of Implementation of Evidence Based Practice (EBP)			
General Education Teachers	154	1.83	0.72
Special Education Teachers	66	2.17	0.78

Note. N varies according to the number of people answering the survey item.

Table 9

Means and Standard Deviations for Survey Clusters for Administrators

	N	Mean	SD
Cluster 1 – Level of Knowledge of Universal Design for Learning (UDL)			
Assistant Principals	16	1.25	0.45
Principals	8	1.63	0.52
Cluster 2 – Comfort Level in Monitoring Teacher Implementation of Universal Design for Learning (UDL)			
Assistant Principals	16	1.75	0.68
Principals	8	2.5	0.76
Cluster 3 – Level of Knowledge of Evidence Based Practices (EBP)			
Assistant Principals	16	1.44	0.51
Principals	8	1.88	0.35
Cluster 4 – Comfort Level in Monitoring Teacher Implementation of Evidence Based Practice (EBP)			
Assistant Principals	16	1.31	0.48
Principals	8	1.63	0.52

Note. N varies according to the number of people answering the survey item.

Research Question One: What do special education teachers, general education teachers, and administrators perceive to be their level of knowledge on the identified categories of specially designed instruction?

Mean scores were calculated to examine the level of knowledge that general education teachers, special education teachers, and administrators (assistant principals and principals) possess regarding specially designed instruction in the categories of Universal Design for Learning (UDL) and Evidence Based Practices (EBP).

As shown in Table 8, the mean score for special education teachers on their level of knowledge of UDL was 2.12, indicating that respondents reported a moderate level of knowledge of UDL relating to specially designed instruction. Additionally, special education teachers had a mean score of 2.26 for their level of knowledge of evidence based practices (EBP), indicating a moderate level of knowledge of EBP relating to specially designed instruction. General education teachers had a mean score of 1.68 for their level of knowledge of UDL and a mean score of 1.97 for their level of knowledge of EBP, indicating that general education teachers have a somewhat low level of knowledge of specially designed instruction in the two categories of UDL and EBP.

Table 9 presents the results for administrators' level of knowledge of Universal Design for Learning and Evidence Based Practices. Assistant principals had a mean score of 1.25 for their level of knowledge of UDL and a mean score of 1.44 for their level of knowledge of EBP, indicating that assistant principals have a somewhat low level of knowledge of specially designed instruction in the two categories of UDL and EBP. Principals had a mean score of 1.63 for their level of knowledge of UDL and a mean score

of 1.88 for their level of knowledge of EBP, representing that principals have a somewhat low level of knowledge of specially designed instruction in the two categories of UDL and EBP.

When comparing mean scores between the general education teachers and special education teachers, results indicated that special education teachers had the highest mean scores for possessing knowledge of specially designed instruction. When comparing mean scores between assistant principals and principals, results indicated that principals had the highest mean scores for possessing knowledge of specially designed instruction

A one-way ANOVA ($p < .05$) between groups was conducted to compare the independent variable of position for two groups: 1) general education teachers and special education teachers and 2) principals and assistant principals. The following two clusters of specially designed instruction were analyzed for Research Question One: 1) Knowledge of Universal Design for Learning (UDL) and 2) Knowledge of Evidence Based Practices (EBP).

Teacher Knowledge of Universal Design for Learning (UDL)

As shown in Table 10, results indicated that there were statistically significant differences between general education teachers and special education teachers: $F(1,217) = 20.24, p = .000$. These results indicated that there were statistical significant differences between the two groups relating to their knowledge of Universal Design for Learning (UDL) as a component of specially designed instruction.

Table 10

ANOVA for General and Special Education Teachers' Level of Knowledge of Specially Designed Instruction in the Categories of Universal Design for Learning (UDL) and Evidence Based Practices (EBP)

	Sum of Squares	df	<i>F</i>	<i>p</i>	
UDL Knowledge			20.24	.000	*
Between Groups	8.99	1			
Within Groups	96.34	217			
Total	105.32	218			
EBP Knowledge			8.80	.003	*
Between Groups	3.95	1			
Within Groups	97.39	217			
Total	101.34				

Note. * $p = .05$

Teacher Knowledge of Evidence Based Practice (EBP)

The results presented in Table 10 indicated that there were statistically significant differences between general education teachers and special education teachers in their knowledge of Evidence Based Practices (EBD): $F(1,217) = 8.80, p = .003$. These results indicated that there were statistical significant differences between the two groups relating to their knowledge of EBP as a component of specially designed instruction.

Administrator Knowledge of Universal Design for Learning (UDL) and Knowledge of Evidence Based Practice (EBP)

As shown in Table 11, the results indicated that there were no statistically significant differences between assistant principals and principals relating to their knowledge of UDL as a component of specially designed instruction: $F(1,22) = 3.39, p = .08$. However, the results found in Table 11 indicated that there were significant differences between assistant principals and principals relating to their knowledge of evidence based practices (EBP) as a component of specially designed instruction: $F(1,22)=4.67, p=.04$.

Table 11

ANOVA for Principals' and Assistant Principals' Level of Knowledge of Specially Designed Instruction in the Categories of Universal Design for Learning (UDL) and Evidence Based Practices (EBP)

	Sum of Squares	df	<i>F</i>	<i>P</i>
UDL Knowledge				
Between Groups	0.75	1	3.39	0.08
Within Groups	4.88	22		
Total	5.62	23		
EBP Knowledge				
Between Groups	1.02	1	4.67	0.04 *
Within Groups	4.81	22		
Total	5.83	23		

Note. * $p = .05$

Research Question Two: What do special education teachers, general education teachers, and administrators perceive to be their level of implementation for providing identified categories of specially designed instruction?

Mean scores and standard deviations were calculated to examine special education and general education teachers' level of implementation for providing specially designed instruction, and administrators' (assistant principals and principals) comfort level in monitoring teacher implementation of specially designed instruction in the categories of Universal Design for Learning (UDL) and Evidence Based Practices (EBP).

As shown in Table 8, the mean score of special education teachers' level of implementation of UDL was 2.23 indicating that respondents reported moderate level of implementation of UDL relating to specially designed instruction. Additionally, special education teachers had a mean score of 2.17 for their level of implementation of evidence based practices (EBP). This also indicated a moderate level of implementation of EBP relating to specially designed instruction. General education teachers had a mean score of 1.67 for their level of implementation of UDL and a mean score of 1.83 for their level of implementation of EBP. This signified that general education teachers had a somewhat low level of implementation of specially designed instruction in the two categories of UDL and EBP.

Table 9 presents administrators' mean scores for comfort level in monitoring teacher implementation of specially designed instruction. Assistant principals had a mean score of 1.75 for their comfort level in monitoring teacher implementation of UDL and a mean score of 1.31 for their comfort level in monitoring teacher implementation of EBP.

This indicated that assistant principals have a somewhat low comfort level in monitoring teacher implementation of specially designed instruction in the two categories of UDL and EBP. Principals had a mean score of 2.50 for their comfort level in monitoring teacher implementation of UDL and a mean cluster score of 1.63 for monitoring teacher implementation of EBP. This indicated principals have a moderate comfort level in monitoring teacher implementation of UDL, and a somewhat low comfort level in monitoring teacher implementation of EBD.

When comparing mean scores between the general education teachers and special education teachers, results indicated that special education teachers had the highest mean scores for implementing specially designed instruction with scores consistently in the moderate range. When comparing mean scores between the assistant principals and principals, results indicated that principals had the highest mean scores for comfort level in monitoring teacher implementation of specially designed instruction with scores consistently in the moderate range.

A one-way ANOVA ($p < .05$) between groups was conducted to compare the independent variable of position for two groups: 1) general education teachers and special education teachers and 2) principals and assistant principals. The following two clusters of implementation of specially designed instruction were analyzed for Research Question Two: 1) Implementation of Universal Design for Learning (UDL) and 2) Implementation of Evidence Based Practices (EBP).

Teacher Implementation of Universal Design for Learning (UDL)

As shown in Table 12, between groups mean scores on the level of implementation of UDL were calculated. These results indicated that there was a significant difference between the two groups relating to their position and level of implementation of Universal Design for Learning (UDL) as a component of specially designed instruction: $F(1,217) = 26.74, p = .000$.

Table 12

ANOVA for General and Special Education Teachers' Level of Implementation of Specially Designed Instruction in the Categories of Universal Design for Learning (UDL) and Evidence Based Practices (EBP)

	Sum of Squares	df	<i>F</i>	<i>p</i>	
Teachers' UDL Implementation					
Between Groups	14.49	1	26.74	.001	*
Within Groups	117.59	217			
Total	132.08	218			
Teachers' EBP Implementation					
Between Groups	5.20	1	9.54	.002	*
Within Groups	118.78	218			
Total	123.98	219			

Note. * $p = .05$

Teacher Implementation of Evidence Based Practices (EBP)

Presented in Table 12 were the results of the between group calculations to compare mean scores of general education and special education teachers' level of implementation of EBP. This finding indicated that there was a significant difference between the two groups relating to their implementation of evidence based practices (EBP) as a component of specially designed instruction: $F(1,218) = 9.54, p = .002$.

Administrator Implementation of Universal Design for Learning (UDL)

As shown in Table 13, between groups mean scores on administrators' comfort level in monitoring the level of implementation of UDL were calculated. These results indicated that the interaction between comfort level in monitoring teacher implementation and position was significant: $F(1,22) = 6.00, p = .02$. These results indicate that there were statistically significant differences between the two groups relating to their comfort level in monitoring teacher implementation of Universal Design for Learning (UDL) as a component of specially designed instruction.

Administrator Implementation of Evidence Based Practices (EBP)

As shown in Table 13, between groups were calculated to compare mean scores of administrators' comfort level of monitoring teacher implementation of Evidence Based Practices (EBP). Study results indicated that was not a significant difference between the position of principals and assistant principals in their comfort level in monitoring teacher implementation of evidence based practices as a component of specially designed instruction: $F(1,22) = 2.16, p = .16$. These results indicate that there were no statistically

significant differences between the two groups relating to their comfort level in monitoring teacher implementation of EBP as a component of specially designed instruction.

Table 13

ANOVA for Principals' and Assistant Principals' Comfort Level in Monitoring Teacher Implementation of Specially Designed Instruction in the Categories of Universal Design For Learning (UDL) and Evidence Based Practices (EBP)

	Sum of Squares	df	F	p
Comfort Level in Monitoring Teacher Implementation of UDL				
Between Groups	3	1	6	.020 *
Within Groups	11	22		
Total	14	23		
Comfort Level in Monitoring Teacher implementation of EBP				
Between Groups	0.52	1	2.16	.160
Within Groups	5.31	22		
Total	5.83	23		

Note. * $p = .05$

Research Question Three: How do special education teachers, general education teachers, and administrators rank identified barriers for implementing specially designed instruction in the general education setting?

Using descriptive statistics from Section III of the survey, teachers and administrators were asked to rank order identified barriers for providing specially designed instruction in the categories of universal design for learning (UDL) and evidence based practices (EBP). The results of the pilot study generated the following barriers for providing specially designed instruction in inclusive settings: 1) high caseload, 2) personnel support, 3) competing demands, 4) materials/resources, and 6) scheduling. Respondents were asked to rank these identified barriers for providing each category of specially designed instruction in the general education classroom in the following order: 1 = low barrier, 2=somewhat low barrier, 3=moderate barrier, 4=somewhat high barrier, 5=high barrier. As shown in Table 14, a summary of how teachers ranked identified barriers for implementing specially designed instruction in inclusive settings is provided. Table 15 presents how administrators ranked identified barriers for providing specially designed instruction in inclusive settings.

When comparing teachers' and administrators' barriers for providing specially designed instruction, both groups ranked lack of personnel support as the highest barrier for implementing Universal Design for Learning (UDL) in the general education classroom. The results for implementing Evidence Based Practices (EBP) in the general education setting are as follows: teachers and administrators ranked lack of personnel support as the highest barrier to implementing the first two components of Evidence Based Practices (EBD), which include curriculum adaptations and direct instruction. Teachers and administrators ranked competing demands as the highest barrier for providing cognitive strategy instruction and small interactive group instruction. Teachers

ranked competing demands as the highest barrier for providing progress monitoring and control of task difficulty. Administrators ranked high caseload as the highest barrier for implementing progress monitoring, and high caseload and competing demands as the highest barriers for implementing control of task difficulty in the general education setting.

Table 14

Mean Scores of General and Special Education Teachers' Highest Barrier for Implementing Specially Designed Instruction in the General Education Classroom

	Highest Barrier	Mean	SD
Universal Design for Learning (UDL)			
Multiple Means of Representation	Personnel Support	3.55	1.20
Multiple Means of Expression	Personnel Support	3.43	1.25
Multiple Means of Engagement	Personnel Support	3.40	1.23
Evidence Based Practices (EBD)			
Curriculum Adaptations	Personnel Support	3.66	1.14
Direct Instruction	Personnel Support	3.69	3.99
Cognitive Strategy Instruction	Competing Demands	3.52	1.23
Small Interactive Group Instruction	Competing Demands	3.31	1.33
Progress Monitoring	Competing Demands	3.54	1.26
Control of Task Difficulty	Competing Demands	3.66	1.20

Table 15

Mean Scores of Assistant Principals' and Principals' Highest Barrier for Implementing Specially Designed Instruction in the General Education Classroom

	Highest Barrier	Mean	SD
Universal Design for Learning (UDL)			
Multiple Means of Representation	Personnel Support	4.05	1.05
Multiple Means of Expression	Personnel Support	3.59	1.40
Multiple Means of Engagement	Personnel Support	3.32	1.32
Evidence Based Practices (EBD)			
Curriculum Adaptations	Personnel Support	4.00	1.11
Direct Instruction	Personnel Support	3.27	1.35
Cognitive Strategy Instruction	Competing Demands	3.32	1.43
Small Interactive Group Instruction	Competing Demands	3.55	1.34
Progress Monitoring	High Caseload	3.50	1.30
Control of Task Difficulty	High Caseload	3.23	1.45
	Competing Demands	3.23	1.48

Limitations

While descriptive studies provide data on the performance of different groups, it does not supply information regarding true experimental differences, or the relationships between two variables. Therefore, this result of this descriptive research study cannot be used to make generalizations.

CHAPTER V

DISCUSSION

The purpose of this study was to examine the degree to which teachers and administrators have knowledge of specially designed instruction, to determine the degree to which they implement specially designed instruction in the general education setting, and to identify barriers for implementation. By examining educators' levels of knowledge of specially designed instruction, evaluating the level of degree to which specially designed instruction is implemented, and identifying roadblocks for implementation, data was gathered to support teachers in improving access to the general education curriculum for students with disabilities. A concise description from the literature review on what constitutes specially designed instruction is presented, along with a reflection of the findings for the pilot study conducted prior to the development of the survey instrument to help delineate the research questions and variables used for this study. The three research questions for the quasi-experimental research design are reviewed, and the major findings from Chapter 4 and findings related to the review of literature are explored. Finally, recommendations for further research are discussed.

Improving meaningful access to the general education classroom for students with disabilities through the delivery of significant and individualized specially designed instruction is a challenge for educators. Studies indicated that general education classrooms are unsupportive environments for implementing effective teaching

interventions and individualized instruction for students with disabilities (Zigmond, 2003). Specially designed instruction utilizing evidence based practices does not transfer easily to the general education classroom, and individualization is often not observed in general education classrooms (Fuchs & Fuchs, 1995). Thus, the implementation of specially designed instruction in the general education classroom is a major instructional challenge for meeting the individual needs of special education students in inclusive settings.

Based on a review of the literature, Garda (2006) reported special education is characterized by significant and individualized adaptations to the content, methodology, and delivery of instruction that is not provided to all general education students.

Researchers from the field of special education described individualized, evidence based practices (EBP) for providing specially designed instruction as direct instruction, cognitive strategy instruction, control of task difficulty, small interactive groups, and progress monitoring. Wehmeyer (2006) provides Universal Design for Learning (UDL) as a theoretical framework for providing individualized accommodations for students with disabilities in the general education classroom as multiple means of expression, multiple means of representation, multiple means of engagement, and curriculum adaptations.

To equip educators with the necessary skills to provide specially designed instruction, along with supplementary aids and supports in the general education setting, educators must first have a high level of understanding on what constitutes specially designed instruction. Second, educators need supports in place to eliminate roadblocks for

implementation, thus resulting in high levels of implementation of specially designed instruction in the general education classroom.

A pilot focus group study was conducted to obtain the teachers' and administrators' perceptions on the delivery of specially designed instruction in inclusive settings and any perceived roadblocks they encountered in the implementation process. Focusing on the individuals' experience through the focus interview captured educational practices in the participants' own words. The data collected through the pilot study provided useful insight for developing the survey for this study. The pilot study employed focus group methodology to examine educators' level of knowledge of specially designed instruction, the degree to which specially designed instruction is implemented, and identify roadblocks for implementation.

Three research questions guided the pilot study. These questions are presented along with a discussion of the results.

Pilot Study Research Question One: How do special education teachers, general education teachers, and administrators describe the delivery of specially designed instruction to students with disabilities in the general education classroom?

The highest ranked descriptor used by special education teachers for describing specially designed instruction was "differentiation." General education teachers described specially designed instruction as "assignment modifications," "accommodations," "planning," and "differentiated instruction" as equally important key descriptors of specially designed instruction. Administrators described "accommodations" as the top descriptor of specially designed instruction.

While special education teachers and general education teachers both used “differentiation” as a top descriptor of specially designed instruction, it is important to note that the hallmark descriptor for specially designed instruction from a legal perspective was “significant” and “individualized,” and the hallmark descriptor for specially designed instruction from researchers in the field of special education was “individualized.” Notably, special education teachers did not describe specially designed instruction as “individualized.” While differentiation is currently emphasized in schools due to the reauthorized Individuals with Disabilities Education Improvement Act (IDEIA) 2004, which requires general educators to increase their efforts to differentiate instruction for struggling students through the Response to Intervention (RTI), “differentiation” does not mean “individualized.”

“Accommodations” were also ranked high by general education teachers and administrators as descriptors for providing specially designed instruction, and special education teachers used the term “assignment modifications” for describing “accommodations” as a category of specially designed instruction. Yet, the participants in the three separate focus groups did not distinguish between routine accommodations made for all students versus “significant” accommodations required for students with disabilities. The impression by the researcher was that educators lacked an understanding of what distinguishes routine accommodations for all students from accommodations representing specially designed instruction for students with disabilities based on their generic responses.

Moreover, researchers in the field of education described the following evidence based practices (EBP) as components of specially designed instruction: 1) direct instruction, 2) cognitive strategy instruction, 3) small interactive group instruction, 4) progress monitoring, and 5) control of task difficulty. Based on these five categories of evidence based practices (EBP) for describing specially designed instruction, only small interactive group instruction was recognized by special education teachers, general education teachers, and administrators as a descriptor of specially designed instruction. Notably missing were the rest of the evidence based practices (EBP) for providing specially designed instruction including direct instruction, cognitive strategy instruction, progress monitoring, and control of task difficulty.

Pilot Study Research Question Two: What do special education teachers, general education teachers, and administrators describe as barriers related to the delivery of specially designed instruction to students with disabilities in the general education classroom?

Regarding barriers for implementation, the consensus was that time was the biggest barrier for implementing specially designed instruction in the general education classroom. General education teachers described time constraints as lack of personnel support to provide equal time for all students. Special education teachers described time constraints as not enough planning time. They also expressed concern for meeting the needs of a variety of students at various grade levels and abilities. Special education teachers also described a roadblock due to a lack of materials and resources readily available in order to provide specially designed instruction and accommodations.

Administrators described time constraints as scheduling issues, and suggested teachers need more time in their schedules to adjust their instruction and plan lessons.

Pilot Study Research Question Three: What do special education teachers, general education teachers, and administrators perceive they need in order to overcome barriers when delivering specially designed instruction in the general education classroom?

Special education teachers ranked providing targeting instructional resources as the most important need in order to overcome barriers when delivering specially designed instruction in the general education classroom. Specifically, special education teachers felt they did not have enough time to plan lessons and accommodations for the variety of students at different grades and ability levels. The special education teachers suggested that the district should provide a bank of instructional resources per grade, subject area, and different ability levels to save teacher time when providing specially designed instruction for students with disabilities in the general education classroom. General education teachers ranked preparation for students as the highest need for overcoming barriers. General education teachers suggested they need more knowledge in order to be prepared to meet the needs of students with disabilities in their classrooms.

Administrators ranked staff development as the highest need for overcoming barriers for implementation. They suggested specific training opportunities on evidence based methods, which included real life scenarios on DVDs.

Following the pilot study, a non-experimental research design utilizing survey methodology was chosen to provide descriptive data on educators' perceptions of their

level of knowledge and level of implementation for providing specially designed instruction in the general education setting, and roadblocks for implementation.

Recap of Research Questions

Three research questions guided the quasi-experimental research design. These questions are presented along with a discussion of the results relating to Chapter 4 and the literature review.

Research Question One

What do administrators, general education teachers, and special education teachers perceive to be their level of knowledge on identified categories of specially designed instruction?

In this study, special education teachers reportedly possessed a *moderate* level of knowledge of specially designed instruction in the categories of evidence based practices (EBP) and Universal Design for Learning (UDL). General education teachers reportedly possessed a *somewhat low* level of knowledge of specially designed instruction in the categories of evidence based practices (EBP) and Universal Design for Learning (UDL).

Similarly, principals and assistant principals reported their level of knowledge for specially designed instruction in the categories of evidence based practices (EBP) and Universal Design for Learning (UDL) as *somewhat low*.

As might be expected, there were statistically significant differences between general education teachers' and special education teachers' knowledge of specially designed instruction in the categories of UDL and EBP, with special education teachers having higher mean scores than general education teachers. However, there is a concern

that special education teachers self-reported *moderate* levels of knowledge of specially designed instruction in the categories of UDL and EBP. There were also statistically significant differences between assistant principals' and principals' knowledge of evidence based practices (EBP), with principals self-reporting higher levels of knowledge of EBP. This is most likely due to principals having more experience than assistant principals.

Historically, special education involved highly trained teachers to provide individualized instruction to students with disabilities (Volonino & Zigmond, 2007). Legally, IDEIA 2004 requires educators to use strategies based on peer-reviewed research. The concern over general education teachers, administrators, and special education teachers self-reporting *somewhat low* to *moderate* levels of knowledge of specially designed instruction falls short of the high degree of knowledge educators must possess in order to serve students with disabilities in the general education setting.

With schools being held to higher academic standards for students with disabilities, educators must be prepared to meet the challenge of providing a free and appropriate public education (FAPE) through an individualized program while demonstrating excellence rather than access (Katsiyannis, Yell, & Bradley, 2001). Providing educators with *knowledge* to implement high quality, specially designed instruction in inclusive settings so that students with disabilities make progress in the general education curriculum is a first step in this challenge for providing excellence.

Research Question Two

What do administrators, general education teachers, and special education teachers perceive to be their level of implementation for providing identified categories of specially designed instruction?

Special education teachers reported a *moderate* level of implementation of UDL and evidence based practices (EBP) relating to specially designed instruction. General education teachers reported a *somewhat low* level of implementation of specially designed instruction in the two categories of UDL and EBP. Assistant principals had a *somewhat low* comfort level in monitoring teacher implementation of specially designed instruction in the two categories of UDL and EBP. Principals reportedly had a *moderate* comfort level in monitoring teacher implementation of UDL, and a *somewhat low* comfort level in monitoring teacher implementation of EBP.

Not surprisingly, there were statistically significant differences between general education teachers' and special education teachers' level of implementation of specially designed instruction, with special education teachers reporting higher mean scores for implementation.

Moreover, there were statistically significant differences between principals and assistant principals relating to their comfort level in monitoring teacher implementation of Universal Design for Learning (UDL) as a component of specially designed instruction, with principals reporting higher mean scores. Yet, there were no statistically significant differences between principals and assistant principals relating to their comfort level in monitoring teacher implementation of evidence based practices (EBP). This finding

seemed somewhat contradictory based on the statistically significant differences between assistant principals' and principals' level of *knowledge* of EBP as a component of specially designed instruction, which may have supported a corresponding statistically significant lack of comfort level in monitoring teacher implementation of EBP.

A major requirement of IDEIA (2004) is access to the general education curriculum, and the student's IEP must contain information to enable the child to be involved in and make progress in the general education curriculum (Ahearn, 2005). The concern over general education teachers, administrators, and special education teachers self-reporting *somewhat low to moderate* levels of implementation of specially designed instruction falls short of the IDEIA mandate for providing children with disabilities supplementary aids, services, and other supports in the regular education classes to enable them to be educated with their nondisabled peers to the maximum extent appropriate (CFR Section 300.42).

Additionally, general education teachers, administrators, and special education teachers self-reporting *somewhat low to moderate* levels of implementation of specially designed instruction in the general education classroom support the conclusions of research conducted by Baker and Zigmond (1995), which contended there was very little specially designed instruction delivered to students with disabilities in the general education setting. Similarly, Espin et al. (1998) reported that teachers are less likely to provide the individualized programs for students with disabilities required by federal policy in the general education classroom. It appeared that the more time the student spends in the general education classroom, the less individualized was the student's IEP.

These findings were also consistent with research conducted in 2005 by Project Forum with the National Association of State Directors of Special Education (NASDSE) and U.S. Department of Education's Office of Special Education Programs (OSEP) on the status of strategies for improving access to the general education curriculum for students with disabilities. Ahearn (2005) suggested the research showed inconsistencies on the use of instructional strategies to support students with disabilities in the general education classroom.

Research Question Three

How do teachers and administrators rank identified barriers for implementing specially designed instruction in the general education setting?

Both teachers and administrators ranked lack of personnel support as the highest barrier for implementing Universal Design for Learning (UDL), and ranked lack of personnel support as the highest barrier to implementing the first two components of Evidence Based Practices (EBD), which include curriculum adaptations and direct instruction. Teachers and administrators ranked competing demands as the highest barrier for providing cognitive strategy instruction and small interactive group instruction. Teachers ranked competing demands as the highest barrier for providing progress monitoring and control of task difficulty. Administrators ranked high caseload as the highest barrier for implementing progress monitoring, and high caseload and competing demands as the highest barriers for implementing control of task difficulty in the general education setting.

Lack of personnel support, competing demands, and high caseload suggests lack of time as the overarching roadblock for providing specially designed instruction in the general education setting. These barriers were consistent with the findings of the pilot study with the consensus being that time was the biggest barrier for implementing specially designed instruction in the general education classroom.

Additionally, these results support Manset and Semmel's (1995) assertion general education classrooms must be restructured to eliminate barriers for implementing specially designed instruction. He suggested a low staff-to-student ratio was necessary to support teachers in providing intensive instruction and performance monitoring, and allowing one-on-one individualized instruction when appropriate. Hudson's Class-within-a-Class (CWC) model recognized that general education classrooms must incorporate specialized supports for students with disabilities to be successful (Tollefson, 1998).

Providing educators with the necessary supports to implement high quality, specially designed instruction in inclusive settings so that students with disabilities make progress in the general education curriculum is the second challenge. As Hudson advocated in 1989 with his Class-within-a-Class (CWC) model, responsible inclusion must be a priority for educators. Responsible inclusion aligns with IDEIA's mandate for providing children with disabilities supplementary aids, services, and other supports in the regular education classes to enable them to be educated with nondisabled children to the maximum extent appropriate (CFR Section 300.42).

In conclusion, data from this study represents a lack of knowledge of specially designed instruction for special education teachers, general education teachers, and

administrators which must be present in order to serve students with disabilities in the general education setting. Clearly, educators must have knowledge of what constitutes specially designed instruction before implementation can occur. Secondly, responsible inclusion must be supported by providing educators with the necessary training and supports for implementing significant and individualized specially designed instruction in the general education classroom.

Implications for Future Research

The results of this study suggested future studies should focus on how to evaluate the effectiveness of educator training programs to ensure teachers and administrators possess high levels of knowledge of what constitutes specially designed instruction.

As a result of this study, the following are recommended to guide future studies on the delivery of specially designed instruction in inclusive settings:

1. Do teachers' and administrators' university based educator programs provide sufficient training on specially designed instruction?
2. How do universities evaluate the effectiveness of their educator preparation programs for providing students with sufficient knowledge of specially designed instruction?
3. Do alternative certification programs for special education teachers provide sufficient knowledge of specially designed instruction?
4. How do alternative certification programs evaluate their effectiveness for providing teachers with knowledge of specially designed instruction?

5. Do districts provide sufficient teacher and administrator training on specially designed instruction?
6. How do districts evaluate their effectiveness for providing participants with knowledge of specially designed instruction?

Once research data suggests teachers and administrators possess high levels of knowledge for providing specially designed instruction, the second recommendation is to conduct further research on how to evaluate the effectiveness of implementing specially designed instruction in the general education classroom. Finally, research is recommended on how to evaluate the effectiveness of supports to eliminate barriers for the implementation of high quality, specially designed instruction in inclusive settings so that students with disabilities make progress in the general education curriculum.

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APPENDIX A
IRB APPROVAL FORM



Institutional Review Board

Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378 Fax 940-898-3416
e-mail: IRB@twu.edu

April 29, 2009

Ms. Kathleen Talbert

Dear Ms. Talbert:

Re: Teacher and Administrator's Perceptions of Delivery of Specially Designed Instruction in Inclusive Classrooms

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and appears to meet our requirements for the protection of individuals' rights.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. A copy of the approved consent form with the IRB approval stamp and a copy of the annual/final report are enclosed. Please use the consent form with the most recent approval date stamp when obtaining consent from your participants. The signed consent forms and final report must be filed with the Institutional Review Board at the completion of the study.

This approval is valid one year from April 29, 2009. According to regulations from the Department of Health and Human Services, another review by the IRB is required if your project changes in any way, and the IRB must be notified immediately regarding any adverse events. If you have any questions, feel free to call the TWU Institutional Review Board.

Sincerely,

Dr. David Nichols, Chair
Institutional Review Board - Denton

enc.

- cc. Dr. Nan Restine, Department of Teacher Education
Dr. Jane Pemberton, Department of Teacher Education
Graduate School



Institutional Review Board
Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378 Fax 940-898-3416
e-mail: IRB@twu.edu

July 20, 2009

Ms. Kathleen Talbert

Dear Ms. Talbert:

Re: Student's With Disabilities Cognitive Access to General Education Settings Through Specially Designed Instruction

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and was determined to be exempt from further review.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. Because a signed consent form is not required for exempt studies, the filing of signatures of participants with the TWU IRB is not necessary.

Another review by the IRB is required if your project changes in any way, and the IRB must be notified immediately regarding any adverse events. If you have any questions, feel free to call the TWU Institutional Review Board.

Sincerely,

Dr. David Nichols, Chair
Institutional Review Board - Denton

APPENDIX B
METAPLAN STEPS

Metaplan Steps

- Step 1 A question is stated.
- Step 2 Participants write thoughts and feelings on note cards.
- Step 3 Participants write clearly and neatly.
- Step 4 Write one idea per card.
- Step 5 Use 7 words or less if possible
- Step 6 The moderator collects and reads note cards aloud and displays them on the wall.
- Step 7 The moderator, with participants help, organizes the note cards into clusters or categories of thoughts, feelings, and opinions.
- Step 8 Participants may continue writing their thoughts during the process.
- Step 9 The moderator and participants discuss their thoughts, feelings, and ideas through the clustering process.
- Step 10 The participants conclude the process by rating the categories according to how they feel about the importance of each category. They also rank their top categories according to perceived importance.

APPENDIX C

EMAIL INVITATIONS FOR FOCUS SESSION

Talbert, Kathy

From: Talbert, Kathy
Sent: Wednesday, May 20, 2009 9:26 AM
To: Talbert, Kathy
Subject: FOCUS group

Greetings!

You are invited to participate with me in a research study entitled "Teacher and Administrators' Perceptions of Delivery of Specially Designed Instruction in Inclusive Classrooms." This study has been approved by the Executive Director of Special Education and the TWU Institutional Review Board (IRB).

Your participation is *voluntary* and will not impact your status in the district. To participate in this study, you are invited to a Focus group meeting on May 28, 2009 at 2:30-4:30 p.m. in room 317. At that time, you will sign a consent form that describes the purpose of the study, how data is collected, how confidentiality is maintained, and the risk of participation. There is potential risk of loss of confidentiality of all email, downloading, and internet interactions.

Please respond to me at _____ with your interest and commitment to participate no later than May 22, 2009.

Sincerely,
Kathy Talbert

Talbert, Kathy

From: Talbert, Kathy
Sent: Wednesday, May 20, 2009 9:30 AM
To: Talbert, Kathy
Subject: FOCUS group

Greetings!

You are invited to participate with me in a research study entitled "Teacher and Administrators' Perceptions of Delivery of Specially Designed Instruction in Inclusive Classrooms." This study has been approved by the Executive Director of Special Education and the TWU Institutional Review Board (IRB).

Your participation is *voluntary* and will not impact your status in the district. To participate in this study, you are invited to a Focus group meeting on May 26, 2009 at 1:00-2:30 p.m. in room 317. At that time, you will sign a consent form that describes the purpose of the study, how data is collected, how confidentiality is maintained, and the risk of participation. There is potential risk of loss of confidentiality of all email, downloading, and internet interactions.

Please respond to me at _____ with your interest and commitment to participate no later than May 22, 2009.

Sincerely,
Kathy Talbert

Talbert, Kathy

From: Talbert, Kathy
Sent: Wednesday, May 20, 2009 9:39 AM
To: Talbert, Kathy
Subject: FOCUS group - General Education Teachers

Greetings!

You are invited to participate with me in a research study entitled "Teacher and Administrators' Perceptions of Delivery of Specially Designed Instruction in Inclusive Classrooms." This study has been approved by the Executive Director of Special Education and the TWU Institutional Review Board (IRB).

Your participation is *voluntary* and will not impact your status in the district. To participate in this study, you are invited to a Focus group meeting on May 26, 2009 at 3:00-4:30 p.m. in room 317. At that time, you will sign a consent form that describes the purpose of the study, how data is collected, how confidentiality is maintained, and the risk of participation. There is potential risk of loss of confidentiality of all email, downloading, and internet interactions.

Please respond to me at _____ with your interest and commitment to participate no later than May 22, 2009.

Sincerely,
Kathy Talbert

APPENDIX D

CONSENT TO PARTICIPATE IN RESEARCH

TEXAS WOMAN'S UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Title: Teacher and Administrators' Perceptions of Delivery of Specially Designed Instruction in Inclusive Classroom

Investigator: Kathleen Talbert.....469-713-5203

Advisor: Jane Pemberton, Ph. D.940-898-2273

Explanation and Purpose of the Research

You are being asked to participate in a research study for Ms. Talbert's dissertation at Texas Woman's University. The purpose of this study is to gain administrators' and teachers' perceptions on the delivery of specially designed instruction in inclusive classrooms. The research study is entitled "Teacher and Administrators' Perceptions of Delivery of Specially Designed Instruction in Inclusive Classrooms." In particular, the study will examine special education teachers' perceptions, general education teachers' perceptions, and administrators' perceptions of the delivery of specially designed in the general education classrooms.

Research Procedures

For this study, the investigator will conduct focus group sessions with special education teachers, general education teachers, and administrators at Liberty Elementary. You will be asked questions following the Metaplan process which includes the moderator asking participants three open-ended questions. The participants will write their answers for each Focus question on color coded sticky notes to generate categories, then rate their individual perceptions of the importance of each category generated by the group using the rating and voting sheets. Your maximum total time commitment in the study is approximately two hours.

Potential Risks

A potential risk related to your participation in the study includes fatigue during the focus group meeting. To avoid fatigue, you may take a break during the focus group questioning as needed, discontinue answering questions at any time without reason, or decline to participate in the study.

A second potential risk to you as a result of your participation in this study is loss of time. Participation in the Focus session is voluntary, and efforts will be made to begin the session on time. Participants will not be held longer than two hours. Participants may leave at any time they choose without penalty.

A third potential risk to you related to your participation in the study is coercion. Participation is completely voluntary, and the participant may discontinue participation in the study at any time without penalty.

A fourth possible risk to you as a result of your participation in this study is release of confidential information. Confidentiality will be protected to the extent that is required by law. The focus group questions will take place at Liberty Elementary at an agreed upon location by the principal and researcher. Participants who have volunteered to participate in the Focus session will receive a color-coded file folder. Each participant will respond on their color-coded rating and voting sheets. No names will be collected with measures of interest and will be separated from the data. No audiotaping or video recording will be used during the Focus group. The only written information that will be collected are the color coded voting and rating sheets without participants' names. The only documents with the participants' names will be the consent forms. The consent forms will be secured and locked in the Principal Investigators' home office. These forms will be turned over to the IRB upon conclusion of the study according the IRB guidelines. There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions.

A final possible risk for you is loss of anonymity. As participants arrive at the focus group session, you will be assigned a pseudo-name for the purposes of individual responses on the rating and voting sheets. Participants may reveal their true identities during the course of the session, but it is not necessary nor is it required. The Principal Investigator and the assistant moderator will **not** ask for identifying information except when completing the informed consent forms.

Identifiable data and participants' responses to invitation email will be maintained until the Principal Investigator completes all steps in her dissertation study. The estimated date that identifiable data will be destroyed is one year after the completion of the study. The estimated date for completion is a timeframe of December 15, 2009 through May 20, 2010 and the estimated date for destroying identifiable data is December 15, 2010 through May 20, 2011.

The Principal Investigator will destroy all identifiable data and participants' responses to invitation email through shredding then discarding the shredded material.

Participation and Benefits

Your involvement in this research study is completely voluntary, and you may discontinue your participation in the study at any time without penalty. The only direct benefit of this study to you is that at the completion of the study a summary of the results will be mailed to you upon request.*

Questions Regarding the Study

If you have any questions regarding the research study you may ask the researcher; her phone number is at the top of this form. If you have questions about your rights as a participant in this research study or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via email at IRB@twu.edu. You will be given a copy of this signed and dated consent form to keep.

Signature of Participant

Date

* If you would like to receive a summary of the results of this study, please provide an address to which this summary should be sent:

APPENDIX E
FOCUS GROUP PROTOCOL

FOCUS GROUP PROTOCOL

Thank you for agreeing to participate with me in our research study entitled “Teacher and Administrators’ perceptions of Specially Designed Instruction in Inclusive Classrooms.” Your ideas are important because they will further inform the field what is required for providing special education services in inclusive settings, and this information will be useful in planning future staff developments and training programs.

Special education is defined in the Individuals with Disabilities Act (IDEA) 2004 as specially designed instruction, at no cost to parents, to meet the unique needs of the child with a disability. The federal regulations also provide further clarification on specially designed instruction, and state that it means adapting, as appropriate the content, methodology, or delivery of instruction 1) to address the unique needs of the child that result from the disability, and 2) to ensure access of the child to the general education curriculum. Specially designed instruction is the heart of special education, and focuses on the individual needs of the student.

If a child qualifies for special education, IDEA requires educating the student in the least restrictive environment requirements (LRE), and states that schools must ensure that to the maximum extent appropriate, children with disabilities are educated with children who are non-disabled. The federal law states that special classes, separate schooling, or other removals from the general education environment occurs only if the nature and severity of the disability is such that education in regular classes with the use of supplemental aides and services cannot be achieved satisfactorily.

To gather your ideas on the delivery of specially designed instruction in the general education classroom, we will be participating in a research methodology called the Metaplan. A handout of The Metaplan Steps is inside your folder. Let's go over these steps together.

The Metaplan Steps

- Step 1 A question is stated.
- Step 2 Participants write thoughts and feelings on note cards.
- Step 3 Participants write clearly and neatly.
- Step 4 Write one idea per card.
- Step 5 Use 7 words or less if possible
- Step 6 The moderator collects and reads note cards aloud and displays them on the wall.
- Step 7 The moderator, with participants help, organizes the note cards into clusters or categories of thoughts, feelings, and opinions.
- Step 8 Participants may continue writing their thoughts during the process.
- Step 9 The moderator and participants discuss their thoughts, feelings, and ideas through the clustering process.
- Step 10 The participants conclude the process by rating the categories according to how they feel about the importance of each category. They also rank their top categories according to perceived importance.

All of your comments are strictly confidential and will not be shared with anyone outside of this room. Your name will not be associated with the results in any way.

Now, I will provide a model for you on how to write your responses on your note cards. **(One person acts as the moderator to pose this question: “Write down as many characteristics you can think of that describe your favorite teacher.” The second person should model how to write about five or six comments onto cards while “thinking aloud.” The moderator will then collect the cards and show them to the group.)**

Are there any questions about how to write down your ideas? **(Answer any questions from the group.)**

Good. Let’s begin with our first question. **(Distribute Focus Group Questions Handout)** You will see that there is a prompt at the top of the page and that the question is stated below. Let’s read the prompt together. The prompt states how IDEA 2004 defines specially designed. It states that is means adapting, as appropriate the content, methodology, or delivery of instruction 1) to address the unique needs of the child that result from the disability, and 2) to ensure access of the child to the general education curriculum. For this question, think about how you have observed or implemented specially designed instruction in general education classrooms. Then write your responses on your note cards for Part 1 of Question A which states “What are you currently doing to provide specially designed instruction to students with disabilities in the general education classroom?” Write as many thoughts as you can think of onto separate cards. When you are done, we will post them and discuss them. You may begin.”

Wait until most participants are ready, and then begin to post the cards.

When similar responses are noted, post them together in a group. Once all responses are posted, give each set of responses a category name.

Now, let's look at Part 2 of Question A. (Refer to the next section on Focus Group Questions Handout) Instruct participants to write their responses on their note cards.)

Cluster these cards and label them with categories in the same way as for Part 1.

Finally, let's look at Part 3 of Question A. (Refer to the next section on Focus Group Questions Handout). Instruct participants to write their responses on their note cards.)

Cluster these cards and label them with categories in the same way as for Part 1 & 2.

Now, locate the "Focus Group Member Rating and Voting Sheet for Question A1 that is located in your folder. At this point, assign a number to each of the categories designated by the group. Tell participants you are assigning a number for the category so that they do not have to write the name on the line. Ask participants to circle a number (1-7) according to how important they believe the category to be to them.

Do the same thing with Questions A2 and A3.

Next, tell participants to look at the bottom half of the sheet. Ask them to list the ____ categories they believe are most important. (You will determine the number of categories designated and then divide by 2. That is the number of categories each person should list.)

Continue to present Questions A2 and A3 in the same manner.

(Post, cluster, and vote as with the other questions.)

In closing, thank everyone for coming and collect folders and cards.

APPENDIX F

FOCUS GROUP QUESTIONS HANDOUT

FOCUS GROUP QUESTIONS Handout

Administrators/Support

PART 1

IDEA 2004 defines specially designed instruction as adapting, as appropriate, the content, methodology, or delivery of instruction 1) to address the unique needs of the child that result from the disability, and 2) to ensure access of the child to the general education curriculum.

Focus question C1 – What are your teachers currently doing to provide specially designed instruction to students with disabilities in the general education classroom?

PART 2

Focus question C2 – What roadblocks do your teachers encounter when providing specially designed instruction to students with disabilities in the general education classroom?

PART 3

Focus question C3 – How can the school/district assist your teachers in providing specially designed instruction to students with disabilities in the general education classroom?

FOCUS GROUP QUESTIONS Handout

General Education Teachers

PART 1

IDEA 2004 defines specially designed instruction as adapting, as appropriate, the content, methodology, or delivery of instruction 1) to address the unique needs of the child that result from the disability, and 2) to ensure access of the child to the general education curriculum.

Focus question B1 – What are you currently doing to provide specially designed instruction to students with disabilities in the general education classroom?

PART 2

Focus question B2 – What roadblocks do you encounter when you provide specially designed instruction to students with disabilities in the general education classroom?

PART 3

Focus question B3 – How can the school/district assist you in providing specially designed instruction to students with disabilities in the general education classroom?

FOCUS GROUP QUESTIONS Handout

Special Education Teachers

PART 1

IDEA 2004 defines specially designed instruction as adapting, as appropriate, the content, methodology, or delivery of instruction 1) to address the unique needs of the child that result from the disability, and 2) to ensure access of the child to the general education curriculum.

Focus question A1 – What are you currently doing to provide specially designed instruction to students with disabilities in the general education classroom?

PART 2

Focus question A2 – What roadblocks do you encounter when you provide specially designed instruction to students with disabilities in the general education classroom?

PART 3

Focus question A3 – How can the school/district assist you in providing specially designed instruction to students with disabilities in the general education classroom?

APPENDIX G
RATING AND VOTING SHEETS

Group A: Special Education Teacher Member Rating and Voting Sheet for Question A1

“What are you currently doing to provide specially designed instruction to students with disabilities in the general education setting?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important	to	Very Important				
1. _____	1	2	3	4	5	6	7
2. _____	1	2	3	4	5	6	7
3. _____	1	2	3	4	5	6	7
4. _____	1	2	3	4	5	6	7
5. _____	1	2	3	4	5	6	7
6. _____	1	2	3	4	5	6	7
7. _____	1	2	3	4	5	6	7
8. _____	1	2	3	4	5	6	7

Vote on your top most important categories A1

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is #_____.

2nd Most Important Category is #_____.

3rd Most Important Category is #_____.

4th Most Important Category is #_____.

Group A: Special Education Teacher Member Rating and Voting Sheet for Question A2

“What roadblocks do you encounter when you provide specially designed instruction to students with disabilities in the general education setting?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important				to	Very Important		
	1	2	3	4		5	6	7
1. _____	1	2	3	4		5	6	7
2. _____	1	2	3	4		5	6	7
3. _____	1	2	3	4		5	6	7
4. _____	1	2	3	4		5	6	7
5. _____	1	2	3	4		5	6	7
6. _____	1	2	3	4		5	6	7
7. _____	1	2	3	4		5	6	7
8. _____	1	2	3	4		5	6	7

Vote on your top most important categories A2

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is # _____.

2nd Most Important Category is # _____.

3rd Most Important Category is # _____.

4th Most Important Category is # _____.

Group A: Special Education Teacher Member Rating and Voting Sheet for Question A3

“How can the school/district assist you in providing specially designed instruction to students with disabilities in the general education classroom?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important				to	Very Important		
1. _____	1	2	3	4	5	6	7	
2. _____	1	2	3	4	5	6	7	
3. _____	1	2	3	4	5	6	7	
4. _____	1	2	3	4	5	6	7	
5. _____	1	2	3	4	5	6	7	
6. _____	1	2	3	4	5	6	7	
7. _____	1	2	3	4	5	6	7	
8. _____	1	2	3	4	5	6	7	

Vote on your top most important categories A3

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is # _____.

2nd Most Important Category is # _____.

3rd Most Important Category is # _____.

4th Most Important Category is # _____.

Group B: General Education Teacher Member Rating and Voting Sheet for Question B1

“What are you currently doing to provide specially designed instruction to students with disabilities in the general education setting?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important to Very Important						
	1	2	3	4	5	6	7
9. _____	1	2	3	4	5	6	7
10. _____	1	2	3	4	5	6	7
11. _____	1	2	3	4	5	6	7
12. _____	1	2	3	4	5	6	7
13. _____	1	2	3	4	5	6	7
14. _____	1	2	3	4	5	6	7
15. _____	1	2	3	4	5	6	7
16. _____	1	2	3	4	5	6	7

Vote on your top most important categories B1

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is #_____.

2nd Most Important Category is #_____.

3rd Most Important Category is #_____.

4th Most Important Category is #_____.

Group B: General Education Teacher Member Rating and Voting Sheet for Question B2

“What roadblocks do you encounter when you provide specially designed instruction to students with disabilities in the general education setting?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important				to	Very Important		
	1	2	3	4		5	6	7
1. _____								
9. _____	1	2	3	4		5	6	7
10. _____	1	2	3	4		5	6	7
11. _____	1	2	3	4		5	6	7
12. _____	1	2	3	4		5	6	7
13. _____	1	2	3	4		5	6	7
14. _____	1	2	3	4		5	6	7
15. _____	1	2	3	4		5	6	7

Vote on your top most important categories B2

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is # _____.

2nd Most Important Category is # _____.

3rd Most Important Category is # _____.

4th Most Important Category is # _____.

Group B: General Education Teacher Member Rating and Voting Sheet for Question B3

“How can the school/district assist you in providing specially designed instruction to students with disabilities in the general education classroom?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important				to	Very Important		
1. _____	1	2	3	4	5	6	7	
9. _____	1	2	3	4	5	6	7	
10. _____	1	2	3	4	5	6	7	
11. _____	1	2	3	4	5	6	7	
12. _____	1	2	3	4	5	6	7	
13. _____	1	2	3	4	5	6	7	
14. _____	1	2	3	4	5	6	7	
15. _____	1	2	3	4	5	6	7	

Vote on your top most important categories B3

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is # _____.

2nd Most Important Category is # _____.

3rd Most Important Category is # _____.

4th Most Important Category is # _____.

Group C: Administrator/Support Member Rating and Voting Sheet for Question C1

“What are your teachers currently doing to provide specially designed instruction to students with disabilities in the general education setting?”

Rating: Write the name of each category on the line provided. Then, circle your response.

	How important is each category to you?						
	Not Very Important			to	Very Important		
	1	2	3	4	5	6	7
17. _____	1	2	3	4	5	6	7
18. _____	1	2	3	4	5	6	7
19. _____	1	2	3	4	5	6	7
20. _____	1	2	3	4	5	6	7
21. _____	1	2	3	4	5	6	7
22. _____	1	2	3	4	5	6	7
23. _____	1	2	3	4	5	6	7
24. _____	1	2	3	4	5	6	7

Vote on your top most important categories C1

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is #_____.

2nd Most Important Category is #_____.

3rd Most Important Category is #_____.

4th Most Important Category is #_____.

Group C: Administrators/Support Member Rating and Voting Sheet for Question C2

“What roadblocks do your teachers encounter when providing specially designed instruction to students with disabilities in the general education setting?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important				to	Very Important		
	1	2	3	4		5	6	7
1. _____	1	2	3	4		5	6	7
16. _____	1	2	3	4		5	6	7
17. _____	1	2	3	4		5	6	7
18. _____	1	2	3	4		5	6	7
19. _____	1	2	3	4		5	6	7
20. _____	1	2	3	4		5	6	7
21. _____	1	2	3	4		5	6	7
22. _____	1	2	3	4		5	6	7

Vote on your top most important categories C2

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is # _____.

2nd Most Important Category is # _____.

3rd Most Important Category is # _____.

4th Most Important Category is # _____.

Group C: Administrators/Support Member Rating and Voting Sheet for Question C3

“How can the school/district assist your teachers in providing specially designed instruction to students with disabilities in the general education classroom?”

Rating: Write the name of each category on the line provided. Then, circle your response.

How important is each category to you?

	Not Very Important				to	Very Important		
	1	2	3	4		5	6	7
1. _____								
16. _____								
17. _____								
18. _____								
19. _____								
20. _____								
21. _____								
22. _____								

Vote on your top most important categories C3

Voting: Write the name of the categories that you deem most important on the lines provided,

1st Most Important Category is # _____.

2nd Most Important Category is # _____.

3rd Most Important Category is # _____.

4th Most Important Category is # _____.

APPENDIX H
EMAIL TO CAMPUS PRINCIPALS

The following email was sent to campus principals:

"Principals,

You are invited to participate with me in a research study entitled "Teachers' and Administrators' Perceptions of the Delivery of Specially Designed Instruction in Inclusive Classrooms." Your campus was selected as a result of receiving an additional inclusion/co-teacher from the stimulus package for LISD special education IDEA-B funds.

This study has been approved by the Executive Director of Special Education and the TWU Institutional Review Board (IRB). There is potential risk of loss of confidentiality of all email, downloading, and internet interactions.

A survey research methodology will be used with this study. The survey focuses on teachers' and administrators' knowledge of specially designed instruction, the extent to which teachers implement specially designed instruction in the general education classroom, and barriers to implementing specially designed instruction in the general education classroom. Responses are confidential; there is no place on the survey for participants' names. Participation is voluntary and participants can withdraw participation at any time.

Please respond to me at talbertkd@lisd.net with a date for me or the Special Education Director assigned to your campus to attend a scheduled faculty meeting to explain the purpose of the study, and encourage participation in the survey."

Sincerely,

Kathy Talbert

APPENDIX I
LETTER TO PARTICIPANTS

Letter sent to participants

Greetings,

You are invited to participate with me in a research study entitled “Teachers’ and Administrators’ Perceptions of the Delivery of Specially Designed Instruction in Inclusive Classrooms.” You were selected to participate in this study as a result of your campus receiving an additional inclusion/co-teacher from the stimulus package for LISD special education IDEA-B funds.

This study has been approved by the Executive Director of Special Education and the TWU Institutional Review Board (IRB). A survey research methodology will be used with this study.

The purpose of this study is three-fold: 1) to gather teachers’ and administrators’ level of knowledge of specially designed instruction, 2) to evaluate the degree to which general and special education teachers implement specially designed instruction in the general education classroom, and 3) to identify barriers to implementing specially designed instruction in the general education classroom.

Specially designed instruction is characterized by significant and individualized adaptations in the content, methodology, and delivery of instruction that is not provided to all general education students.

Your responses are confidential; there is no place on the survey for participants’ names. Participation is voluntary and participants can withdraw participation at any time. ***There is a potential risk of loss of confidentiality in all paperwork. To reduce the possibility of loss of anonymity, you will be given the choice of completing the survey in another setting. If you are willing to participate in the survey, please take the next twenty minutes to complete the survey either in the faculty meeting room or another setting of your choice.***

Upon complete of your survey, you will place your completed survey in the individual envelope, then place the sealed envelope in the sealed box at the back of the meeting room upon completion. The survey will take approximately 20 minutes to complete.

Questions Regarding the Study

If you have any questions regarding the research study you may ask Kathy Talbert at 469-713-5203. If you have questions about your rights as a participant in this research study or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via email at IRB@twu.edu.

Your participation in this research will be beneficial and helpful in planning future staff trainings for the district.

Sincerely,
Kathy Talbert

APPENDIX J
QUESTIONNAIRE

THE RETURN OF YOUR COMPLETED QUESTIONNAIRE CONSTITUTES YOUR INFORMED CONSENT TO ACT AS A PARTICIPANT IN THIS RESEARCH.

TEACHERS' AND ADMINISTRATORS' PERCEPTIONS OF SPECIALLY DESIGNED INSTRUCTION IN INCLUSIVE CLASSROOMS

This survey focuses on teachers' and administrators' knowledge of specially designed instruction, the extent to which teachers **implement specially designed instruction in the general education classroom**, and barriers to implementing specially designed instruction in the general education classroom.

Specially designed instruction is characterized by significant and individualized adaptations in the content, methodology, and delivery of instruction that is not provided to all general education students.

Gender:	Ethnicity:
<input type="checkbox"/> Male	<input type="checkbox"/> Caucasian <input type="checkbox"/> Hispanic
<input type="checkbox"/> Female	<input type="checkbox"/> African American <input type="checkbox"/> Asian
	<input type="checkbox"/> Other: _____
<hr/>	
Age: <input type="checkbox"/> 20-29 <input type="checkbox"/> 30-39 <input type="checkbox"/> 40-49 <input type="checkbox"/> 50-59 <input type="checkbox"/> 60+	

Level of education: <input type="checkbox"/> Undergraduate <input type="checkbox"/> Master's degree <input type="checkbox"/> Master's plus post Master's hours <input type="checkbox"/> Doctoral degree	Route to teaching certification: <input type="checkbox"/> University base <input type="checkbox"/> Alternative certification
Have you attended level I and level II co-teaching training in LISD? <input type="checkbox"/> yes <input type="checkbox"/> no	
Have you attended level III co-teaching training in LISD on KU learning strategies? <input type="checkbox"/> yes <input type="checkbox"/> no	
Have you attended Understanding By Design training in LISD? <input type="checkbox"/> yes <input type="checkbox"/> no	
Years experience in education: _____	

Responses are **confidential**; there is no place on the survey for participants' names. Participation is **voluntary** and participants can withdraw participation at any time. ***There is a potential risk of loss of confidentiality in all paperwork.***

**TEACHERS' AND ADMINISTRATORS' PERCEPTIONS OF THE DELIVERY OF
SPECIALLY DESIGNED INSTRUCTION IN INCLUSIVE CLASSROOMS**

Please complete items 1-18 by checking the box that is appropriate for you. At the end of the survey, there is a space for you to offer comments.

Statement	Low	Somewhat Low	Moderate	Somewhat High	High
Section I. Universal Design for Learning (UDL) for Students With Disabilities in the General Education Setting. Questions 1-8. UDL is the design of instructional materials and activities to meet various learner needs through multiple means of representation, multiple means of expression, multiple means of engagement, and curriculum adaptations (Wehmeyer, 2006).					
Multiple Means of Representation is providing learners with various ways to acquire content information such as visuals or auditory rather than print (i.e. digital talking books, enlarged print, highlighted texts, amplified sounds).					
1. My level of knowledge on how to provide students with Multiple Means of Representation is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My level of implementation for providing Multiple Means of Representation for students with disabilities in the general education setting that is significant individualized is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multiple Means of Expression is providing learners multiple ways to demonstrate what they know (i.e. drawings, oral reports, written reports, drama, artwork, etc.					
3. My level of knowledge on how to provide students with Multiple Means of Expression is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. My level of implementation for providing Multiple Means of Expression for students with disabilities in the general education setting that is significant and individualized is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multiple Means of Engagement is gaining students' interest and increasing motivation through computers , providing choices,etc.					
5. My level of knowledge on how to provide students with Multiple Means of Engagement is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. My level of implementation for providing Multiple Means of Engagement for students with disabilities in a general education setting that is significant and individualized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Statement	Low	Somewhat Low	Moderate	Somewhat High	High
Curriculum Adaptations is changing the representation of the content to help students store and remember information, or changing the student's engagement in the content through the use of advance organizers, graphic organizers, outlines, flowcharts, concept maps, etc.					
7. My level of knowledge on how to provide students with Curriculum Adaptations is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. My level of implementation for providing Curriculum Adaptations for students with disabilities in a general education setting that is significant and individualized is:

☐
☐
☐
☐
☐

Section II.
Evidence based Practices for Students with Disabilities in the General Education Setting
Questions 9 – 18.

Direct Instruction is explicit, skill based teacher directed instruction utilizing research based programs, i.e. Corrective Reading, Reading Mastery, etc.

9. My level of knowledge on how to provide students with Direct Instruction is:

☐
☐
☐
☐
☐

10. My level of implementation for providing Direct Instruction for students with disabilities in a general education setting that is significant and individualized is:

☐
☐
☐
☐
☐

Cognitive Strategy Instruction –Learning strategies to help students learn independently such as self-questioning and self-monitoring strategies to activate prior learning, summarize information, etc.

11. My level of knowledge on how to provide students with Cognitive Strategy Instruction is:

☐
☐
☐
☐
☐

12. My level of implementation for providing Cognitive Strategy Instruction for students with disabilities in a general education setting that is significant and

☐
☐
☐
☐
☐

individualized is:

Small Interactive Groups Instruction includes peer tutoring with one student assisting another in learning a new skill, Cooperative Learning, or small groups of 6 or less.

13. My level of knowledge on how to provide students with Small Interactive Group Instruction is:

☐
☐
☐
☐
☐

14. My level of implementation for providing Small Interactive Group Instruction for students with disabilities in a general education setting that is significant and individualized is:

☐
☐
☐
☐
☐

Statement

Low

Somewhat Low

Moderate

Somewhat High

High

Progress Monitoring – collecting student data through the use of curriculum based measurements (CBMs) or other ongoing measurements of student performance (i.e. IEPs) for individualized decision making.

15. My level of knowledge on how to provide students with progress monitoring is:

☐
☐
☐
☐
☐

16. My level of implementation for providing Progress Monitoring for students with disabilities in a general education setting that is significant and individualized is:

☐
☐
☐
☐
☐

Control of Task Difficulty - sequencing student work to maintain high levels of student

success and reduce frustration.

17. My level of knowledge on how to provide students with Control of Task Difficulty is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. My level of implementation for providing Control of Task Difficulty for students with disabilities in a general education setting that is significant and individualized is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section III (Items 19-27).					
Rank these identified barriers for providing the following categories of <u>specialty designed instruction</u> to students with disabilities <u>in the general education classroom</u> from 1= low barrier, 2= somewhat low barrier, 3 = moderate barrier, 4 = somewhat high barrier, and 5 = high barrier					
	High Caseload	Personnel Support	Competing Demands	Materials/Resources	Scheduling
<i>Example:</i> Differentiation Response would indicate high caseload as the lowest barrier, with scheduling as the highest barrier.	<u>1</u>	<u>3</u>	<u>4</u>	<u>2</u>	<u>5</u>
19. Multiple means of representation.	___	___	___	___	___
20. Multiple means of expression.	___	___	___	___	___
21. Multiple means of engagement.	___	___	___	___	___
22. Curriculum adaptations.	___	___	___	___	___
23. Direct Instruction.	___	___	___	___	___
24. Cognitive Strategy Instruction.	___	___	___	___	___
25. Small Interactive Group Instruction.	___	___	___	___	___
26. Progress Monitoring.	___	___	___	___	___
27. Control of Task Difficulty.	___	___	___	___	___

Additional Comments:



APPENDIX K

GROUP PARTICIPANT RESPONSES BY CATEGORIES FOR PROVIDING
SPECIALLY DESIGNED INSTRUCTION TO STUDENTS WITH DISABILITIES IN
THE GENERAL EDUCATION SETTING

Group Participant Responses by Categories for providing specially designed instruction to students with disabilities in the general education setting.

Special Education Teachers – Description of providing specially designed instruction in the general education classroom

Categories	Responses
Instructional Groupings (GV = 0)	<p>Small group</p> <p>One-on-one reteach of skills</p> <p>Small group and/or oral testing</p> <p>Ten minute pull-out reading on student level</p> <p>SOS</p>
Differentiated Instruction (GV = 3) Differentiating instruction: allowing for individual responses	<p>Structure/restructure general education instruction as needed</p> <p>Pre-teaching so student can be involved</p> <p>Making sure teacher uses visuals with instruction</p> <p>Relating language therapy to classroom activity</p> <p>Coded spelling tests over grade level words</p> <p>Using manipulatives</p>

Note: GV = Group votes for most important category based on raw votes of the group

Special Education Teachers – Description of providing specially designed instruction in the general education classroom, continued

Categories	Responses
Collaboration (GV=1) Consulting and getting feedback from general education teacher and inclusion teacher	<p>Asking teacher for input on IEP</p> <p>Offering suggestions when requested</p> <p>Asking teachers for their observations on a student</p>
Assignment modifications (GV = 1) Making accommodations to grade level materials	<p>Breaking down assignments</p> <p>Modifying assignments</p> <p>Following accommodations and modifications or implementing them based on need</p> <p>Homework- targeting individual weaknesses</p> <p>Let the student try assignments “as is” then customize as needed. Don’t over modify.</p> <p>Outlines for reports</p>
Assessment (GV = 0)	Finding out what level they are on

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – Providing specially designed instruction in the general education classroom

Categories	Responses
Alternate Materials (GV = 0)	Books on tape Reading books on level
Planning (GV = 2)	Plan with special education teachers before each lesson Consistently use IEP to plan daily lessons
Accommodations (GV=2)	Provide steps Provide small steps Smaller assignments Smaller lessons/assignments Modify homework and projects to include all students Shortened assignments Breaks throughout the day
Modifications (GV = 2)	Modify instruction where appropriate Modify, modify, modify

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – Providing specially designed instruction in the general education classroom, continued

Categories	Responses
Differentiated Instruction (GV=2)	Individualized help or interaction Pull child aside for individualized instruction Differentiated instruction One-on-one or small group Creating visuals Model everything Meet them at their level Differentiated curriculum for success! Lots of small group, individual work Checking for understanding
Peer Supports (GV = 0)	Peer helper Partner work with helpers

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – Providing specially designed instruction in the general education classroom, continued

Categories	Responses
Environmental supports (GV = 1)	Space in the class
	Sitting on balls
	Make sure students participate in all areas
	Display signs around the room as labels
	Sign and speak
	Caring attitude
	Positive reinforcement
	Stay on schedule

Note: GV = Group votes for most important category based on raw votes of the group

Administrators/Support staff – Providing specially designed instruction in the general education classroom

Categories	Responses
Collaboration (GV = 1)	<p>Team planning – grade level</p> <p>Collaborating with other teachers and support staff</p> <p>Working in collaboration to accommodate</p>
Accommodations (GV=3)	<p>Finding ways to implement IEP in regular education</p> <p>Teaching more in chunks</p> <p>Visuals</p> <p>Use visual cues</p> <p>Exposing students to content and adapting to needs</p> <p>Multi-sensory activities</p> <p>Modified whole group questions</p> <p>Provide student with alternate response forms ex: oral</p>

Note: GV = Group votes for most important category based on raw votes of the group

Administrators/Support staff – Providing specially designed instruction in the general education classroom, continued

Categories	Responses
Professional Development (GV = 0)	Attending training to update skills Gaining training
Instructional groupings (GV = 0)	Peer coach Peer buddies Flex grouping Grouping within abilities

Note: GV = Group votes for most important category based on raw votes of the group

APPENDIX L

GROUP PARTICIPANT RESPONSES BY CATEGORIES FOR ROADBLOCKS
TO SPECIALLY DESIGNED INSTRUCTION IN THE GENERAL
EDUCATION SETTING

Group Participant Responses by Categories for Roadblocks to Specially Designed Instruction in the General Education Setting

Special Education Teachers – Roadblocks encountered when providing specially designed instruction in the general education classroom

Categories	Responses
Time (GV = 3)	Time for implementation
	Time for planning
	Time for planning/conferencing with K-5
	Planning time with general education teacher
	Not enough time for daily paperwork
	Having enough time to provide individual
	Instruction to each student
High caseload (GV = 0)	Hard to keep track of what's going on for 47 students
	There isn't enough teachers per student ratio to do a great job

Note: GV = Group votes for most important category based on raw votes of the group

Special Education Teachers – Roadblocks encountered when providing specially designed instruction in the general education classroom, continued

Categories	Responses
Environment (GV=0)	Space/logistics – crowded rooms!
Student ability levels (GV = 0)	Students take longer to complete assignments so they lag behind Student needs are drastically different from general education curriculum
Peer Attitudes (GV = 0)	Peers “not nice” or “not interested”
Lack of Teacher Knowledge (GV = 1)	General education teacher hesitation- is that necessary General education teacher student “ownership” (he’s yours – you do it!) Sometimes general education isn’t aware of how disability relates to classroom performance
Student Behavior (GV = 1)	Distraction with behavior

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – Roadblocks encountered when providing specially designed instruction in the general education classroom

Categories	Responses
Time (GV = 4)	Time when balanced with other supports Time Missing some instruction time Time Time Equal time for all Time
Personnel Support (GV = 4)	Lack of support Support for behavior Not enough support Lack of support
Classroom Management (GV=0)	Class management disruptions Focus

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – Roadblocks encountered when providing specially designed instruction in the general education classroom, continued

Categories	Responses
Competing demands of teacher (GV = 0)	<p>Focusing on one vs. many</p> <p>Differentiation for the others in the class</p> <p>Level of understanding</p> <p>Student's understanding</p> <p>Student's actual ability level</p>
Peer Perceptions (GV=0)	<p>Students feel unfair</p> <p>Frustration from students</p> <p>Peer pressures</p> <p>Other students' impatience</p>
Parent Perceptions (GV = 0)	<p>Parent opinions</p> <p>Parents</p> <p>Parent feel you are not treating equal</p> <p>Parent problems</p>

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – Roadblocks encountered when providing specially designed instruction in the general education classroom, continued

Categories	Responses
Material Resources (GV = 0)	Space Material creations Not having proper materials Resources Money
Scheduling (GV = 0)	Scheduling Schedule constraints
Staff Development (GV = 1)	Knowing new accommodations to try

Note: GV = Group votes for most important category based on raw votes of the group

Administrators/Support staff – Roadblocks encountered when providing specially designed instruction in the general education classroom

Categories	Responses
Scheduling (GV = 1)	<p>Scheduling</p> <p>Time to adjust instruction</p> <p>Need more time to plan lessons</p>
Unexpected Circumstances (GV = 1)	<p>Success vs. circumstance</p> <p>Sufficiently meeting the needs of # of students</p> <p>Disability disrupts focus</p> <p>Student not cooperating or unwilling</p>
Role Delineation (GV=1)	<p>Another person in the room</p> <p>Willingness to accept/collaborate with other</p> <p>Professionals within their classroom</p> <p>Additional support staff</p>

Note: GV = Group votes for most important category based on raw votes of the group

Administrators/Support staff – Roadblocks encountered when providing specially designed instruction in the general education classroom, continued

Categories	Responses
Lack of Resources (GV = 0)	<p>Lack of materials</p> <p>Lack of specific materials</p>
Lack of staff development (GV = 0)	<p>Lack of knowledge of disability</p> <p>Knowledge of effective teaching procedures</p> <p>For students with cognitive delays</p> <p>Know how to adjust</p> <p>Lack of training</p> <p>Lack of knowledge on the assessment of Skills</p> <p>Lack of progress monitoring for students</p>
Concern (GV = 1)	<p>Fear</p> <p>Is someone watching me</p> <p>Attitudes or “buy-in” from staff</p> <p>Pressures from parents</p>

Note: GV = Group votes for most important category based on raw votes of the group

APPENDIX M

GROUP PARTICIPANT RESPONSES BY CATEGORIES FOR HOW THE
SCHOOL/DISTRICT CAN ASSIST IN PROVIDING SPECIALLY DESIGNED
INSTRUCTION TO STUDENTS WITH DISABILITIES IN THE GENERAL
EDUCATION CLASSROOM

Group Participant Responses by Categories for how the school/district can assist in providing specially designed instruction to students with disabilities in the general education classroom

Special Education Teachers – How can school/district assist in providing specially designed instruction to students with disabilities in the general education classroom

Categories	Responses
Time (GV = 1)	<p>Give me time to plan with general education</p> <p>Give me time to plan with special education</p> <p>Scheduled time for planning with general education and special education</p>
Staff development (GV = 0)	<p>Specific training based on curriculum instead of special education teachers attending general education inservice, we need to attend areas we are weak in</p> <p>Training on how to collaborate</p> <p>More information for regular education teachers</p> <p>Regular education needs to attend special education workshops during the year – staff development</p> <p>Inservice opportunities for general education regarding disabilities</p> <p>During the year, send out an email about what workshops we need to attend, then set it up for next year</p>

Note: GV = Group votes for most important category based on raw votes of the group

Special Education Teachers – How can school/district assist in providing specially designed instruction to students with disabilities in the general education classroom,
continued

Categories	Responses
Administrative Support (GV=0)	Administrative support-visibly “on-board”
More staff (GV = 0)	More teachers
Less paperwork (GV = 0)	Less paperwork More streamlined paperwork “Paras for paperwork” – I want to teach more
Targeted instructional resources (GV = 4)	Bank of resources for instruction and accommodations per grade, subject, and ability levels Materials/supplies to differentiate Instruction Appropriate materials

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – How can school/district assist in providing specially designed instruction to students with disabilities in the general education classroom

Categories	Responses
More material resources (GV = 0)	<p>More resources</p> <p>More money</p> <p>Resources</p>
Time (GV = 1)	<p>More time to collaborate with Special Education teachers</p> <p>More time without interruptions</p>
More personnel support (GV=2)	<p>Support</p> <p>Qualified help for all inclusion students</p> <p>Money</p> <p>Support</p> <p>More support staff</p>

Note: GV = Group votes for most important category based on raw votes of the group

General Education teachers – How can school/district assist in providing specially designed instruction to students with disabilities in the general education classroom,
continued

Categories	Responses
Staff development (GV = 2)	<p>Training</p> <p>Staff development that's not just theory</p> <p>Qualified support</p> <p>Qualified help (aids, co-teachers, etc.)</p> <p>Different staff development</p> <p>Strategies by subject and grade level per specific disability</p> <p>Better meetings</p> <p>More training</p> <p>Staff development opportunities</p>
Preparation for students (GV= 3)	<p>More knowledge</p> <p>Being prepared for coming students</p>

Note: GV = Group votes for most important category based on raw votes of the group

Administrators/Support staff – How can school/district assist in providing specially designed instruction to students with disabilities in the general education classroom

Categories	Responses
Staff development (GV = 2)	<p>Staff development opportunities</p> <p>Specific staff development training for teachers with district staff</p> <p>Provide opportunities for training in research based methods</p> <p>Real life scenarios on DVD</p>
Resource Funds (GV = 1)	<p>Funds for resources</p> <p>More staff</p> <p>Provide additional materials</p> <p>Support staff accessible</p> <p>Materials, supplies, and resources</p> <p>Providing additional support staff</p> <p>More staff</p>

Note: GV = Group votes for most important category based on raw votes of the group

Administrators/Support staff – How can school/district assist in providing specially designed instruction to students with disabilities in the general education classroom,
continued

Categories	Responses
Teacher supports (GV=1)	Expertise for decision-making Support teacher's stance on issues Promote collaborative planning
Student supports (GV = 0)	Acknowledgement when student succeeds Recognize teacher and student success
Working with parents (GV = 0)	Help teacher deal with parents Advice to communicate with parents Provide correct verbage in parent conference

Note: GV = Group votes for most important category based on raw votes of the group

APPENDIX N

MEAN RATINGS, GROUP VOTES, AND GROUP RANKS ON CATEGORIES FOR
PROVIDING SPECIALLY DESIGNED INSTRUCTION TO STUDENTS WITH
DISABILITIES IN THE GENERAL EDUCATION SETTING

Mean Ratings and Group Ranks on Categories providing specially designed instruction to students with disabilities in the general education setting.

Categories	MR	SD	GV	GR
Special Education Teachers				
Instructional Groupings	5.6	1.14	0.00	3.00
Differentiated Instruction	6.80	0.45	3.00	1.00
Collaboration	6.00	0.71	1.00	2.00
Assignment Modifications	5.60	2.19	1.00	2.00
Assessment	5.80	1.10	0.00	3.00
General Education Teachers				
Alternate Materials	5.22	2.17	0.00	3.00
Planning	6.89	0.33	2.00	1.00
Accommodations	6.89	0.33	2.00	1.00
Modifications	7.00	0.00	2.00	1.00
Differentiated Instruction	6.78	0.44	2.00	1.00
Peer Supports	5.44	1.01	0.00	3.00
Environmental Supports	5.77	1.30	1.00	2.00

Note: MR = Mean rating based on individual ratings; SD = Standard deviation; GV = Group votes based on raw votes of the group; GR = Group rank based on member

Mean Ratings and Group Ranks on Categories providing specially designed instruction to students with disabilities in the general education setting, continued

Categories	MR	SD	GV	GR
Administrators				
Collaboration	7.00	0.00	1.00	2.00
Professional Development	6.25	0.50	0.00	3.00
Accommodations	6.50	1.00	3.00	1.00
Instructional Grouping	5.75	0.96	0.00	3.00

Note: MR = Mean rating based on individual ratings; SD = Standard deviation; GV = Group votes based on raw votes of the group; GR = Group rank based on member

APPENDIX O

MEAN RATINGS, GROUP VOTES, AND GROUP RANKS FOR CATEGORIES ON
ROADBLOCKS ENCOUNTERED WHEN PROVIDING SPECIALLY DESIGNED
INSTRUCTION IN THE GENERAL EDUCATION CLASSROOM

Mean Ratings and Group Ranks on Categories on roadblocks encountered when providing specially designed instruction in the general education classroom

Categories	MR	SD	GV	GR
Special Education Teachers				
Time	6.6	.89	3.00	1.00
High Caseload	5.8	0.83	0.00	3.00
Environmental Factors	5.00	0.71	0.00	3.00
Student Ability	5.80	1.79	0.00	3.00
Peer/Student Attitudes	4.40	2.30	0.00	3.00
Lack of Teacher Knowledge	6.00	1.00	1.00	2.00
Student Behavior	5.60	1.14	1.00	2.00
General Education Teachers				
Time	6.44	0.73	4.00	1.00
Personnel Support	6.44	1.01	4.00	1.00
Classroom Management	6.33	0.87	0.00	3.00
Competing Demands	6.44	0.73	0.00	3.00
Peer Perceptions	5.33	1.32	0.00	3.00
Parent Perceptions	5.44	1.51	0.00	3.00

Note: MR = Mean rating based on individual ratings; SD = Standard deviation; GV = Group votes based on raw votes of the group; GR = Group rank based on member

Mean Ratings and Group Ranks on Categories on roadblocks encountered when providing specially designed instruction in the general education classroom, continued

Categories	MR	SD	GV	GR
General Education Teachers				
Materials/Resources	6.44	0.73	0.00	3.00
Scheduling	6.11	1.05	0.00	3.00
Staff Development	6.22	1.09	1.00	2.00
Administrators				
Scheduling	6.25	0.96	1.00	1.00
Unexpected Circumstances	5.75	1.26	1.00	1.00
Role Delineation	6.00	0.82	1.00	1.00
Lack of Resources	5.75	0.96	0.00	2.00
Lack of Professional Development	6.00	0.82	0.00	2.00
Concerns	6.00	0.82	1.00	1.00

Note: MR = Mean rating based on individual ratings; SD = Standard deviation; GV = Group votes based on raw votes of the group; GR = Group rank based on member

APPENDIX P

MEAN RATINGS, GROUP VOTES, AND GROUP RANKS FOR CATEGORIES OF
HOW SCHOOL/DISTRICTS CAN ASSIST IN PROVIDING SPECIALLY DESIGNED
INSTRUCTION TO STUDENTS WITH DISABILITIES IN THE GENERAL
EDUCATION CLASSROOM

Mean Ratings and Group Ranks on Categories on how school/district can assist in providing specially designed instruction to students with disabilities in the general education classroom

Categories	MR	SD	GV	GR
Special Education Teachers				
Time	7.00	0.00	1.00	2.00
Staff Development	6.60	0.89	0.00	3.00
Administrative Support	5.60	1.67	0.00	3.00
Personnel	5.60	0.55	0.00	3.00
Paperwork	6.00	0.71	0.00	3.00
Targeted Instructional Resources	7.00	0.00	4.00	1.00
General Education Teachers				
More Resources/Materials	6.00	0.76	0.00	4.00
Time	6.75	0.46	1.00	3.00
More Personnel Support	6.75	0.46	2.00	2.00
Staff Development	6.75	0.46	2.00	2.00
Preparation for Students	6.75	0.71	3.00	1.00

Note: MR = Mean rating based on individual ratings; SD = Standard deviation; GV = Group votes based on raw votes of the group; GR = Group rank based on member

Mean Ratings and Group Ranks on Categories on how school/district can assist in providing specially designed instruction to students with disabilities in the general education classroom, continued

Categories	MR	SD	GV	GR
Administrators				
Staff Development	7.00	0.00	2.00	1.00
Resource Funds	6.50	0.58	1.00	2.00
Teacher Supports	6.75	0.50	1.00	2.00
Student Supports	6.25	0.96	0.00	3.00
Working with Parents	6.00	0.00	0.00	3.00

Note: MR = Mean rating based on individual ratings; SD = Standard deviation; GV = Group votes based on raw votes of the group; GR = Group rank based on member