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Educators' Perceptions of the Importance and Intensity of Supports in the General Education Classroom for Students with Individualized Education Plans

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EDUCATORS' PERCEPTIONS OF THE IMPORTANCE AND INTENSITY OF

SUPPORTS IN THE GENERAL EDUCATION CLASSROOM FOR

STUDENTS WITH INDIVIDUALIZED EDUCATION PLANS

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195 Pages

Federal law provides that all students are entitled to a free and appropriate education in the least restrictive environment (LRE). In order to educate students with disabilities in the LRE, educators need to provide supports to enhance meaningful engagement and success in the general education curriculum. Utilizing supports to increase engagement and human functioning is not a new concept, but it is one that has received increased attention due to scholarly efforts by the World Health Organization (WHO, 2001) and the American Association on Intellectual and Developmental Disabilities (AAIDD; Luckasson et al., 1992; Schalock et al., 2002; 2010). A major premise of this approach is that everyone needs and benefits from supports in an interdependent society; however, individuals with disabilities require supports that differ quantitatively and qualitatively across their lifespan. For educators, understanding students with disabilities through this lens allows planning teams to address the mismatch between what the student is able to do and what is expected in the school through changing the environment(s) (e.g., Universal Design) and/or adding support(s) (e.g., teaching skills).

Application of a social-ecological model to students with disabilities in schools calls for supports to be provided that increase access to general education settings and activities. Supporting students requires educators to problem solve in order to identify possible supports, extend time and energy arranging supports, and fully implement supports. Yet, little is known about educator perceptions of the importance of arranging supports for students with disabilities to increase their engagement in general education classrooms. Therefore, educator understanding of the social-ecological approach and the relative priority ascribed to different types of supports provided in general education settings were investigated. A survey design with corresponding vignettes was utilized to collect data regarding pre-service and practicing educators' perceptions of importance and intensity of different types of supports. Participants rated all supports identified by the IEP team as necessary based on vignettes of students with disabilities; however, there were statistically significant differences in ratings between educator groups for one vignette. Furthermore, significant differences were found between support types when compared with the other six support types. Ratings of intensity did not appear to impact perceptions of importance.

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A journey of a thousand miles begins with a single step.
                                                        --Lao Tzu

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THE PROBLEM AND ITS BACKGROUND

Statement of the Problem

Federal law affords all students the right to a free and appropriate education

(FAPE) in the least restrictive environment (LRE; U.S. Sec. 1412[a][l] & [a][5]). In

essence, students with disabilities must be educated in the general education environment

alongside their peers without disabilities to the maximum extent appropriate (Sailor &

McCart, 2014). Many students with disabilities need extra support that most other

children do not need in order to be successful in the LRE. The provision for supports is

identified under the "Supplementary Aids and Services" section of the Individualized

Education Plan (IEP; U.S. Department of Education, OSERS, 2010), the planning

document that is required for any student receiving special education services. Although

the work of specific individuals (e.g., paraprofessional) who will assist the child are often

highlighted in this section, supplementary aids and services cover a much broader array

of supports than just individuals. A full array of supports must be considered when

making determinations on behalf of a student.

Utilizing supports to increase engagement and human functioning is not a new

concept. Yet, it is a topic that is receiving increased attention in research and practice

(Walker, DeSpain, Hughes, & Thompson, 2014). This is in large part due to scholarly

efforts by the World Health Organization (WHO, 2001) and the American Association on

Intellectual and Developmental Disabilities (AAIDD; Luckasson et al., 1992, 2002;

Schalock et al., 2010) to understand individuals with disabilities by their unique support

needs rather than their deficits. This is referred to as a social-ecological approach and is

based on the premise that there is a mismatch between personal competencies and

environmental demands which constrains human functioning (Luckasson et al., 1992,

2002; Schalock et al., 2010). A major premise of this approach is that everyone needs

and benefits from supports in an interdependent society; however, individuals with

disabilities require extra supports (i.e., more intense) that differ by type, duration, and

frequency across their lifespan. For educators, understanding students with disabilities

through this lens allows planning teams to address the mismatch between what a student

is able to do and what is expected in the school through two basic approaches: (a)

changing the environment(s) (e.g., Universal Design), and (b) adding support(s) (e.g.,

teaching new skills). Schalock et al. (2010) defined supports as "resources and strategies

that aim to promote the development, education, interests, and personal well-being of a

person and that enhances individual functioning" (p. 10).

The social-ecological approach to understanding disability has been the focus of

major publications produced by the WHO (2001) and AAIDD (Schalock et al., 2010).

Both organizations provided conceptual frameworks to aid in understanding disability

with the focus on empowering individuals through supports that allow for greater

participation in typical environments. Greater inclusion in schools is an outcome

consistent with the legal principles of IDEA. In order to meet the needs of students with

disabilities in the general education setting, proper supports are necessary. Yet, very little

is known about educator perceptions and understandings of the importance of arranging

supports on behalf of students with disabilities in an effort to increase their engagement in general education classrooms. Therefore, it is important to investigate educator understanding of the social-ecological approach and the relative priority that they ascribe to different types of supports provided in general education settings.

Background of the Study

The LRE principle, as cited in the IDEA, requires that students with disabilities be educated alongside their peers without disabilities to the maximum extent possible (U.S. Sec. 1412[a][l] & [a][5]). *The maximum extent possible* or relative restrictiveness of a student's placement is based on individual student's needs, and is reflected in the amount of time a student with an IEP spends in general education settings and elsewhere. Provisions for supplementary aids and services are included in the law to promote access to general education settings. Supports must be identified and provided on an individual basis to assure that students are educated in the general education setting to the maximum extent possible. Over the past few decades, the term "integration presumption" has been coined in reference to judicial and legislative preference for educating students with disabilities alongside their peers without disabilities as much as possible (Keaney, 2012).

Legal Basis for Inclusive Education

Since the inception of IDEA, courts have adopted an "integration presumption" when resolving disputes over the LRE (Colker, 2006; Keaney, 2012). The integration presumption holds school districts accountable for justifying placement of students with disabilities outside general education settings. According to Colker (2006), "Congress enacted the integration presumption in 1974 to hasten structural change in the alternatives available to children with disabilities—to hasten the closing of disability—only

institutions and the creation of other alternatives for children with disabilities" (p. 795).

She further reported that U.S. courts have generally perceived inclusive settings more

favorably than other types of settings for students with IEPs. Despite arguments that

integrating students with IEPs into the general education setting may compromise the

education of students in the general population and may not be the most appropriate for

addressing the unique learning needs of students with disabilities, there remains a clear

legislative and judicial preference for integrating students (Kauffman, 2004). The debate

over integrating students with disabilities in general education settings has historical roots

that continue to resonate in the education system today. It is important to briefly consider

the history and evolution of special education in order to better understand these issues.

Before IDEA. Prior to the enactment of IDEA in 1975, many children with

disabilities were denied access to education and were often relegated to a life of seclusion

and limited opportunities (Gargiulo, 2014; Keaney, 2012; U.S. Department of Education,

OSERS, 2010). Many individuals resided in state institutions and received care for only

basic needs. Oftentimes, even the most inconsequential rehabilitative services and care

were denied, offering "only minimal clothing, food, and shelter" (Department of

Education, 2010, p. 3). Students with disabilities, especially those with severe, multiple

disabilities were regularly excluded from public schools attended by peers without

disabilities, and it is estimated that educational benefits were provided to only one in five

students with disabilities as late as 1970 (U.S. Department of Education, OSERS, 2010).

In addition, families of individuals with disabilities did not have the opportunity to

participate in the educational planning for their children, nor were they provided with

resources to allow them to care and educate their children in the home. As a result, many students were often placed in state institutions because parents were unable to provide necessary care and there were no services available in local communities.

Initial litigation and federal response. Largely due to organized parent efforts during the 1950s and 60s, litigation and legislation were initiated that resulted in more humane practices for students with disabilities and provided a foundation for the systems in place today.

Organized support from parents. Parents have long been seen as advocates and activists for their children. Often, they are the only voice that children have in speaking against injustices and fighting for necessities in society (Gargiulo, 2014). Parents of children with disabilities have a rich history of this with respect to obtaining educational opportunities and defending civil rights for children with disabilities. Determined to gain the right to education, parents formed organizations such as the National Association of Retarded Citizens (now called the Arc), United Cerebral Palsy, and the Association for Children with Learning Disabilities which focused efforts on promoting government support for children with disabilities (Department of Education, 2010; Keaney, 2012).

Litigation. Landmark court cases furthered the educational rights afforded to students with disabilities. *Brown v. Board of Education of Topeka, Kansas* (1954) was a civil rights lawsuit which culminated with a ruling that school segregation by race was unconstitutional because it deprived segregated students of a property right, namely, the right to an equal educational experience (Gargiulo, 2014; Keaney, 2012). This set the precedent for advocates of children with disabilities to argue that segregated education

facilities for students with disabilities denied them their property right and were, therefore, unconstitutional.

     The Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania (1972) and *Mills v. Board of Education, District of Columbia* (1972) furthered the rights afforded to individuals with disabilities through guaranteeing the right to an education to all students with disabilities regardless of severity of impairment or disability. Furthermore, these court cases established that: (a) students had a right to an education with specialized instruction matched to their unique needs, (b) students were to be educated in integrated settings as much as possible, (c) parents had the right to participate in decision making on behalf of their child, (d) states needed to take proactive steps to identify and serve all students with disabilities (child-find), (e) services needed to be provided regardless of availability of finances, and (f) procedural safe guards were required that assured parent and child rights were protected (Gargiulo, 2014; Department of Education, 2010). The aforementioned cases set in motion the enactment of Public Law 94-142 (PL 94-142), now known as IDEA, and have continued to define special education in present society. Additional court cases also established, clarified, and expanded guidelines related to class placement, equal educational opportunities, extended school year services, related services, appropriate education, and least restrictive environment (Scheerenberger, 1983).

     Public law 94-142. On November 29, 1975, in response to litigation and federal reports indicating that less than half of children with disabilities were receiving an appropriate education, Public Law 94-142, the Education for All Handicapped Children Act of 1975 (EAHCA) was signed into law by President Gerald Ford (Keaney, 2012).

This law later became known as the Individuals with Disabilities Education Act (IDEA, 1990, 1997, 2004) and, from the onset, guaranteed children with disabilities the right to a free and appropriate public education. It remains the most important legislation with respect to special education (Gargiulo, 2014). As stated in the original legislation, the purpose of this Act is:

> to assure that all handicapped children have available to them, within the time periods specified in section 612(2) (B), a free appropriate public education which emphasizes special education and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents or guardians are protected, to assist States and localities to provide for the education of all handicapped children, and to assess and assure the effectiveness of efforts to educate handicapped children. [Section 601(c)]

Six main components were incorporated into the legislation, which include: (a) A free appropriate education (FAPE), (b) LRE, (c) IEP, (d) Procedural due process, (e) Nondiscriminatory assessment, and (f) Parental participation. Although IDEA has been reauthorized (1986, 1990, 1997, 2004) to clarify and update key components, these underlying principles have remained steadfast since its inception. Moreover, federal resolutions and court decisions continue to refine definitions of concepts such as "individualized education," "appropriate education," and "LRE" (Gargiulo, 2014).

IDEA & NCLB. The IDEA was reauthorized in the years 1986, 1990, 1997, and 2004. The 1986 reauthorization had a strong emphasis on early intervention and early childhood; while the 1990 reauthorization changed the name of the law to IDEA to reflect person first language, added autism and traumatic brain injury as eligibility categories, added rehabilitation and counseling as related services, and required individualized transition planning for older students preparing to leave school. In regard to LRE, however, the 1997 revisions put even greater emphasis on providing measures intended

to assure that students with disabilities were integrated into the general education setting to the maximum extent possible and required removal to be justified in the student's IEP (U.S. Department of Education, OSERS, 2010; Keaney, 2012).

Five years after the reauthorization of IDEA (1997), the No Child Left Behind Act of 2001 (NCLB; PL 107-110), formerly known as the Elementary and Secondary Education Act, was enacted. NCLB (2001) required schools to "ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education" [Sec. 1001]. This law took effect in 2002 and applied to *all* students, emphasizing that school districts were also responsible for the educational progress of students with disabilities in the general education setting. Further, all students were expected to achieve proficiency in science, math, and reading (NCLB, 2001). This aligned with IDEA (1997; 2004), which similarly required schools to ensure that students with disabilities are making progress in the general education curriculum. Therefore, NCLB required schools to be responsible for the educational progress of students with disabilities in the general education curriculum. This emphasis on accountability for student progress was unprecedented, and the critical issue for schools was no longer assuring children with disabilities had access to educational programs, but rather assuring educational outcomes.

Summary of legal issues. The number of students receiving special education and related services under IDEA has been on the rise since the mid-1970s. During the 1976-77 school year, over 3.6 million students aged 3-21 were receiving services under this act. Over a 30-year time span, this increased to over 6.4 million during the 2010-11 school year (U.S. Department of Education, National Center for Education Statistics, 2013). Furthermore, the percentage of students included in the general education setting

80% of the time or more has increased substantially over time (e.g., in 1989 only 31.7% had this level of integration, whereas in 2011, 61.1% did; U.S. Department of Education, 2013). Therefore, the emphasis placed in public laws and policies on accessing the general education setting has yielded impressive results.

As more students qualify for and receive special education and related services, the number of students with IEPs in the general education setting will continue to rise. Although controversy on the best place to educate students with IEPs has not completely disappeared, data show that more students with IEPs are being included at increasing rates (U.S. Department of Education, OSERS, 2010). It is clear that the field of special education has now moved beyond purely ideological arguments about integration. Today, the focus is on practical solutions regarding how best to effectively include students in the general education setting and to better understand the supports that will increase student success in this environment. The present study will contribute to this discourse.

Studies Investigating the Effectiveness of Inclusive Education

A core goal of any educational program is to help students achieve and maximize their abilities (Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012). As discussed above, the setting in which this outcome is achieved can be a subject of debate. However, students with disabilities are entitled to access to general education settings through federal law and these entitlements are based on the premise that all students are valuable members of society (Causton-Theoharis & Theoharis, 2009). Several benefits of integration for students with and without disabilities have been identified.

Benefits of integration. Educating students with and without disabilities in common integrated school settings has been found to have numerous academic and social benefits (Keaney, 2012). Shinn, Powell-Smith, Good, and Baker (1997) examined the progress of students with disabilities in integrated settings in reading. They found comparable rates of progress between the students with disabilities and their peers without disabilities who experienced some level of reading difficulty. Similarly, Fuchs, Fuchs, and Fernstrom (1993) compared mathematics scores of students with disabilities placed in integrated settings and those of students in a resource setting. Findings revealed that students who were included in the general education setting attained higher levels of achievement, and their progress was comparable to that of their peers without disabilities who also experienced some difficulty with mathematics.

Keaney (2012) also identified that students with disabilities experienced increased academic gains and standardized test scores when they were included in the general education setting. Sailor and Roger (2005) concluded that literature available on integration "overwhelmingly supports integrated instructional approaches over those that are categorically segregated" (p. 504). Interestingly, benefits have also been noted in research on integration for students without disabilities. For instance, more positive peer interactions, improved grades and higher standardized test scores, more tolerant attitudes towards peers with disabilities, and increased emotional intelligence have been identified (Keaney, 2012).

Research on the benefits of integration for students with disabilities can be discussed at length and the possibility of multiple intervening variables makes definitive knowledge claims suspect. Although it is undeniable that many students can benefit from

instruction in inclusive settings, it would be false to suggest that inclusive education is, in and of itself, a panacea for all of the learning difficulties children may experience. The law, however, requires that children have the opportunity to be educated in the LRE and educators have the responsibility to make general education settings as accessible and welcoming as possible. Certainly, many factors can interfere with successfully implementing inclusive education opportunities. Perhaps the most important is educator attitudes towards integration. If educators do not perceive that integration is a viable and important option for educating students with disabilities, then successful implementation will be difficult, if not impossible.

Attitudes toward integration. Successful integration of students with IEPs into general education settings is a multi-faceted issue; however, one of the key factors involved in successful integration is teacher attitudes (Garvar-Pinhas & Schmelkin, 1989; Keaney, 2012; Scruggs & Mastropieri, 1996). Keaney (2012) stated that "the success of any integration effort is crucially dependent on the willingness and capacity of our teachers to implement it" (p. 831). In order for integration to be successful it is important for teachers to be receptive to its underlying ideals and principles (Garvar-Pinhas & Schmelkin, 1989).

Larrivee and Cook (1979) identified attitudinal factors that are important for successful integration of students with disabilities in the general education setting. These factors included: (a) grade level taught, (b) perception of success teaching students with disabilities, (c) level of support received from administrators, and (d) availability of support services. Three variables not found to influence teacher attitude were "classroom size, school size, and type of school community" (Larrivee & Cook, 1979, p. 320). Of

the factors that significantly impacted teacher attitudes, teachers' perceptions of their success in teaching students with disabilities had the strongest relationship.

Scruggs and Mastropieri (1996) reported findings from a research synthesis on teacher perceptions of mainstreaming and inclusion between the years 1958 and 1995. They found that teachers attributed personal support for inclusion according to the intensity of the integration and severity of the student. This also aligned with their willingness to teach students with IEPs. Essentially, the lower the responsibility for inclusion and less severe the disability, the more willing teachers were to support integration. When looking at perceptions of benefit to students with disabilities, Scruggs and Mastropieri reported that special education teachers were more likely to agree that integration was beneficial for students with disabilities. They also found that most educators agreed that some degree of integration was beneficial, but few considered the general education setting to be the best environment. A high number of teachers across studies identified that students with disabilities would create problems in the general education setting that would not typically be present. When asked about time for planning for integration, teachers reported that additional time is essential but not generally available. Lastly, teachers perceived there to be a lack of resources to support integration of students with disabilities; this included both material and personnel support.

Summary

The IDEA (2004) affords students with disabilities the right to a FAPE in the LRE. This means that students with disabilities must be educated alongside their peers without disabilities to the maximum extent appropriate. In an effort to increase access to

general education settings, provisions for supports are included in the "Supplementary

Aids and Services" section of the IEP. Although this section often highlights individuals

who will assist the student, a much broader array of supports must be considered when

making decisions about supports on behalf of students with disabilities (Schalock et al.,

2010; Thompson et al., 2009). A social-ecological approach to understanding disability

indicates that everyone in an interdependent society needs and benefits from supports, yet

individuals with disabilities require supports that differ by intensity, duration, and type.

The social-ecological approach thus provides a framework for planning teams to address

the mismatch between the person and the environment through identifying and arranging

supports.

Conceptual Framework

A social-ecological conceptualization of disability focuses attention on the

mismatch between people's personal competencies and the performance expectations

associated within culturally valued settings and activities. Disability is evident when

there is a significant and chronic mismatch. This conceptualization of disability is in

contrast to more traditional conceptualizations (i.e., the medical model) where disability

is understood as a defect within a person, a trait that most others in the population do not

have (Schalock et al., 2010; Thompson et al., 2009). The key implication of a "medical

conceptualization" of disability is to cure or partially cure a person through medical or

behavioral intervention. If the disability is eradicated or lessened, then that person will

become more independent (i.e., less dependent on others).

In contrast, the key implication of a "social-ecological conceptualization" of

disability is to provide a person with *extraordinary supports* (i.e., supports that others in

the general population do not need) that eliminate or reduce the mismatch between the person and environmental demands. If provided the proper supports, a person can more fully participate in culturally valued activities and settings (and thus, it is assumed, have greater opportunities to experience an enhanced quality of life). In terms of children with disabilities and school settings, a social-ecological understanding of disability calls for educators to provide supports to students that address the mismatch between their competencies and the demands of different school settings and activities (Thompson et al., 2009).

An important commonality between the medical and social ecological conceptualizations is that both are grounded on the premise that people with disabilities can be differentiated from the general population based on limitations in personal competence. An implication of both models is for efforts to be undertaken to reduce limitations in personal competence. To state it more positively, both models call for interventions that will result in increased personal competence (whether through instructional or medical interventions). Whereas the medical conceptualization calls for *reducing limitations in order to increase the capacity of people to function more independently* (i.e., do more things for themselves), the social-ecological conceptualization calls for *reducing limitations in order to reduce the person-environment mismatch*. Although this distinction may seem inconsequential at first glance, it is quite important because the desired outcomes from any intervention are qualitatively different. The goal of acquiring a greater array of skills (the medical model outcome) is not equivalent to the goal of increasing meaningful participation in an array of settings and activities (the social-ecological outcome; Thompson & DeSpain, in press).

The rationale for "reducing personal limitations" is to reduce the person-environment mismatch according to a social-ecological understanding of disability, and as a result, any efforts that are targeted to "reducing limitations" can be considered to be supports. As mentioned earlier, supports function to eliminate and/or reduce the mismatch between the person and environmental demands. Therefore, in relation to field of education, *instruction* is one type of support according to a social-ecological conceptualization of disability (Table 1).

Of course, increasing personal competency addresses only one part of the person-environment mismatch; the other aspect is the environment (Table 1). Supports bridge the gap between limitations in personal functioning and environmental demands, and anything that increases the capacity of the environment to fully include a person (i.e., mitigates the demands of settings or activities) is as much of a support as something that increases the competency of the person. Environmental supports can be people, technologies, modifications to activities, or physical modifications to the environment. Often environmental supports are used in combination.

For example, a menu at a local restaurant may create a mismatch for many individuals with disabilities. If, however, the restaurant had a menu that utilized pictures of the most popular menu items along with a limited text description and Braille, the menu would be more accessible to individuals with disabilities. To further this example, if the restaurant created a digital menu through a computer application, individuals could sort through menu options by pictures and submit their order without needing the skills necessary to read and communicate verbally. Visiting this establishment would be more accessible to the wider public through embedding environmental supports.

Table 1

Types of Supports Provided to Children to Access the General Education Curriculum

GENERAL EDUCATION SUPPORTS (Individualized Supports Provided to Students with IEPs that Promote Access to the General Education Classroom, a FAPE, and education in the LRE)			
ENVIRONMENTAL SUPPORTS Supports to Change the Environment—the purpose is to increase the capacity of the general education classroom to include the student		INSTRUCTIONAL SUPPORTS Supports to Change the Child—the purpose is to increase the capacity of the child to be successful in the general education classroom	
Additional Resources Supports The purpose is to add something to the classroom that enables the student to be more successful	Performance Supports The purpose is to establish different expectations for performance to better allow students to demonstrate their learning	Teacher Initiated Supports The purpose is to increase the capacity of the student through teacher initiated instruction	Student Initiated Supports The purpose is to increase the capacity of the student through self-directed instruction
People supports— Provide other people to assist the student (this could include paid staff or volunteers, adults or peers)	Modifications— Modify performance expectations so the student is not doing the same level of work as other students	Content Instructional Supports— Strategies targeted to content (e.g., academic) skill development	Content Instructional Supports— Strategies targeted to content (e.g., academic) skill development
Assistive technology (AT) supports—AT is technology that enables a student to participate in settings and activities in ways that s/he otherwise could not	Accommodations— Modify performance expectations so that the student can submit assignments/participate in alternative ways	Social-Behavioral Instructional Supports— Strategies targeted to social-behavioral skill development	Social-Behavioral Instructional Supports— Strategies targeted to social-behavioral skill development
Adaptations— Create or Adapt classroom and learning materials to make them accessible to the student			

Table 1 shows one way to classify seven different types of classroom-based supports (i.e., resources and strategies) that promote access to the general education curriculum. There are two major types of supports: (a) *environmental supports* that increase the capacity of the classroom to include the student, and (b) *instructional supports* that increase the capacity of the student to fully participate in classroom settings and activities. Subtypes of supports are within both environmental and instructional supports. The five subtypes under "environmental supports" are associated with IDEA terminology (Wright & Wright, 2006), and the four subtypes under "instructional supports" are associated with a body of special education literature that distinguishes "academic" from "behavioral" interventions [e.g., Response to Intervention (RtI) and and School Wide Positive Behavior Intervention Support (SWPBIS); (Gargiulo, 2014)].

Environmental supports are further classified by *Additional Resource Supports* and *Performance Supports,* because the intent of the supports under these two categories is different. Instructional supports are classified by *Teacher Initiated Supports* and *Student Directed Supports* because the intent of the supports under these categories differs with respect to the individual responsible for directing the instruction. It is important to note that supports can be Teacher-initiated or Student-initiated. Teacher-initiated in this context means that the teacher is responsible for implementing and monitoring the effectiveness of the support. On the other hand, Student-initiated supports means that the student is responsible for implementing and monitoring the effectiveness of the support. Although many supports may initially be teacher-initiated, the goal should be for the supports to become student-initiated as proficiency is achieved.

The intent of *environment supports* is to make a classroom more accessible to a student, and, thereby, lessen the person-environment mismatch. Environmental supports change over time (based on changes within a student and/or changes in classroom expectations for student performance). Environmental supports can be further divided into (a) additional resources added to a classroom (people, technology, or adapted materials), or (b) modification of classroom expectations for participation (modifications and accommodations).

The intent of *instructional supports* is for a student to become more competent, and, thereby, lessen the person-environment mismatch. Providing instructional support may result in a student needing less intense support (but still needing some extraordinary support) to participate, or it could lead to a student not requiring any supports over and above what children from the general population require. Another word for instructional support is teaching, and there are multiple approaches to teaching. A useful distinction is to separate instruction that is delivered primarily to promote the acquisition of skills and knowledge in relation to curricular content areas from instruction that is delivered primarily to promote the acquisition of social-behavioral skills (including the reduction of problem behavior). No pretense is made, however, that these two types of instruction are mutually exclusive.

Problem Statement

A social-ecological model to understanding disability has been presented by the WHO (2001) and the AAIDD (Schalock et al., 2010). Both organizations provided conceptual frameworks that focus on the use of supports to promote greater participation in typical environments. Application of a social-ecological model to students with

disabilities in schools calls for supports to be provided that increase access to general

education settings and activities. Supporting students requires educators to problem-

solve in order to identify possible supports, extend time and energy arranging supports,

and fully implement the supports that are arranged. Yet, little is known about educator

perceptions in regards to implementing supports on behalf of students with disabilities in

order to increase their engagement in general education classrooms. Therefore, it is

important to investigate educator attitudes towards support provisions, particularly in

relation to the priority that they ascribe to different types of supports provided in general

education classrooms.

Purpose Statement

The purpose of this study was to investigate the relative priority that teachers

ascribe to different types of supports provided in general education classrooms to

students with IEPs in kindergarten through twelfth grade. Additionally, the extent to

which the intensity of the support influences the priority educators place on providing

different types of supports was investigated.

Research Questions

Through completion of this study, the following questions were answered:

1. Do pre-service and practicing educators differ in regard to the importance they
   place on providing different types of classroom-based supports to students
   with IEPs in the general education setting?

2. Do pre-service and practicing educators perceive any of the seven potential
   support types to be more important than others when assuring students with
   IEPs have access to a FAPE in the LRE?

3. Are pre-service and practicing educators' attitudes toward the seven types of support related to their perceptions of intensity of support?

This investigation was important because it provides researchers, administrators, educators, and those working in teacher education programs a more in-depth understanding of the importance practicing and pre-service teachers place on different types of support provided to students with disabilities in the general education setting. Furthermore, findings have implications for professional development and pre-service teacher training. This investigation begins to clarify whether practicing and pre-service teachers differ in regards to the importance they place on different types of support, and if there are categories of supports that teachers are more or less inclined to view as priorities for implementation. Results of this study offer insight in regard to educators' attitudes towards providing students with supports so that future researchers can investigate why these differences, if any, exist.

Methods

A survey design was employed to investigate the relative priority that teachers ascribe to different types of supports provided in the general education classrooms to students with IEPs in kindergarten through grade 12 (Creswell, 2008). This design allowed the merging of quantitative cross-sectional survey methods and qualitative methods to provide a comprehensive analysis of the problem under investigation. Vogt (2007) recommended combining methods such as survey design and interview. A face-to-face survey was utilized to collect quantitative and qualitative data. Participants were asked to read four vignettes. Each vignette included descriptions of seven different types of support that are intended to promote access to the general education curriculum.

Participants were asked to rate each type of support on a 4-point scale indicating the relative importance of the support and the intensity of effort required to provide the support. Participants were also asked to provide open-ended responses explaining their decisions on ratings.

Assumptions

It was hypothesized that when pre-service and practicing educators were given descriptions of children with IEPs and seven potential supports to meet each child's needs, there would be no difference in the mean ratings of pre-service and practicing educators in regard to relative importance or priority given to the supports. Furthermore, given the same descriptions, pre-service and practicing educators would rate each type of support as equally important. Lastly, it was hypothesized that there would be no relationship between ratings of intensity of support and importance of support by either pre-service teachers or practicing educators.

Limitations of the Study

Due to the nature of the study, the information gathered through the surveys was self-reported perceptions rather than actual observations of classrooms and educators. It was assumed that participants would be honest in their answers; however, self-reports of perceptions are not the same as actions. Although people may report a particular stance, the real test of attitudes can only be seen by the actions people take. Convenience sampling rather than pure random sampling was another limitation of the study. This limited the ability to generalize findings to the population of pre-service and practicing educators. Data collected came from a relatively small sample size, thus limiting the generalizability of the findings. For instance, educator attitudes from the current sample

may not be representative of the population of teachers as a whole, as the educators who were recruited were enrolled in graduate education courses.

There may have been a number of threats to the study, including volunteer effects, history effects, maturation effects, and communication among participants. Threats from volunteer effects may have been present because participants were asked to give consent in order to participate, and by doing so differ from those who did not give consent. To reduce threats of communication among participants, pre-service and practicing teachers working alongside each other participated as a group through face-to-face interactions with the primary investigator. History effect threats should have had little impact on the study because data were completed over a relatively short period of time. However, as pre-service teachers gain experience and knowledge from the beginning of the semester to the end, this could have imposed some threat.

Significance of the Study

Special education services operating under a social-ecological understanding of disability focus on providing supports that bridge the gap between student competencies and environmental demands. Proper supports increase access and participation across multiple general education settings and activities. Educator attitudes toward providing different types of support to meet the diverse needs of students must be understood if a full array of supports is to be offered.

Definition of Terms

For the purposes of this study, the following terms are defined:

Accommodation: "Allows a student to complete the same assignment or test as other students, but with a change in the timing, formatting, setting, scheduling, response

and/or presentation. This accommodation does not alter in any significant way what the test or assignment measures" (U.S. Department of Education, OSEP, 2001, p. 1).

Adapted equipment: Any device that is specifically designed to assist individuals with disabilities in performing activities of daily living with greater independence (e.g., a special seat or a cut-out cup for drinking; Thomas, 1993).

Adapted materials: Materials that are changed so that they can be presented in another form (i.e., books on tape, large print or highlighted notes; NICHCY, 2010).

Assistive technology: Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted, or the replacement of such device (as cited in Mittler, 2007).

Consultation: "A focused, problem-solving process in which one individual offers expertise and assistance to another" (Gargiulo, 2014, p. 21).

Modification: "An adjustment to an assignment or a test that changes the standard or what the test or assignment is supposed to measure" (U.S. Department of Education, OSEP, 2001, p. 1).

Paraprofessionals: Paraprofessionals are employees who provide instructional support, including those who:

(1) provide one-on-one tutoring if such tutoring is scheduled at a time when a student would not otherwise receive instruction from a teacher;

(2) assist with classroom management, such as organizing instructional and other materials;

(3) provide instructional assistance in a computer laboratory;

(4) conduct parental involvement activities;

(5) provide support in a library or media center;

(6) act as a translator;

(7) provide instructional support services under the direct supervision of a

teacher. (U.S. Sec. 6319[g][2])

Peer tutoring: An array of tutoring arrangements that allows for heterogeneous groupings of students working together to assist each other with the acquisition of knowledge (Kunsch, Jitendra, & Sood, 2007).

Social-ecological conceptualization of disability: Disability is the mismatch between expectations of the environment and personal competency. Although all people experience some degree of mismatch, people with disabilities experience a degree of mismatch that requires extraordinary supports (i.e., supports that others do not need) to fully participate in normative environments (Schalock et al., 2010; Thompson et al., 2009).

Special education: "Specially designed instruction" to meet the unique needs of individuals identified as having a disability under the IDEA eligibility categories (U.S. Sec. 300.39).

Specially designed instruction: Adapting, as appropriate to the needs of an eligible child under this part, the content, methodology, or delivery of instruction—
(a) To address the unique needs of the child that result from the child's disability; and
(b) To ensure access of the child to the general curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all

children. (U.S. Sec. 300.39[b][3])

Supplementary aids and services: Aids, services, and other supports that are provided in regular education classes, other education-related settings, and in extra-curricular and nonacademic settings, to enable children with disabilities to be educated with children without disabilities to the maximum extent appropriate. (U.S. Sec. 300.42)

Supports: "Resources and strategies that aim to promote the development, education, interests, and personal well-being of a person and that enhance individual functioning" (Schalock et al., 2010, p. 224).

Support Needs: "A psychological construct referring to the pattern and intensity of supports necessary for a person to participate in activities linked with normative human functioning" (Schalock et al., 2010, p. 224).

Chapter Summary

Students with disabilities are afforded the right to a FAPE in the LRE as provided through the IDEA (U.S. Sec. 1412[a][l] & [a][5]; 2006). However, in order to make this education meaningful, supports are a necessary component of the IEP. The provision of supports is identified under the "Supplementary Aids and Services" section of the IEP and highlights the supports necessary for successful integration. Utilizing supports as a method to bridge the gap between human functioning and demands of the environment is not a new concept, but the emphasis placed on supports by the WHO (2001) and AAIDD (2010) has generated considerable interest in identifying, arranging, and implementing supports in recent years. Proponents of a social-ecological approach to understanding disability posit that everyone needs and benefits from supports, but individuals with disabilities require quantitatively and qualitatively different supports than do people from

the general population. Understanding students with disabilities through a social-ecological lens allows planning teams to address the mismatch between competency and environmental demands through changing the environment and/or providing instructional supports that will enhance the competency of the student.

Much remains unknown about the perceptions of educators regarding the implementation of supports on behalf of students with disabilities in general education settings. Although research has suggested a number of factors that affect educator attitudes towards integration of students with disabilities in general education settings, very little is known about educator attitudes toward different types of supports. Therefore, it is important to investigate the perceptions of both pre-service and practicing educators' in regard to the relative priority that they ascribe to different types of supports provided in general education settings. Additionally, it is critical to determine if perceptions are influenced by the intensity (i.e., amount of time, effort, and resources) of supports needed.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter is presented in four parts. *Rights of Individuals with Disabilities* summarizes the evolution of the field of special education with an emphasis on educating students with disabilities in the least restrictive environment (LRE). *The Social-Ecological Conceptualization of Disability and Measurement of Support Needs* presents two frameworks underlying the concept of understanding students by their support needs within the context of the LRE. *Research on Inclusive Education* explores the efficacy of inclusive education and the role of educator attitudes. *Contemporary Approaches in Education* summarizes current inclusive practices aimed at expanding the capacity of schools to meet the needs of all students in inclusive settings.

Rights of Individuals with Disabilities

Education, viewed as a privilege early on in U.S. history, led to exclusion and segregation of children with disabilities. Families of individuals with disabilities often found even the most basic services (e.g., medical care and education) difficult to access (Kirk, Gallagher, & Coleman, 2015). During the 19th century, special education services began to be offered at public schools, but these programs were few and far between, segregated, and limited to providing services to students with sensory impairments or who were deemed "slow learners" (Hardman, Clifford, & Winston, 2014). Those with more significant disabilities were excluded from public education altogether.

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Public school special education expanded to more students during the first half of the 20th century but did not see rapid expansion until the end of the Second World War. Following World War II, many states expanded their special education programs for students with disabilities by providing financial support and involvement. Some states, however, chose not to respond in this manner, causing organized parent groups and other advocates to question the discrepancy in services between states (Kirk et al., 2015). During the 1950s, spurred by advocacy movements and new knowledge on educating students with disabilities, researchers began investigating the efficacy of segregated programs and explored new models of education that would allow students with disabilities to be educated alongside their peers without disabilities (Hardman, Clifford, & Winston, 2014). The civil rights movement that was occurring in the broader society during the late 1950s and early 1960s stimulated advocacy on issues of discrimination and access for people with disabilities.

During the Kennedy administration of the early 1960s, the role of the federal government in education expanded, including the provision of financial support to institutions of higher education for the purposes of training special education teachers. Furthermore, new governmental agencies (e.g., Bureau of Education for the Handicapped and Office of Education) were created along with new projects to support the needs of students with disabilities served in public school settings (Hardman et al., 2014). At both the state and federal levels legislation was passed that further defined educational opportunities and services for students with disabilities in public school settings throughout the 1960s and 70s. Support and access to public education continued to gain momentum, culminating in the Education of All Handicapped Children Act of 1975

(EAHCA) that made free and appropriate education to children with disabilities federal law.

History of Special Education Law in the USA

      Pre-1975. Prior to 1975, numerous judicious decisions aided in defining issues that have impacted special education as it is today. During the years 1927 to 1975, 175 federal laws were enacted to address the needs of individuals with disabilities. Of this number, between March of 1970 and 1975, 61 of these laws were passed (Gargiulo, 2014). The aim of this section is not to provide a full review of litigation and legislation, but to focus on landmark decisions that led to the enactment of the EAHCA (1975).

      Brown vs. Board of Education of Topeka, Kansas **(1954).** During the 1950s, many schools in the U.S. were racially segregated. At this time, these schools were not in violation of the U.S. constitution because of the *Plessy vs. Ferguson* case of 1896. The rulings in this case held that separate facilities were constitutional as long as the facilities were equal. In 1954, Oliver Brown filed a class action lawsuit against the Board of Education of Topeka, Kansas, on the grounds that racially segregated schools were unconstitutional because the schools were inherently unequal. This was considered a violation of the Equal Protection Clause of the 14th Amendment. The U.S. Supreme Court found that racially separate schools were, in fact, unequal and ruled that it was unconstitutional to discriminate based on arbitrary reasons, such as skin color (Gargiulo, 2014). This case brought about legislation that ended racial segregation in schools and set a precedent for arguing against segregating students with disabilities.

      Diana vs. State Board of Education **(1970).** Following *Brown vs. Board of Education*, over a decade passed before legislative action related to special education was

brought before the Supreme Court (Talley & Schrag, 1999). *Diana vs. State Board of Education* of 1970 was a landmark case arguing that students who are given IQ tests must be assessed in their primary language. Diana was a Hispanic student attending school in central California. Based on assessment results conducted by a school psychologist, she was identified as having a mild intellectual disability and was placed in a self-contained classroom for students with similar disabilities. In 1970, a class action lawsuit was brought against the state of California challenging that IQ tests used to identify students for special education placement were unconstitutional due to cultural bias. The plaintiffs argued that students were not able to adequately complete the assessment because of language and cultural differences, resulting in low and invalid measures of their intelligence. The U.S. Supreme Court held that students cannot be placed in special education based on linguistically and culturally biased tests (Gargiulo, 2014). Assessments must be substantiated through a complete evaluation that considers developmental history, academic achievement, and cultural background; if an IQ test is given it must be administered in the student's native language.

　　　Pennsylvania Association for Retarded Children (PARC) vs. Commonwealth of Pennsylvania **(1971).** Shortly thereafter, the Pennsylvania Association for Retarded Children (PARC), an advocacy group for children with intellectual disability, contested a state law that allowed schools to deny access to education to children that did not function at a mental age of 5 years at the time of enrollment in first grade (Skrtic, Harris, & Shriner, 2005). The lawsuit was filed in an attempt to ensure that students were not denied access to education because of their mental functioning and perceived limits on their potential (Talley & Schrag, 1999). A consent agreement resulted which held that

students with intellectual disability had the right to a free and appropriate public education (FAPE) in the most integrated setting possible regardless of disability or degree of impairment. This case also expanded the definition of education, included parents in the decision-making process, prompted efforts to locate and serve young students with disabilities through "child-find" services, and mandated schools to serve preschool-age students with disabilities if the district serves typically developing preschool children (Gargiulo, 2014).

Mills vs. Board of Education of District of Columbia **(1972).** The third landmark lawsuit from the early 1970s was a class action suit brought against the Board of Education of the District of Columbia because they failed to enroll and often expelled students on the basis of their disability. This was partially related to a national advocacy campaign aimed at promoting better services for students with disabilities (Gargiulo, 2014; Tally & Schrag, 1999). Citing the exclusionary actions as the result of financial constraints, the U.S. District Court ruled that it was unconstitutional to exclude students from school due to a lack of fiscal resources. In addition, the court mandated that schools could not exclude students based on their level of functioning. The case also established the right to procedural due process and parental notification of evaluation and/or change in placement. This case was particularly important because it included all students with disabilities, and set the legal precedent that students had the right to a meaningful education matched to their needs and procedural protections (Gargiulo, 2014).

Public Law 94-142 and Amendments

In 1975, The Education for All Handicapped Children Act (P.L. 94-142) was enacted, bringing together pieces of legislation from states as well as federal litigation

into one comprehensive national law (Hardman et al., 2014). This law established

provisions for five major tenants: (a) FAPE; (b) individualized education program (IEP);

(c) procedural safeguards; (d) multidisciplinary assessment; and (e) access to the LRE. It

was amended in 1986 (P.L. 99-457) to extend a FAPE to preschool age students and

established early intervention programs for students up to their third birthday (Skrtic,

Harris, & Shriner, 2005). In 1990, Congress changed the name of the Education for All

Handicapped Children Act to the Individuals with Disabilities Education Act (IDEA; P.L.

101-476) to promote the use of people-first language (Gargiulo, 2014; Hardman et al.,

2014).

FAPE. According to the "zero reject" philosophy underlining IDEA and based

on the 14th Amendment of the U.S. Constitution, children with disabilities are entitled to

a FAPE regardless of the severity of their disability. This provision mandates schools to

provide special education and related services based on each student's unique needs and

must be offered at no additional cost (Gargiulo, 2014). In 1982, the U.S. Supreme Court

offered further interpretation of FAPE based on the *Board of Education of the Hendrick

Hudson School District vs. Rowley* litigation (Hardman et al., 2014). In this

interpretation, the Supreme Court differentiated between "ideal education" and

"educational benefit" and identified that "an appropriate" education consisted of specially

designed services based on individual need and providing educational benefit to students

with disabilities. In essence, special education services provided by a school district

needed to be appropriate but not optimal or ideal (Hardman et al., 2014).

Nondiscriminatory and multidisciplinary assessment. Historically, students

were often placed in special education programs based on poor and inaccurate assessment

data. As a result, a high percentage of students from disadvantaged or culturally diverse

backgrounds were found in these programs. Based on proceedings from the *Diana vs.*

State Board of Education (1970), before a student can be provided with special education

and related services, a multidisciplinary team must evaluate the student in any areas of

concern using an unbiased assessment approach (Gargiulo, 2014). Assessments must be

given in the student's native language when possible and must be a valid measurement

for the purposes which they are intended. In addition, IDEA mandates that several

different types of assessments provided by qualified professionals must be used in

determining placement (Hardman et al., 2014).

Parental safeguards and involvement. IDEA mandates that parents have the

right to participate and be meaningfully involved in decisions that impact their children

(Gargiulo, 2014). This provision affords parents not only the opportunity to participate in

the educational decision-making process, but also protects the rights of students and

families from potentially adverse decisions. As presented by Hardman and colleagues

(2014), IDEA established parental rights to: (a) give written consent prior to assessment

and eligibility determination and for educational placement; (b) request an independent

assessment outside of the school and at the public's expense when there is disagreement

in results or recommendations; (c) participate on the IEP team; (d) obtain and review

educational records; and (e) request due process.

IEP. The IEP is a document that outlines a student's educational plan for

delivering a FAPE to eligible students. The plan is developed in conjunction with parents

and education professionals working with the student and must address: (a) present levels

of academic achievement and functional performance; (b) measurable annual goals and

objectives; (c) special education, as well as supplementary aids and services, needed; (d)

percentage of time in the general education setting; (e) initiation date and duration of

services; and (f) evaluation procedures (Gargiulo, 2014; Hardman et al., 2014).   The IEP

is important to ensuring that services and supports are delivered to students consistently

and evaluated at least annually.

> **LRE.** As mandated in IDEA and integral to this study,
>
> To the maximum extent appropriate, children with disabilities, including children
> in public or private institutions or other care facilities, are educated with children
> who are not disabled and that special classes, separate schooling, or other removal
> of children with disabilities from the regular education environment occurs only
> when the nature or severity of the disability is such that education in regular
> classes with the use of supplementary aids and services cannot be achieved
> satisfactorily. (U.S. Sec. 612[a][5][A])

In an effort to educate all students in the LRE, schools are required to offer a variety of

placement options (Figure 1). The placements fall along a continuum (cascade) and

decisions must then be made based on each student's individual needs. Some have raised

concern, however, that by offering a continuum of placement, schools are legitimizing

the segregation of students with disabilities (Hardman et al., 2014; Nisbet, 2004; Taylor,

1988). The LRE provision will be discussed in greater detail in a later section.

Student in general classroom without additional assistance

Student educated in general classroom with special educator providing assistance to classroom teacher

Least restrictive

Student educated in general classroom for majority of school day but receives specialized instruction through pullout services

Student educated in special education class for majority of school day but attends some classes in general classroom consistent with abilities

Student educated exclusively in special education class in general education school

Student educated in separate school

Most restrictive

Student educated in homebound/ hospital program

Figure 1. Educational Placement Cascade for Students with Disabilities. Adapted from E. Deno, 1970; M. L. Hardman, C. J. Drew, & M. W. Egan, 2014.

Policy Related to LRE Provisions

The LRE principle provides support for a continuum of placement options for students with disabilities. Yet, because the language in the law is imprecise (e.g., "maximum extent appropriate", "achieve satisfactorily"), there have been conflicting judicial rulings as well as inconsistent interpretation of the LRE in state systems of education across the country. Ryndak et al. (2014) contended that language in the statute, along with inconsistent judicious rulings and interpretations, has led to the continued segregation of students with disabilities from their same age peers. Furthermore, Kurth, Morningstar, and Kozleski (2014) identified that students with disabilities have historically been instructed in segregated settings on the assumption that "some students cannot learn in or benefit from participation in a regular classroom" (p. 227).

Despite inconsistencies in interpretation of the LRE provisions, McLeskey, Landers, Williamson, and Hoppey (2012) reported on data from a 17-year time span (1990-2007) indicating that students with high-incidence disabilities are being educated in the general education setting at an increasing rate. Similarly, Williamson, McLeskey, and Rentz (2006) examined data indicating that students with ID have spent an increasing amount of time in the general education setting over the 10-year time span (early 1990's-2000's) investigated; however, they also noted a plateau in the final 3 years of data analyzed. More recently, Ryndak and colleagues indicated that there has been little movement of students with more significant disabilities to less segregated settings (Ryndak et al., 2014). Although trends indicate an increase in less segregated placements for students with high-incidence disabilities, access to similar settings for students with low-incidence disabilities are not occurring at consistent rates (Kurth, et al., 2014).

According to the most recent data from the U.S. Department of Education, the

National Center for Education Statistics (2012) reported 95% of students with IEPs aged

6-21 attended regular schools. In addition, 3% of students were served in separate

schools for students with disabilities, and 1% were served in separate residential

facilities, homebound, hospital settings, or correctional facilities. Data on the placement

of students with disabilities in regular schools are collected under Part B of IDEA (2004)

and are presented according to percentage of time in the general education setting (e.g.,

less than 40%, 40%-79%, 80% or more). The majority of students with high-incidence

disabilities spend 80% or more of their day in the regular education setting, while the

majority students with low-incidence disabilities spend less than 40% of their time in the

same setting. Students with multiple disabilities are placed in separate schools for

students with disabilities more frequently than any category other than students with

deaf-blindness. They also have the highest placement rate for separate residential

facilities behind students with sensory disabilities. Table 2 summarizes data on

percentages of students served under the three categories of placement time in the regular

classroom.

As shown in Table 2, many students with disabilities spend 80% or more of their

day in the regular education classroom with decreasingly lower percentages across the

other settings (40%-79%, less than 40%). This distribution falls along a typical cascade

of placements, where the majority of students are placed in lesser restrictive settings and

lower percentages of students are placed in more restrictive settings (Table 2).

Table 2

Percent Time in General Education Class by Type of Disability

Cascade Appearance		Type of Disability	<40%	40%-79%	80% +
▽	Typical Cascade	Developmental Delay	16.1	19.8	62.4
		Hearing Impairment	14.1	16.7	56.1
		Other Health Imprmnt	10.6	23.0	62.4
		Specific Learning Disabilities	7.3	25.6	65.1
		Speech/Language Imprmnt	4.7	5.5	86.5
		Traumatic Brain Injury	20.9	23.6	47.4
		Visual Impairment	11.8	13.4	63.7
⊐	Concave Cascade	Autism	34.1	18.1	38.5
		Emotional Disturbance	21.3	18.3	42.1
		Orthopedic Impairment	22.9	16.2	53.3
		Deaf-Blindness	33.4	11.9	23.0
△	Inverted Cascade	Intellectual Disability	47.7	26.8	17.9
		Multiple Disabilities	45.9	15.9	13.0

Note. U.S. Department of Education, National Center for Education Statistics (2013). *Digest of Education Statistics, 2012* (NCES 2014-015).

For students with ID and multiple disabilities, however, the highest percentage of students are educated in the most restrictive settings and the lowest percentage are educated in the least restrictive setting. This distribution falls along an inverted cascade, where the majority of students are placed in the most segregated setting, with decreasing percentages educated in less restrictive settings. This is further confounded by the fact that the percentage of students with IEPs identified with ID has decreased from the school years 1976-77 through 2011-12 (U.S. Department of Education, 2013), while the percentage of students identified with specific learning disabilities (SLD) and autism increased. Categorical drift may have occurred in the sense that children who may have been diagnosed with ID in the early days of IDEA are now diagnosed with autism or

SLD. Regardless of the reason for disability population shifts, it is evident that students with ID, as a group, are experiencing less integration in general education settings compared to most students with IEPs.

A criticism of the cascade model has been that restrictiveness of placement gets coupled and confused with intensity of supports and services. It is assumed that those with more intense needs can only have their needs met in more restrictive settings (Taylor, 1988). This creates a situation where students have to prove themselves ready to be educated in a less restrictive setting. In essence, they must earn their way into the general education classroom. Despite the nebulous language in LRE, the intent of the law was not to set up a readiness model where students get placed in more restrictive settings based on severity of disability.

Summary

Although this review only briefly touches on landmark litigation and legislation, there has been remarkable progress over the past 60 years in providing students with disabilities opportunities for a meaningful education. The LRE provision in federal special education law supports a continuum of placement options. Although some argue that the continuum provides necessary options to meet diverse needs, others are concerned that the continuum has established special education as a location, rather than a set of individually tailored services designed to meet each student's educational needs (Gargiulo, 2014). Another concern is that the continuum has prompted a reciprocal relationship between intensity of supports and services needed and the restrictiveness of the setting (Ryndak et al., 2014). A third concern is that the LRE has unintentionally added a readiness component, where students must demonstrate a level of competency,

before moving to less restrictive placements. Students are expected to improve academically, functionally, and/or behaviorally before they are deemed appropriate to be placed in a less restrictive setting instead of less restrictive placement being modified to accommodate the needs of diverse learners (Taylor, 1988).

Although students with high-incidence disabilities have begun to see greater inclusion in the general classroom, students with more significant disabilities have not seen similar rates of integration (U.S. Department of Education, 2013). Professionals have had difficulty determining how best to include students with ID and other low-incidence disabilities and, therefore, they continue to be placed in more segregated school settings. According to Ryndak and colleagues (2014) "one persistent barrier to involvement in the general curriculum is the skepticism of teachers and other educational team members about the appropriateness of general education contexts for instruction" (p. 39). If the field of special education is to move forward in terms of including students in the general education classroom, educators need to begin understanding disability through a social-ecological lens. This will encourage the identification and implementation of supports that better allow for meaningful engagement in general education settings, rather than a preparedness issue.

The Social-Ecological Conceptualization of Disability and

Measurement of Support Needs

Conceptual models and frameworks play an important role in the manner in which disability conditions are defined and understood. Over the next few pages, a discussion of the historical context and what is meant by a social-ecological conceptualization of disability will be addressed. Furthermore, two conceptual models of disability will be

presented: conceptual model of disability as presented by the World Health Organization (*International classification of functioning, disability, and health (ICF)*, 2001), and conceptual model of intellectual disability (*Intellectual Disability: Definition, Classification, and Systems of Support*, Schalock et al., 2010). After presentation of the historical context and current conceptual models of disability, a discussion of the application of a social-ecological approach to students with disabilities in K-12 settings will be presented.

Historical Context

Interest in a social-ecological conceptualization of disability has been most prominent in the field of intellectual disability (ID). Historically, individuals with ID were referred to as "mentally deficient," "mentally handicapped," "feeble-minded," and "mentally retarded" (Schalock, 2011). In 2010, the American Association on Intellectual and Developmental Disabilities (AAIDD) updated the term used to describe individuals with mental retardation (MR) to intellectual disability (ID) (Schalock et al., 2010). The Association posited that the former construct of MR viewed disability as a defect within the person, where the new construct of ID viewed the disability in terms of person-environment fit, focusing on the whole person and his or her state of functioning.

Aside from changes in terminology, different approaches to understanding individuals with ID have evolved over time (Schalock et al., 2010). The *social approach* defined ID in terms of the individual's failure to adapt to his or her social environments and had an emphasis on social behavior. The *clinical approach*, consistent with a traditional medical model, considered disability to be the result of impairment in the level of functioning or absence of something that was present in typically developing

individuals. The *intellectual approach* came about as measures of intelligence gained

popularity and an IQ score determined disability status. These earlier approaches to

understanding individuals with ID laid the foundation for the present definition, which

has continued to include intellectual functioning, adaptive behavior, and age of onset as a

basis for defining ID (Schalock et al., 2010). These approaches focus on defining ID

through characteristics that can be measured or observed, and tend not to consider the

person as a whole.

The social-ecological approach to understanding ID places an emphasis on

classifying the individual based on the interactions characteristic of the environment and

the individual (Buntinx & Schalock, 2010). Although understanding individuals based

on deficits in intelligence provides a basic understanding of people's functioning, it is

very limiting. If that focus is shifted to viewing people as a whole, human functioning

can then be understood based on the roles played in society and how those roles impact

one's health, participation, and context (Schalock, 2011).

Models of Human Functioning and Disability

Two models of human functioning and disability reflecting this emphasis on

understanding ID in terms of person-environment fit that have been widely discussed in

research and literature are the ICF and AAIDD models. The ICF (World Health

Organization (WHO), 2001) was published as a way for professionals to communicate

with clarity across disciplines with respect to classifying disabilities. The AAIDD model

provided a framework for understanding ID as a mismatch between individual

competency and environmental demands. Although both models were designed for

different purposes, they both provide frameworks for understanding individuals

holistically rather than focusing on degree of impairment.

ICF model of disability. The *International Classification of Impairments, Disabilities, and Handicaps* (ICIDH) was initially published by the WHO in the 1980s as a trial version, to be used as a statistical, research, clinical, educational, and social policy tool (WHO, 2001). The early version introduced three levels of experience for human functioning: body structures and functions (functioning involving the body or part of the body), activities and abilities (the person as a whole), and the person with in the social context (participation) (Buntinx & Schalock, 2010; WHO, 2001). This presented a framework for understanding disability through impairments, activity limitations, and participation. Although the early version attempted to provide a method to understand disability more holistically, it continued to place a greater emphasis on the impairment than the interaction between the person and environment.

In 2001, the WHO presented a revised edition—*International Classification of Functioning, Disability, and Health (ICF)*—which classified disability through a multidimensional framework that added a person-environment component. This allowed for classification to be based on "components of health" versus "consequences of disease" (1980 version). However, the ICF is a classification system that ensures that all dimensions of disability and human functioning are evaluated, not a diagnostic tool (Buntinx & Schalock, 2010). It is a bridge between the medical and biopsychosocial model that negotiates the complexity of disability and stresses that context (person and environment) plays a role in disability and human functioning. Furthermore, it provides a language for professionals across disciplines to communicate with clarity (WHO, 2001).

Qualifiers are used to indicate the presence and level of severity in human functioning, allowing for classifications of disability across the three levels of functioning (ICF, 2001). Body function and structure qualifiers allow for classification of impairment and degree of impact, while activity and participation qualifiers provide information on ability to perform in current environments and complete activities. Qualifiers allow judgments to be made based on impairment, performance, and capacity and provide a method for determining needs (i.e., capacity to complete an activity is greater than the current performance measured in the environment).

The underlying principles of the ICF model as a classification system include universality (applicable to all people), parity (no differentiation based on cause), neutrality (neutral language to encompass positive and negative aspects), and environmental factors (interaction with environment) (WHO, 2001). These principles support the assumption that diagnosis does not predict need, nor does it predict human functioning or outcome. Disability and functioning are viewed as outcomes of interaction between health conditions (diseases, disorders, and injuries) and contextual factors (external environmental factors, internal personal factors; see Figure 2).

The ICF provides a conceptual framework that encompasses impairment, activity, and participation while also considering the person-environment interaction. It provides a tool for professionals across disciplines to engage in consistent communication about human functioning and disability. In sum, the ICF framework (WHO, 2001) provides a conceptual framework based on the person-environment paradigm that allows for defining and measuring functioning and impairment for all persons.
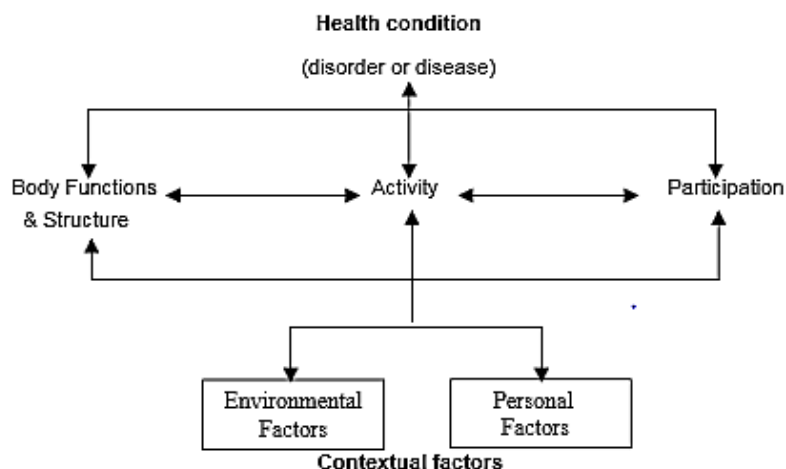
Figure 2. Interactions between the Components of ICF. From "The International Classification of Functioning, Disability and Health," 2001, World Health Organization, p. 18. Copyright 2001 by the WHO. Reprinted with permission.

The AAIDD model of intellectual disability. The AAIDD proposed a model of human functioning in 1992 (Luckasson et al., 1992), with revisions in 2002 (Luckasson et al., 2002) and 2010 (Schalock et al., 2010). Improvements between the 1992 and 2002 AAIDD manuals included: (a) greater emphasis on person-centered planning; (b) use of an ecological approach that utilizes supports to enhance interactions between person and environment; (c) emphasis on quality of life; and (d) expansion of support strategies (Thompson et al., 2009).

The 2010 revision changed the terminology from "mental retardation" to "intellectual disability" and the change in focus from "impairment of the individual" to "enhancing human functioning." Major components of the framework include five dimensions (intellectual abilities, adaptive behavior, health, participation, and context) and the role that supports play in enhancing the functioning of individuals with ID within these five dimensions is highlighted (Figure 3). Supports, defined as "resources and

strategies that aim to promote the development, education, interests, and personal well-being of a person and that enhance individual functioning" (Luckasson et al., 2002, p. 151), are framed within a contextual, ecological, and egalitarian basis. They are provided in the context of the environment and facilitate congruence between the person and environment in a way that influences human functioning and supports the basis of human equality.

Five key assumptions are central to the application of the definition presented in the 2002 definition, and reiterated in the 2010 manual. These assumptions include:

1. Considerations about present functioning must be made within the community context typical of same age peers and culture.
2. Differences in personal factors, culture, and linguistic diversity must be considered in order to conduct valid assessments.
3. Limitations and strengths often coexist within an individual.
4. Profiles of needed support are developed alongside descriptions of limitations.
5. Improvements in human functioning for individuals with ID generally improve with appropriate supports and over a sustained period of time. (Luckasson et al., 2002; Schalock et al., 2010)

The AAIDD model provides a multidimensional framework for understanding ID and human functioning and it is in contrast to the "consequences" (or defects) of the individual that have historically dominated understanding of ID. The framework in Figure 3 underpins the complexities and characteristics of individuals with ID, and acknowledges how the five dimensions interact with human functioning. Furthermore, it reflects the social-ecological perspective and illustrates how the provision of supports addresses the mismatch between a person and his/her environment.
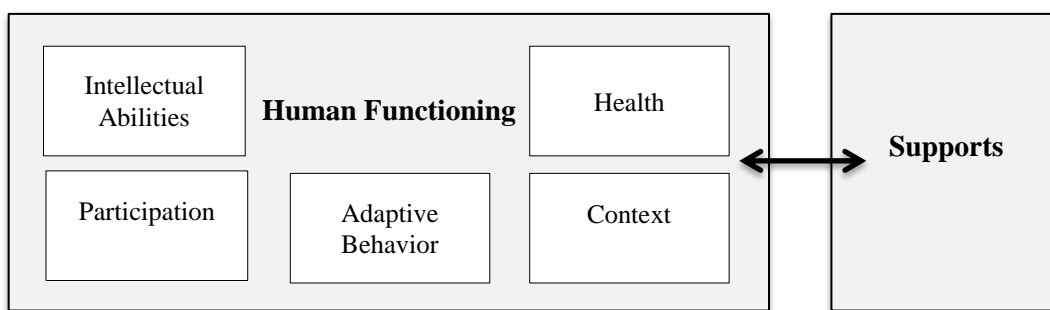
Figure 3. AAIDD Conceptual Framework for Human Functioning. Adapted from "Intellectual disability: Definition, classification, and systems of supports (11th ed.)," Schalock et al., 2010, American Association on Intellectual and Developmental Disabilities.

The ICF and AAIDD models are consistent with one another to the extent that both focus on human functioning and emphasize a framework that considers intellectual functioning (body structures and functions), adaptive behavior (activities and participation), and environmental factors (context and personal factors) in conceptualizing disability (Table 3). They both provide the foundation that ID is characterized by limitations in intellectual functioning and adaptive behavior and focus on bridging the gap between capacity and performance through the use of supports. However, the AAIDD model was originally created as a construct for understanding individuals with ID and acknowledged supports as a separate and main component of the framework; the ICF framework included supports within the context of environmental factors. Additionally, the ICF model provides classification codes and a method for professional communication about all people across disciplines.

Table 3

Alignment Between AAIDD & ICF Models

Dimensions of Human Functioning (AAIDD, 2010)	ICF Model (WHO, 2001)
Dimension 1: Intellectual Abilities Individuals differ in the way they comprehend, organize, clarify, learn, engage and adapt to their environments.	Body functions and Structures
Dimension 2: Adaptive Behavior Conceptual, social, and practical skills learned and used in everyday life, that often coexists with strengths and limitations, and is documented within the community context.	Activities
Dimension 3: Health Physical, mental, and social well-being that may lead to enhanced quality of life or significantly limits activity.	Personal factors; Body functions and Structures
Dimension 4: Participation Performance in activities in home living, work, education, leisure, spiritual, and cultural activities.	Participation
Dimension 5: Context Environmental and personal factors that are encompassed by the way people live their lives (ecological perspective).	Contextual

Note. Adapted from Schalock et al. (2010); WHO (2001)

Measures of Support Needs

The "paradigm shift" in the field of ID/DD from a deficit model to a social-ecological understanding of disability has created a need for reliable and valid measures of support needs (Thompson, Schalock, Agosta, Teninty, & Fortune, 2014). Support needs was once described as a "slippery construct" due to the lack of clarity for defining and measuring it. Early measures of support needs were based on judgments (Biklin 1988; Schalock et al., 2010), and assessments of adaptive behavior and skill

competencies (Schalock et al., 2010). When supports were implemented, they focused primarily on "personal care and maintenance" (Thompson et al., 2002) of the individual. With increased awareness and research, defining and measuring support needs has greatly evolved over the past two decades.

Supports are defined as "resources and strategies that aim to promote the development, education, interests, and personal well-being of a person and that enhance individual functioning" (Luckasson et al., 2002, p. 151). Although everyone uses and benefits from supports, individuals with ID need more supports than others and this varies by type, intensity, and frequency (Thompson et al., 2009). *Support needs* refer to the "pattern and intensity of supports necessary for a person to participate in activities linked to normative human functioning" (Schalock et al., 2010, p. 109). Support needs originate from a mismatch between the capacity of the individual and the demands of the environment. Functioning is enhanced when the mismatch is reduced. In the following section, a method for addressing the person-environment mismatch amongst school age children with disabilities is presented.

Social-Ecological Conceptualization and the

Least Restrictive Environment

Historically, educating and supporting students with ID in the K-12 settings most often focused on addressing deficits and providing remediation within a self-contained classroom. The Regular Education Initiative (REI; Reynolds, Wang, & Walberg, 1987) and the Full Inclusion movement (Stainback & Stainback, 1984) energized efforts to include students with disabilities in general education settings in the 1980s and 90s. This momentum has continued to the current day.

Although educator views on inclusive education vary, membership in the general education classroom is no longer a novelty and students with disabilities are no longer perceived as visitors whose home classroom is elsewhere. In this regard, the roles of general educators changed, and today's general educators are expected to be willing to make accommodations and adaptations to the environment and materials to ensure the highest level of participation for all students. The emphasis in inclusive education has clearly shifted away from fixing deficits of the students to addressing the gap between the students' competencies and environmental demands (Thompson & Viriyangkura, 2013). The aim of this section is to describe the premise of a social-ecological understanding of ID as applied to school-age students with disabilities.

Social-Ecological Understanding of Disability in Children

Historically, when supports were implemented on behalf of a student, they most often focused on "personal care and maintenance" (Thompson, 2002). In the past 15 years, a paradigm shift away from a deficits model of thinking to a social-ecological model of understanding students with disabilities has begun to gain greater acceptance. According to Butterworth (2002) this paradigm shift "suggests that individuals should first, without restriction, define the lifestyles they prefer and the environments they want to access. Their goals and priorities then become the basis for the intensity and types of support they need to succeed in these environments" (p. 85). Schalock (2011) supported this notion indicating that a supports paradigm "focuses on the provision of a person-centered system of supports that enhances human functioning" (p. 234).

A social-ecological approach is based on the premise that there is a mismatch between personal competency and environmental demands placed on individuals that

constrains human functioning. It also supports the idea that everyone needs and benefits from supports in an interdependent society. However, children with disabilities will require supports that are different in the type, intensity, and frequency of supports needed across their lifespan. Understanding students with disabilities through this lens allows planning teams to address the mismatch between what the student is able to do and what is expected by changing the environment(s) (e.g., Universal Design) and/or adding support(s) (e.g., teaching skills). Schalock et al. (2010) defined supports as "resources and strategies that aim to promote the development, education, interests, and personal well-being of a person and that enhances individual functioning" (p. 10) that are provided in the context of the environment.

As discussed above, this social-ecological approach is consistent with conceptual models of disability presented by the WHO (2001) and the AAIDD (Schalock et al., 2010). Both organizations provided conceptual frameworks to aid in understanding disability with the focus on enabling and empowering students through supports that allow for greater participation in typical environments. For children, that means general education classrooms and schools.

Measuring Support Needs

Advances in understanding any psychological construct are assessed with advances in measuring the construct. This can be seen in the progression in understanding of intelligence and adaptive behavior through the development of IQ and adaptive behavior (AB) scales (Thompson & Viriyangkura, 2013). The ability to understand the construct of support needs will continue to progress as methods for measuring support needs continue to be developed and refined. A number of scales

purporting to measure the support needs of individuals with disabilities are currently

available; however, research and application of such scales are still in their infancy

compared to IQ and AB scales.

      Support needs scales. Several assessment tools have been created over the past

15 years to address the need for reliable and valid measures of support needs. These

assessments include the *North Carolina–Support Needs Assessment Profile* (*NC-SNAP;*

Hennike, Myers, Realon, & Thompson, 2006), the *Instrument for Classification and*

Assessment of Support Needs (*I–CAN;* Riches, Parmenter, Llewellyn, Hindmarsh, &

Chan, 2009a; 2009b), the *Service Needs Assessment Profile* (Guscia, Harries, Kirby, &

Nettelbeck, 2005), the *Supports Intensity Scale–Adult Version* (*SIS–A*; Thompson et al.,

2004), and the *Supports Intensity Scale–Children's Version* (*SIS–C*; Thompson et al.,

2012). The SIS-A has the most extensive research base and the SIS–C is the only support

needs assessment instrument developed for use with children under the age of 16.

      Supports intensity scale—children's version. The *SIS–A* was developed to

measure the support needs of adults and the *SIS–C* was developed to measure the support

needs of children with ID aged 5-16 (Thompson et al., 2014a). Thompson et al. (2014a)

identified that the "SIS-C would be helpful to state disability service systems to inform

policy decisions such as resources allocation, as well as school systems for educational

planning" (p. 141). The *SIS–C* consists of seven subscales that represent the

environments and activities in which most children are engaged: Home Living Activities,

Community and Neighborhood Activities, School Participation Activities, School

Learning Activities, Health and Safety Activities, Social Activities, and Advocacy

Activities. An additional section, *Exceptional Medical and Behavioral Support Needs*,

are included because medical and behavioral conditions may impact support needs

regardless of support needed across other domains (Thompson et al., 2012).

The SIS–C is administered through a semi-structured interview process with two

respondents who are familiar with the student being assessed (e.g., parent, teacher,

paraprofessional, student being assessed). To qualify as an interviewer, the individual

must have a bachelor's degree in a human service field (e.g., education, social work,

psychology), experience working with children with disabilities, and have been trained in

administration and scoring of the scale. The assessment process focuses on the students'

support needs across environments and activities in order to fully participate in those

settings.

Implications of a Social-Ecological Approach in K-12 Settings

The primary goal of special education is to provide a FAPE to every child that

qualifies for services through instruction tailored to meet the unique needs of students

(PL 108-446; IDEA, 2004). Moreover, special education services are designed to address

each student's individual needs that are a result of the disability. A disability diagnosis is

key to gaining services and supports. A deficit-based understanding of disability, similar

to a medical model of understanding, focuses on prevention, remediation, and teaching

skills. Although teaching new skills is a necessary and worthwhile endeavor, there is an

underlying assumption that something is wrong with the child that needs to be fixed

before participation in prerequisite environments can occur (Thompson, Wehmeyer, &

Hughes, 2010). In contrast, the social-ecological approach allows professionals to

acknowledge the child as a complex individual with support needs, based on limitations

as well as on strengths. Special education services operating under a social-ecological

understanding of disability focus on providing supports that bridge the gap between personal competency and environmental demands as a way to increase access and participation across multiple activities and settings (Figure 4). The focus of education planning and instruction subtly shifts as a result of the social-ecological approach. Planning focused on addressing the mismatch between the students' competencies and environmental demands is different contextually than planning focused on eliminating a deficit area.

Support planning and the IEP. There is a legal basis for investing time and resources in planning supports at school and documenting support planning on the IEP. Under IDEA (2004), statements of supplementary aids and services, program modifications or supports for school personnel, and individual accommodations are to be specified on every student's IEP, in addition to annual goals and present levels of academic achievement and functional performance. Therefore, the IEP team must identify the type of supports needed to enhance functioning and participation across school environments. It is important to consider all types of supports including "people (e.g., teachers, paraprofessionals, peers), instructional accommodations and adaptations (e.g., peer note taker, adapted assignments), technology (e.g., using word/picture processing software program for written work), and instructional strategies (e.g., self-monitoring and self-management techniques)" (Thompson et al., 2010, p. 176). When considering supplementary supports and services, it is helpful to distinguish two broad categories of supports that are needed to bridge the gap between personal competency and environmental demands: (a) supports intended to increase student competency, and (b) supports intended to change the environment (i.e., increase the capacity of the

environment so that a more diverse population can function successfully in it).

Increasing student competency. One way to support students in the general education setting is to implement supports that increase personal competency. This can be done through providing instructional supports to increase student skills related to academic content instruction or social-behavioral instruction. There is a rich professional literature on interventions and instructional strategies to teach the students with disabilities specific skills or knowledge that allow them to more easily access the general education curriculum (e.g., peer tutoring, Self-Determined Learning Model of Instruction).

Changing the environment. The mismatch can also be addressed through environmental supports. With these types of support, something is being changed in the environment that enables a student to be more successful. For example, paraprofessionals, peer tutors, other teachers, assistive technology, and adaptations can be added to the environment to enhance students' ability to engage in the setting and/or activities. In addition, different expectations for performance can be established to better allow students to demonstrate their knowledge. Examples of performance supports can include modifications (i.e., adjustments that change the standard or measurement) and accommodations (i.e., changes in timing, formatting, setting, scheduling, response, and/presentation without changing the product; U.S. Department of Education, 2001). Regardless of the type of support, educators who embrace a social-ecological understanding of disability look for ways to bridge the gap between what students with disabilities are presently able to do and what is being expected of them in general education settings and activities (Figure 4).

- Personal competence
- Mismatch
- Demands of the environment
- Health
- Intelligence
- Adaptive Beh
- Prob. Beh.
- Bridge the mismatch through supports
- Settings
- Activities
- Social-behavioral instruction
- Content instruction
- Adaptations
- People
- AT
- Modifications
- Accommodations
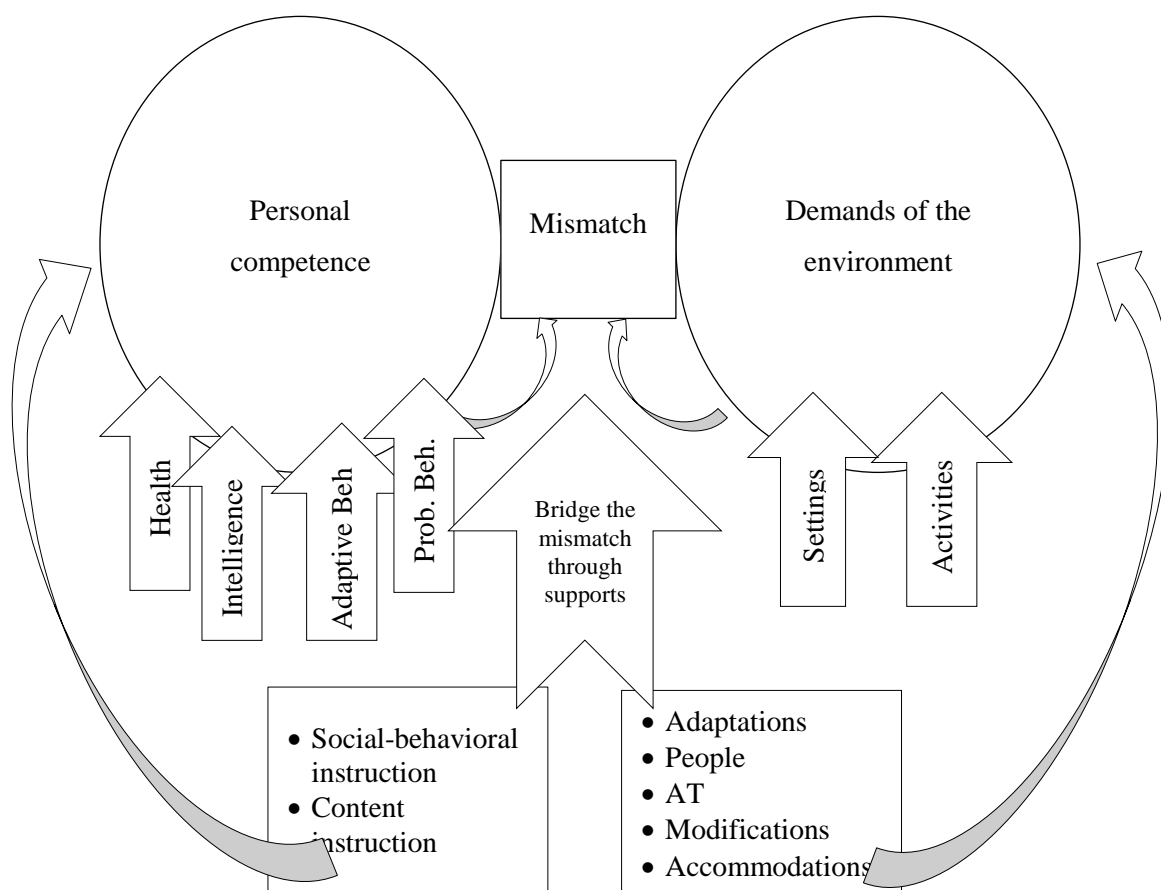
Figure 4. Interaction between Personal Competencies, Environmental Demands, and Supports

Summary

A growing body of interest on applying the social-ecological understanding of disability (supports paradigm) to school-age children, along with existing research on teacher attitudes towards inclusion of students with disabilities, has provided a foundation for exploring educator attitudes towards different types of supports provided to students with IEPs. If students with IEPS are to receive a FAPE in the LRE, individualized supports need to be provided which are identified from the comprehensive array of available supports. In line with this approach, if educators are to put personalized

supports in place for students with IEPs, it is important for them to perceive supports aligned with a student's needs as valuable and necessary. Therefore, it is imperative to understand the extent to which educators perceive different types of supports as useful.

Research on Inclusive Education

The push for inclusive education and instructing students with disabilities in the general education setting has been emphasized in research and literature on integration since the 1970s (Banerji & Dailey, 1995; Dymond, Renzaglia, Gilson, & Slagor, 2007; Larrivee & Cook 1979). Studies have cited the impact that integration has on students with and without disabilities. General themes among these studies indicate that (a) academic and social progress of students with disabilities educated in integrated settings is variable (Banerji & Daily, 1995; Dessemontet, Bless, & Morin, 2012; Vaughn, Elbaum, & Schumm, 1996), (b) the academic and social development of same-age peers is not adversely affected by the presence of students with disabilities (Dessemontet & Bless, 2013; Idol, 2006), and (c) teachers' attitudes towards integration are a multi-faceted issue (Dymond, Renzaglia, Gilson, & Slagor, 2007; Salend & Duhaney, 1999).

Studies Investigating the Effectiveness of Integration

Current legislation has a clear preference for including students with disabilities in general education classrooms (IDEA, 2004; NCLB, 2001). From an ethical standpoint, if students are expected to leave school and become active participants in their representative communities, then they need to be included in activities associated with normative human functioning during their school years (Sailor & McCart, 2014). Beyond these arguments, there is empirical research supporting the benefits of inclusion for students with and without disabilities (Dessemontet & Bless, 2013).

Outcomes of integration for students with disabilities. Over the years there have been numerous studies that have investigated the impact of inclusive education in regard to social and academic gains for students with disabilities. Collectively, there has been variability in findings. For instance, Banerji and Dailey (1995) compared students with SLD in inclusive settings to their typically developing counterparts and found that most students achieved a year's growth in reading. Although not statistically significant, students with SLD also made gains in spelling, writing, attitude, motivation, and self-concept. Vaughn et al. (1996) found significant increases in number of books read for students with SLD as compared to their same age peers, in addition to increases in spelling and writing skills. Yet, when looking at attitudes, self-concept, and motivation, no statistically significant improvements between the beginning and end of the year were noted for students with SLD. They were also found to be the least well-liked and had significantly lower self-concept scores than same age peers. Similarly, Dessemontet and colleagues (2012) found that differences between students in included and segregated settings did not differ significantly in academic functioning; however, follow-up findings suggested that included students made significant gains beyond their peers in segregated settings.

Although findings have been variable, many of the authors indicated that use of empirically-based interventions, professional development, and support from other professionals will enhance the outcomes and success of inclusion programs (Banerji & Dailey 1995; Salend & Duhaney, 1999; Dessemontet et al., 2012). Inclusion is not a panacea. Simply educating students in the general education classroom is not enough; however, with competent teachers who carefully plan and use evidence-based practices,

many students can be successful. Students deserve the chance to be educated with their same age peers and removing them without providing them adequate opportunity to succeed is ethically and legally indefensible.

Students without disabilities. Although investigating the impact of inclusive practices on the progress of students with disabilities included in general education settings is important, it is equally important to determine the effects of those practices on students without disabilities. Several authors have reported findings that academic progress is not impacted by the inclusion of students with disabilities (Dessemontet & Bless, 2013; Idol, 2006; Salend & Duhaney, 1999). Moreover, inclusive practices have led to increased acceptance and understanding of students with disabilities and greater awareness of the needs of others (Salend & Duhaney, 1999). Dessemontet and Bless (2013) posited that "together with those of previous studies, findings of this study indicate that the inclusion of children with ID in primary regular education classrooms with support is not detrimental to the academic progress of students without disabilities" (p. 29).

The key finding is that inclusive education does not appear to have a negative impact on students without disabilities. Although varied, the findings suggest that inclusion is not detrimental to academic and social progress and may lead to desirable social outcomes. Furthermore, students' tolerance and acceptance of students with disabilities in included settings was positive (Dessemontet & Bless, 2013; Idol, 2006). In order to more fully understand the impact of inclusion on typically developing students, further investigation is needed. Specifically, determining how supports, models of collaboration, and other variables affect typically developing students in the included

classroom would be useful.

      Variables affecting access to the general education curriculum. Research on the issues impacting access of students with disabilities to the general education setting have led authors to identify a number of variables, including classroom ecology, setting, teacher, characteristics, peers, and supports. The presence of supports and activities associated with IEP goals and off-grade level standards were strong predictors of increased student response and decreased competing behaviors (Lee et al, 2009; Soukup et al., 2007). Moreover, authors have cited that special education teachers were primarily responsible for implementing supports and off-grade level instructions, crediting the need for increased collaboration and training for general education teachers (Lee et al., 2010). Furthermore, limited presence of supports across investigations prompted authors to suggest a need to consider a broader range of supports in the general education setting (Soukup et al., 2007). Although the variables discussed above have been found to impact access to the general education setting, relationships between students and teachers and attitudes towards integration have similarly impacted the inclusion of students with disabilities.

Attitudes Toward Integration

      Over the past several decades, many studies have focused on the attitudes of others towards individuals with disabilities (Siperstein, Parker, Bardon, & Widaman, 2007). From integration into communities after deinstitutionalization to more recent mandates to educate students with disabilities alongside their same-age peers, attitudes have been a topic of investigation in an attempt to shed light on the public's view and whether attitudes have improved over time (Berryman, 1989). Early thinking led

proponents of inclusion to believe that exposure to students with disabilities in school would eventually improve the attitudes and treatment of these individuals across settings; thus increasing acceptance of individuals with disabilities (Siperstein et al., 2007).

Attitudes of educators. Perhaps the most critical variable impacting the success of inclusion is educator attitude (Salend & Duhaney, 1999). Inclusive classrooms may not be the best for every child, but many more can be successful than data indicates are currently accessing it. For inclusion to work, educators must first be open to it. Blatant discriminatory attitudes are easy to spot, and there should be zero tolerance as well as consequences in cases where educators are not following the law. Although educators may embrace the human value of inclusion, they may not have the knowledge or willingness to do what is required. Understanding attitudes toward supports may be more helpful than understanding global attitudes toward inclusion in terms of improving teacher disposition in regard to including children with IEPs. The aim of the following section is to explore the attitudes of teachers toward the inclusion of students with disabilities.

Practicing educators. Perceptions of success in inclusive settings are correlated with teacher attitudes and availability of support services and administrative support (Larrivee & Cook, 1979). Although some have contended that availability of support determines inclusion success, Hammond and Ingalls (2003) noted that special and general education teachers do not often collaborate with respect to providing services to students with disabilities. Yet, Dymond and colleagues found that although special education teachers focus on collaboration and co-teaching, general education teachers indicated that students with disabilities needed access to other teachers and paraprofessionals (2007).

When looking at adaptations and accommodations, Hammond and Ingalls (2003) indicated that only some educators are willing to make the necessary adaptations and accommodations needed to include students with disabilities in the general classroom. In addition, special educators are primarily responsible for focusing and making these adaptations (Dymond et al., 2007).

With respect to general attitudes toward inclusion, Garvar-Pinhas and Schmelkin (1989) contended that special education teachers and classroom teachers held the least positive attitudes toward inclusion, while administrators had the most positive attitudes. They attributed this to administrators' views that inclusion does not impact academic progress. Idol (2006), however, found instructional staff and administrators to not be in favor of including students in the general education setting without additional support. On the other hand, Rheams and Bain (2005) found significant differences in attitudes between educators working in inclusive settings and those working in self-contained classrooms, citing that those in self-contained classrooms held more positive views. Cook, Cameron, and Tankersley (2007) found that teachers rated students with disabilities higher on levels of concern, indifference, and rejection than their same age peers, but lower on attachment. Similarly, Hwang and Evans indicated that general educators felt students with disabilities were better served in special education settings, even though the general classroom offered positive role models.

The studies reviewed point to the varied attitudes that practicing educators hold toward inclusion. Most often, findings from prior research indicated that attitudes are related to student characteristics, level of success, administrator and other instructional support, financial resources, professional development and training, and time for

planning and collaboration (Cook, Cameron, & Tankersley, 2007; Hammond & Ingalls, 2003; Hwang & Evans, 2011; Salend & Duhaney, 1999). In order to implement successful inclusion programs, access to support, training, and meaningful collaboration is critical (Male, 2011).

As a method to increasing success and acceptance of inclusion, researchers have also investigated pre-service educators' attitudes towards inclusion. Some studies have compared pre-service and practicing educators' attitudes toward inclusion. Gokdere (2012) found significant differences between pre-service and practicing teachers' attitudes. Pre-service teachers held more positive views than practicing teachers. In addition, those who indicated greater knowledge of special education also held more positive attitudes toward students with disabilities.

Pre-service educators. Although research on pre-service teacher attitudes is variable, many hold more positive views of inclusion as a result of contemporary coursework and inclusive practicum experiences. Mintz (2007) found that many pre-service educators hold positive views toward inclusion and needs of students with disabilities. Additionally, Jung (2007) identified that students held more positive views of inclusion early on in their education program than during their student teaching experience. Berry (2010) indicated that pre-service teachers were worried about their ability to successfully include students in the general classroom, but held positive attitudes toward doing so. Yet, early career teachers struggled with the idea of inclusion and either maintained a positive attitude or were resistant toward it.

In addition, having contact with individuals with disabilities had a positive impact on being an education major (Barr & Bracchitta, 2008). Furthermore, education majors

held fewer misconceptions of individuals with disabilities and lower levels of hopelessness than those in other postsecondary programs. "Contact with individuals with behavioral disabilities was significantly related to students' being an education major, and this was the strongest predictor of positive attitudes toward individuals with disabilities in general" (Barr & Bracchitta, 2008, p. 237). Similarly, students who participated in an inclusive setting during student teaching experienced positive shifts in their attitudes toward students with disabilities and reduced concern toward individuals with disabilities (Golmic & Hansen, 2012). Swain and colleagues found similar results with inclusion in a special education course and 20-hour practicum experience, noting that the experience increased knowledge of teaching students with a range of needs and that activities used in the general classroom are appropriate for all students (2012). However, Crowson and Brandes (2013) noted that students enrolled only in an introductory special education course held disability-specific opposition and unwillingness to teach individuals with disabilities at the onset of the course.

Overall, results indicated that pre-service teachers have more positive attitudes early on in their respective programs (Mintz, 2007) or after included experiences in schools (Barr & Bracchitta, 2008; Golmic & Hansen, 2012; Jung, 2007). Jung (2007) specifically found that first-year teachers had more positive attitudes, while student teachers lacked confidence in their teaching abilities. Authors identified a need to focus on topics related to inclusion and equitable treatment of students with disabilities in teacher education programs in order to promote successful inclusion and positive attitudes (Berry, 2010; Crowson & Brandes, 2012; Jung, 2007).

Teacher Preparation and Professional Development

Grskovic and Trzcinka (2011) surveyed secondary special education teachers to identify the skills, dispositions, and knowledge they felt general education teachers needed in order to effectively teach students with disabilities in the general education setting. An 80-item survey was created using the Individualized Curriculum Standards put out by the Council for Exceptional Children (CEC). According to Grskovic and Trzcinka (2011), the document describes "the minimum knowledge, skills, and dispositions needed by all new special educators to safely and effectively teach students with mild/moderate disabilities" (p. 99). The survey was then delivered electronically to 3,060 members of CEC who checked "Secondary Level" on their membership forms. The survey was completed by 510 participants, who indicated their perception of importance for each of the 80-item standards. Findings showed that 12 instructional items, 6 class-room management items, 4 collaboration items, 4 professional and ethical practice items, and 5 other standards were rated as "essential." Only 31 items on the 80-item scale were rated as "essential" to educating students with disabilities in the general education setting.

Among the highest rated standards, with over 50% of the participants rating the items as essential, were: (a) instructional strategies and materials individualized for students with disabilities; (b) methods for modifying the general curriculum to teach essential concepts, vocabulary, and content; (c) academic accommodations for students with disabilities; (d) learning strategies and study skills to acquire academic content; (e) strategies for creating a safe, equitable, positive, and supportive learning environment in which diversities are valued; (f) nonaversive techniques to control behavior and maintain attention of students with disabilities; (g) co-planning and co-teaching methods to

strengthen content acquisition of students with disabilities; and (h) maintaining

confidential communication about students with disabilities. Many of these items are in

line with suggestions from prior research. For example, general education teachers need

knowledge on understanding of the unique needs of students with disabilities and the

impact it can have in the classroom (Salend & Duhaney, 1999). Moreover, general

education teachers need early experience interacting and working with students with

disabilities (Barr & Bracchitta, 2008; Golmic & Hansen, 2012; Jung, 2007).

Contemporary Approaches in Inclusive Education

The Education for All Handicapped Children Act (P.L. 94-142, 1975), later

renamed the Individuals with Disabilities Education Act (IDEA, 1990), mandated that

schools provide children with disabilities a free and appropriate public education (FAPE)

in the least restrictive environment (LRE). As discussed in an earlier section,

reauthorizations to IDEA (1997, 2004, 2010) continued to support inclusion of students

with disabilities in general education settings, although revisions over the past decade

also "reflect advances in knowledge related to the assessment and identification of

children with disabilities" (Sullivan & Castro-Villarreal, 2013). Multi-tiered frameworks,

such as Response to Intervention (RtI) and Positive Behavior Interventions and Supports

(PBIS) were developed particularly in response to concerns about over identification in

special education (President's Commission on Excellence in Special Education, 2002).

The goal of these frameworks was to reduce the number of students referred for special

education services through intervening sooner with students who were at-risk of failing

and providing more effective instruction in inclusive settings (Bean & Lillenstein, 2012).

Response to Intervention

RtI is a tiered approach to providing high quality instruction to all students, along with early identification and support of children with academic and behavioral needs (National Center for Learning Disabilities, 2015). Although there is no single "model", the RtI process is generally defined through a three-tiered model. Within the RtI process, students are instructed through high-quality and scientifically-based classroom instruction and universally screened for specific education needs at various points in the school year. Learners identified through the screening process as needing support are provided with interventions aimed at improving their rate of learning (Brown-Chidsey & Steege, 2004). Interventions are delivered by a variety of professionals in the school setting and increase with intensity and duration based on student need and ongoing progress monitoring. According to the National Center for Learning Disabilities (2015), "RtI is designed for use when making decisions in both general education and special education, creating a well-integrated system of instruction and intervention guided by child outcome data" (para. 1). RtI is distinguished from other instructional and assessment practices based on the following essential components and key features that must be implemented with fidelity: (a) high-quality, scientifically based classroom instruction; (b) ongoing student assessment; (c) tiered instruction; and (d) parental involvement.

Components of RtI. The National Center for Learning Disabilities (2015) contends that "powerful classroom instruction begins with the adoption and use of an evidence-based curriculum" (para. 1). Under the framework, all students receive high-quality and research-based instruction through the general education classroom and teachers design instruction to meet the individual needs through differentiation.

According to Brown-Chidsey and Steege (2004), "high-quality instruction is based on the idea that all children deserve effective instruction that leads to achieving functional skills" (p. 11).

Universal screening and progress monitoring data provide information at the individual student level and also allow for comparison to other students. Furthermore, these data are used to make informed decisions about instructional needs and monitor the effectiveness of instruction and interventions. Universal screening and progress monitoring are based on the assumption that frequent assessment results in improved student outcomes (Brown-Chidsey & Steege, 2004). As students move through tiers, they are monitored and assessed with greater frequency in an effort to track progress and monitor intervention effectiveness. Assessment data should drive and inform *all* instruction [delivered] within the learning environment.

As mentioned above, most RtI models are based on a 3-tier system of instruction and intervention referred to as Universal Interventions (Tier 1), Secondary Interventions (Tier 2), and Tertiary Interventions (Tier 3; Figure 5). Tier 1 provides the basis for universal instruction that all students receive through the standard curriculum. Effective Tier 1 instruction is delivered in the general education setting through evidence-based practices and differentiated instruction to meet the needs of all students. Universal screening and progress monitoring is used to guide instruction and movement between the tiers (Kirk et al., 2015). Based on screening and monitoring results, inadequate progress over an extended period of time (i.e., 8 weeks) may result in delivery of Tier 2, targeted instruction. The assumption is that as student needs increase, so does the intensity and duration of interventions (Brown-Chidsey & Steege, 2004). Tier 2 is a

collaborative effort between general and special educators and provides students with

more explicit instruction in a smaller group setting. Students receiving Tier 2 services

are assessed and their progress is monitored with greater frequency. Again, should

students continue to make inadequate gains, they would be considered for Tier 3. At this

level, students receive even more intensive instruction and intervention as the result of

individualized need. Services in Tier 3 may be delivered individually to the students and

failure to respond to these interventions can lead to referral and/or eligibility for special

education and related services (Brown-Chidsey & Steege, 2004; Kirk et al., 2015; The

National Center for Learning Disabilities, 2015).
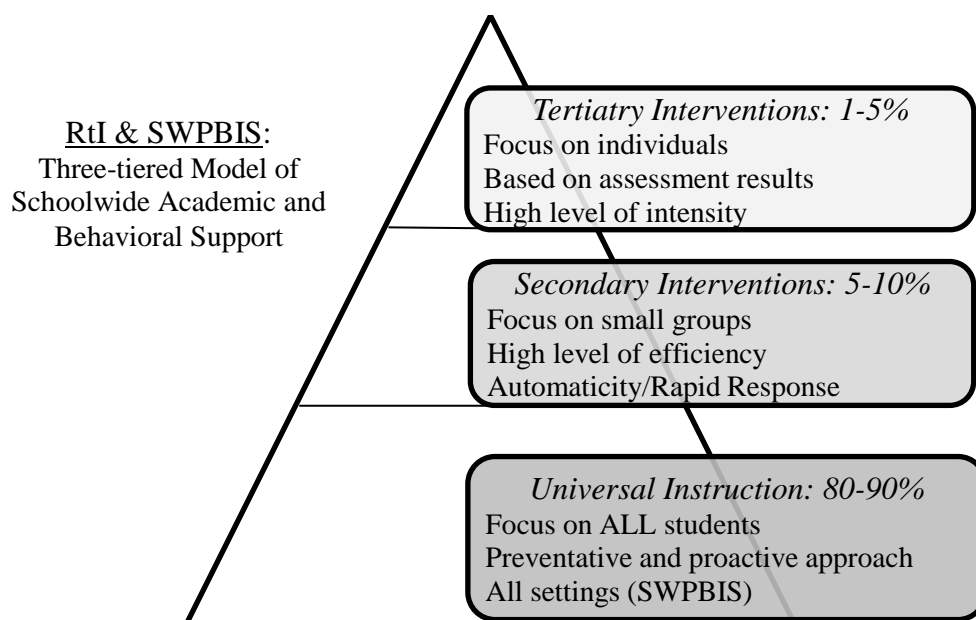
Figure 5. Three-tiered Model of Schoolwide Academic and Behavioral Support. Adapted
from Brown-Chidsey & Steege (2004) and PBIS (2015).

        A final component, integral to RtI, is parental involvement as true stakeholders in

their child's education. Family-school partnerships lead to increased student outcomes

and RtI presents a meaningful opportunity to engage the family in decision making (The

Center for Learning Disabilities, 2015). This process allows schools to share information with parents on progress, instruction, interventions, and goals. Furthermore, parents can play an integral role in the decision-making process when considering movement between tiers.

The RtI model provides a framework for educating and addressing student academic needs through high-quality instruction and ongoing assessment. A similar structure is found in School Wide Positive Behavior Interventions and Supports (SWPBIS) to address student social-behavioral needs. These two frameworks provide the conceptual basis for providing individual supports into the two broad categories shown in Table 1 (Content-Academic Instructional Supports and Social-Behavioral Instructional Supports).

As cited in Gargiulo (2014), "RtI represents a significant conceptual shift in thinking from a "wait to fail" approach to one that emphasizes early identification, intervention, and possible prevention" (pp. 224-225). It allows professionals to work together collaboratively to rule out inadequate instructional opportunities as a reason for poor achievement. Furthermore, it promotes the inclusion of students with disabilities and those struggling to maintain grade level skills in the general education setting through individualized intervention plans, progress monitoring, and data collection (Sullivan & Castro-Villarreal, 2013). Although it was not a specific goal of RtI, some speculate that this has prompted a reduction in the number of students identified for special education; specifically those from diverse backgrounds. A similar comment could be said in regard to SWPBIS.

Additionally, special education often becomes a permanent placement with few

opportunities for students to transition out of those services (Harris-Murri, King, &

Rostenberg, 2006; Sullivan & Castro-Villarreal, 2013). Problem-solving models such as

RtI and SWPBIS have been endorsed as methods to identify students in need of special

education and supports, and to differentiate between those lacking adequate instruction

and those in need of more extensive services (IDEA, 2004; PBIS, 2015; Sullivan &

Castro-Villarreal, 2013).

School Wide Positive Behavior Supports and Interventions

Similar to RtI, SWPBIS is a 3-tiered "prevention model that draws upon

behavioral, social learning, and organizational principles" to increase positive outcomes

for students at-risk for serious behavioral consequences (as cited in Bradshaw & Pas,

2011, p. 531). When applied to an entire school or district, it is often referred to as

School-wide Positive Behavior Interventions and Supports (SWPBIS). The premise of

this model is to teach all students the behavioral expectations of the school community as

with any other core academic subject. Although SWPBIS is not new concept, it provides

an important foundation for improving the outcomes of students through behavioral

intervention and support needs. As cited by Sugai and colleagues (2000),

> …positive behavior support is a general term that refers to the application of
> positive behavioral interventions and systems to achieve socially important
> behavior change…developed initially as an alternative to aversive interventions
> used with students with significant disabilities who engage in extreme forms of
> self-injury and aggression. (p. 133)

SWPBIS aims to facilitate positive educational environments that eliminate the need for

students to engage in competing behaviors. Furthermore, it follows the assumption that

behaviors need to be shaped through understanding the antecedents and consequences

that are maintaining the behavior; rather than reactively using punishments delivered

after engaging in problematic behaviors (Kirk, Gallagher, & Coleman, 2015).

Three-tiered models of support and intervention (i.e., RtI and SWPBIS) have

provided a more systematic process for identifying students with disabilities and

intervening early for students at-risk for academic failure and disciplinary actions. Much

of the need for 3-tiered models resulted from the over-use of punitive strategies for

disciplinary infractions and over representation of diverse students in special education.

These models have placed increased accountability on general education teachers to use

effective and research-based classroom practices as preventative measures. Although

there remain discrepancies in data on referral and placement rates, RtI and SWPBIS

models may lead to improved educational experiences for students with disabilities.

Although many districts and approaches align RtI and SWPBIS models, it may be easier

to understand academic and behavioral interventions and supports separately. For this

reason, reporting and understanding perceptions of behavioral and academic supports as

separate approaches has been chosen.

Chapter Summary

Despite data showing that progress has been made in including students with

disabilities in the general education setting, there is still much work to do. Current

legislation outlines a preference for educating students with IEPs in general education

settings (IDEA, 2004; NCLB, 2001). Yet, the continuum of placements options and LRE

provisions continue to lead to misperceptions about where students with disabilities

should be educated. Special education is often looked at as a placement rather than an

individually tailored set of services designed to meet students' educational needs

(Gargiulo, 2014). The skepticism and attitudes of teachers about the appropriateness of educating students with disabilities in the general education setting also continues to influence inclusion (Ryndak et al., 2014), even though evidence exists that thoughtful inclusion leads to improved social and academic gains (Banerji & Dailey, 1995; Dessemontet et al., 2012; Vaughn et al., 1996). Moreover, disproportionality and over representation in special education continue to be impeding issues that have increased efforts to implement 3-tiered models in schools.

New models for understanding students with disabilities have begun to shift thinking related to how students are included in general education (WHO, 2001; Schalock et al., 2010). These models utilize a social-ecological approach to understanding disability as a mismatch between student competencies and demands of the environment. Special education services determined through a social-ecological conceptualization of disability focus on providing supports that bridge the gap between competency and demands. Planning which results from this type of framework acknowledges the desired goals and competencies across settings that are important to a child. Additionally, implementing supports as a method for increasing student competency and changing the demands of the environment in order to improve access to activities associated with normative human functioning is emphasized. In Chapter III, a method for investigating teacher attitudes toward different types of supports will be introduced.

CHAPTER III

METHODOLOGY

Statement of the Problem

The Individuals with Disabilities Education Act (IDEA; 2004) entitles students

qualifying for an individualized education plan (IEP) a free and appropriate education

(FAPE) in the least restrictive environment (LRE). This means that students with

disabilities must be educated alongside their peers without disabilities in general

education settings to the maximum extent appropriate. For students with IEPs to fully

access the general education curriculum, supports are needed to provide students with the

necessary tools for success. The provision for supports is identified under the

"Supplementary Aids and Services" section of the IEP.

Implementing supports to increase access to environments and activities that are

typical of human functioning is consistent with a social-ecological approach to

understanding disability, and this approach has received increased attention due to

scholarly efforts by the WHO (2001) and the AAIDD (2010). Supporting students

through this lens requires educators to problem-solve potential supports, expend time and

energy arranging supports, and fully implement the supports, resources, and strategies

that are identified and arranged. Supports can be provided that change the environment

(e.g., Universal Design for Learning) and/or change the student (e.g., skills instruction).

Yet, little is known about educators' perceptions on integrating supports on behalf of

students with disabilities in an effort to increase engagement in the general education

classroom. If educators largely value and are open to implementing all types of supports, the critical implication is to assure educators have sufficient knowledge, resources, and problem-solving skills to identify and arrange supports for their students. Knowledge, resources, and problem-solving skills may make little difference, however, if educators do value certain types of supports or only value supports they perceive as being less intense (i.e., easily implemented). Therefore, it is important to investigate the relative priority that educators ascribe to different types of supports provided in the general education setting and determine if their perception of the intensity of support affects their priority ratings.

Purpose of Current Study

The purpose of the current study was to investigate how support type and intensity relate to the priority that educators place on providing different types of supports to assure that children receive a FAPE in the LRE. Although literature on teacher attitudes toward integrating students with IEPs can be found (e.g., Larrivee & Cook, 1997; Garvar-Pinhas & Schmelkin, 1989; Hammond & Ingalls, 2003; Male, 2011), little is known about educator attitudes toward providing specific types of supports to these students. It is possible for educators to be in philosophical agreement with the need to offer inclusive education opportunities, but not to be supportive of some or all of the supports needed to make inclusive education a reality for children.

This study aimed to answer the following questions:

1. Do pre-service and practicing educators differ in regard to the importance they place on providing different types of classroom-based supports to students with IEPs in the general education setting?

2. Do pre-service and practicing educators perceive any of the seven potential support types to be more important than others when assuring students with IEPs have access to a FAPE in the LRE?

3. Are pre-service and practicing educators' attitudes toward the seven types of support related to their perceptions of intensity of support?

It was hypothesized that when pre-service and practicing educators were given descriptions of children with IEPs and seven potential supports to meet each child's needs, there would be no difference in the mean ratings of pre-service and practicing educators in regard to relative importance or priority given to the supports. Furthermore, given the same descriptions, pre-service and practicing teachers would rate each type of support as equally important. Lastly, it was hypothesized that there would be no relationship between ratings of intensity of support and importance of support by either group of educators.

Research Design

The current study was exploratory in nature and utilized a survey design to collect information aimed at addressing the research questions. The survey included a Likert-type rating scale combined with opportunities to provide explanations. This survey was used to elicit information on educators' perceptions of different types of supports that could be implemented in inclusive settings to ensure that students with IEPs receive a FAPE. Survey methods were chosen because they assist the researcher with identifying trends in a given population and allow for comparison between groups (Creswell, 2008). In addition, Creswell noted that survey designs are best suited for collecting data on opinions and attitudes regarding the topic under investigation (2008). As this study

attempted to gain baseline understanding of educators' perceptions of supports, a survey design was the most logical approach. Participation in the study was voluntary, and while demographic information was collected (i.e., course of study, year in program, teaching position, years as a teacher), it was done only with the intent of using the information to investigate group differences.

Research Setting

Data was collected through a convenience sample from undergraduate and graduate students who were practicing educators enrolled at a university in central Illinois. Participants were recruited from undergraduate- and graduate-level courses offered by three academic units (special education, teaching and learning, and educational administration). The courses selected for recruitment were done through a convenience sample of professors willing to allow the researcher class time to deliver the recruitment presentation, recruit participants, and collect data. Where permission was granted, the researcher went directly to the campus classroom to collect data.

Practicing educators were also recruited from three school districts in Illinois: a K-2 elementary school, a K-5 elementary school, and a K-12 school. The districts chosen were convenient in nature and included those with whom the university and/or the researcher had an established relationship with and were willing to allow the researcher time at the end of the school day for recruitment and participation. In these cases, the researcher went directly to the school to deliver the recruitment presentation, recruit participants, and collect data. The administrators at all three schools decided upon the location in the building that was most conducive to working with all potential participants. Most often, this was done in the cafeteria or the media center.

Target Population

The target population for this study included pre-service and practicing general and special educators enrolled in coursework at a university in central Illinois as well as practicing educators employed at local school districts. This university was chosen for participant recruitment because it hosts one of the oldest colleges of education, enrolls more than 3,000 students through undergraduate and graduate level coursework, and graduates the largest population of educators in the nation at the undergradute level. In addition, the institution has fully developed coursework at both the master's and doctoral level in three academic departments: Department of Special Education, Department of Educational Administration and Foundations, and the School of Teaching and Learning. Therefore, recruiting practicing educators through these departments was also suitable. Due to insufficient recruitment numbers from the university and because it was possible that educators enrolled in graduate level coursework would be different from the population of educators not enrolled in coursework, the target population also included practicing educators recruited through three school districts in Illinois.

Recruitment

Phase 1. Recruitment began during the fall 2015 semester by contacting instructors of graduate and undergraduate courses in the College of Education, Department of Special Education, and School of Teaching and Learning. Instructors were asked about their willingness to consent (Appendix A) to providing the researcher with approximately 20-30 minutes of class time for participant recruitment and survey completion. Of the 77 instructors contacted, 25 provided consent to allow the researcher to recruit participant from their classes; two instructors declined the opportunity, and the

remaining instructors did not provide a response. Upon gaining consent to utilize class time to recruit participants, dates and times were established to recruit participants and complete surveys for each course.

Phase 2. Participants were recruited during the designated dates and times established during Phase 1 of the recruitment process. The instructors of each class were asked to leave the room and the researcher presented a short recruitment presentation (Appendix D) highlighting the purpose of the study and terms of participation to the class. Once the initial presentation was completed, the researcher provided each member of the class with a sealed envelope. The envelope contained: (a) participant consent form (Appendix C), (b) one survey and corresponding vignette (Appendices H-K), and (c) an article on assessment and planning of supports in the K-12 setting (Walker, DeSpain, Thompson, & Hughes, 2014). Those wishing to participate in the study were asked to sign the enclosed consent form, read the vignette, and complete the survey. Those who did not wish to consent were offered the opportunity to read through the enclosed article while participants completed the survey. Participants were given 20 minutes to decide on their involvement in the study and complete the survey. Once time expired, members of the class were asked to return the consent forms and surveys in the original envelope (regardless of participation status) to the researcher. They were asked to keep the article as a tool to learn about the social-ecological approach to understanding disability and planning for and implementing supports in a K-12 setting.

Phase 3. Upon completing participant recruitment and data collection at the university in central Illinois, numbers of completed surveys were counted. Due to insufficient recruitment numbers from the university and because it was possible that

educators enrolled in graduate level coursework would be different from the population

of educators not enrolled in coursework, recruitment and participation from school

districts in Illinois was conducted. Initially, administrators from school districts in which

the researcher and/or the university had established relationships were contacted via

email. Administrators who responded indicating a willingness to allow the researcher

permission to recruit from the school were asked to provide a time and date for

recruitment and data collection. During the established date and time, the researcher

went to the location of the school to deliver a participant recruitment presentation, deliver

participation materials, and collect data.

Participants of the Study

Participation was done through a volunteer convenience sample. Originally the

goal was to recruit a minimum of 80 pre-service and 80 practicing educators to complete

the study. This was determined to be sufficient for running analyses, with the assumption

that there would not be a ceiling to the number of participants included in the study.

Recruitment and data collection were considered completed when no other professors and

school districts responded with a willingness to allow the researcher recruitment

opportunities or the end of the academic fall 2015 semester, whichever came first. In this

case, recruitment was completed when no other districts and professors responded to the

researchers inquiries for recruitment opportunities. A total of 405 participants were

included in the study. Table 4 summarizes the demographic information collected of

participants. Participant demographics shown in Table 4 were grouped into categories

based on their degree program enrolled in or completed, and according to whether they

were pre-service or practicing educators. Groupings were done this way for easy

comparison of the groups in terms of analyzing data and answering the research questions.

Over half of the participants were pre-service educators (66.7%), while the other third were practicing educators (33.3%). The majority of the 270 pre-service educators came from the Department of Special Education (60.7%), with the remaining pre-service participants recruited from the School of Teaching and Learning (39.3%). Of the 135 practicing educators enrolled through the university, 68.9% were general educators and 31.1% were special educators. Over half of the respondents surveyed (50.6%) completed or were in the process of completing coursework required for the special education degree. Another third of the participants (33.8%) had been enrolled in two or more special education courses during their degree program. Less than 5% of the participants had taken no coursework in special education.

Ethical Issues

In an effort to address ethical issues that arose during the course of this investigation, information pertinent to the study was discussed with participants prior to consent. Before participant recruitment and data collection begun, the instructors of the classes or school administrators were asked to leave for approximately 30 minutes to reduce the risk of coercion for participating in the study. A portion of the study also included collecting demographic information (i.e., gender, teaching experience, subject level, grade level, degree[s], special education courses taken), but this did not include collecting names or any directly identifiable information. Any demographic data collected was used to help analyze and compare data with different criteria in mind.

Table 4

Demographic Characteristics of Participants (n=405)

Characteristic	Total	Category %	Total Sample %
Pre-Service Educators (n= 270)	270	100	66.7
Special Education–LBS1	152	56.3	37.5
Special Education–DHH	10	3.7	2.5
Special Education–LVB	2	.7	.5
Early Childhood	74	27.4	18.3
Elementary	4	1.5	1
Middle Level	24	8.9	5.9
Secondary	4	1.5	1
Practicing Educators (Total n= 135)	135	100	33.3
Special Educator	33	24.4	8.1
Special Education Administration	9	6.7	2.2
General Educator	91	67.4	22.5
General Education Administrator	2	1.5	.5
University Recruitment	91	67.4	22.5
School District Recruitment	44	32.6	10.8
All Participants (n= 405)			
Overall Professional Status			
Pre-service Educators	270		66.7
Practicing Educators	135		33.3
Overall Major Teaching Area			
Special Education	206		50.9
General Education	199		49.1
Number of SED Courses Taken			
Special education teacher/major	206		50.9
Two or more SED courses taken	136		33.6
One SED course taken	43		10.6
No SED courses taken	20		4.9
Gender			
Female	361		89.2
Male	43		10.6
Other	1		.2

Note. For purpose of this study: LBS1 or Learning Behavioral Specialist-1 is the cross categorical special education certification in Illinois. LVB or Low Vision Blindness is the certification for those who instruct students with vision impairments. DHH or Deaf Hard of Hearing is the certification for those who instruct students who are Deaf or hard of hearing. Special Educators are any educators with a certification in LBS1, LVB, or DHH. Special education administrators include those with a Director of Special Education or School Psychology certification. General education administrators include those who are principals or assistant principals.

Furthermore, the names of the institutions and courses accessed were numerically labeled to protect the anonymity of course instructors, school districts, and participants.

Although there was no direct benefit to participants, they likely gained knowledge of the supports paradigm and implementing supports on behalf of students with IEPs in the general education setting. Furthermore, it is possible they experienced satisfaction because they perceived the benefit of participating in research to enhance knowledge in the education field. However, no direct benefit was gained by participants as a result of participating in this study, and no tangible benefits were provided for participation.

Instrumentation

To explore perceptions of different types of supports that could be implemented in inclusive settings, four vignettes with corresponding surveys were created to give participants hypothetical situations to rate the importance and intensity of supports. According to Borter and Renolds (1999), vignettes provide an opportunity for participants to clarify their understanding given a context or case example, and provide a method for exploring perceptions that is less sensitive than simply asking opinions. Discussing matters of access to the inclusive settings for students with IEPs can be a sensitive topic for some; vignettes provided a context for participants to share their opinions regarding the importance of different types of supports aimed at increasing access and success in the general education setting for students with IEPs. Each survey included seven support recommendations based on the information in a corresponding vignette. Each survey also contained sections for demographic information as well as a place to provide feedback following the ratings for each support. Participants were asked to rate the level of importance of various supports in assuring a child receives a FAPE in

the LRE, the intensity of each support in terms of time, effort, and resources, and explain

their reasoning behind their ratings. The survey instruments and corresponding vignettes

used in this investigation were created by the researcher and can be found in Appendices

H through K.

Instrument Development

The final instrument was developed based on a body of literature and research

centering on the supports paradigm, current trends in education (i.e., Response to

Intervention, School-wide Positive Behavior Interventions and Supports), and perceptions

of inclusion (Keaney, 2012; Scruggs & Mastropieri, 1996; Schalock et al., 2010;

Thompson et al., 2009) and included four vignettes, each including seven items. To limit

the amount of time needed for recruitment and participation, vignettes were limited to

one page (front and back) with brief descriptions on the survey to promote ease of

completion. In addition, participants were only given one of the four vignettes to

complete. The final survey was designed to collect self-reported data and consisted of 28

items divided across four scales. Participants were provided with one of the four

vignettes and recorded their responses to each item of importance on a 4-point Likert

scale ranging from 1 = completely unnecessary to assuring FAPE in the LRE to 4 =

absolutely essential to assuring a FAPE in the LRE. They also recorded their responses

to each item of intensity on a 3-point Likert scale ranging from *1 = low* to *3 = high*. An

additional open-ended response option after each support importance and intensity rating

allowed participants to provide an explanation for their ratings.

Vignettes

During initial planning regarding how best to gain educator perceptions of the importance of different types of support, it was discussed that vignettes may be the best method for providing a context for participants to respond to when indicating their perceptions of importance and intensity of different supports. The thought was that participants may have difficulty rating the importance of supports and explaining their feelings as such if the support was not connected to specific scenarios. Therefore, four vignettes highlighting four different students with disabilities and supports aimed at improving their access to a FAPE in the LRE were created (Table 5). Supports created for each vignette align with the categories of support highlighted in Table 1 in Chapter I (i.e., people, assistive technology, adaptations, modifications, accommodations, content instructional supports, social behavioral instructional supports). After the description of the student and supports, participants were asked to rate their perceptions of importance on 4-point Likert-type scale referencing how important they felt each of the seven supports were at ensuring the student received a FAPE in the LRE. They were also asked to rate how intense they felt the support would be to implement on a 3-point Likert-type scale. For instance, how much energy and resources on the part of the educator or school would be exhausted in implementing the supports? Finally, participants were asked to provide an explanation as to why they assigned the importance and intensity rating to each support.

Instrument Validation

In an effort to validate the proposed survey and supporting vignettes, an expert panel of individuals familiar with the supports paradigm was established. The original

group of individuals considered for the expert panel included K-12 educators, university

professors, professional disability rights organization administrator, and a government

consultant. Of the 11 experts who were emailed and asked to serve as the expert panel

(Appendix G), 6 responded by completing the survey. The purpose of the expert panel

was to provide feedback and content validity for the approach taken to classifying

supports. For instance, the expert panel was asked to consider whether the seven types of

supports make sense and if there were any further categories that needed to be considered

in the model. To accomplish this, a two-part survey was developed through Survey

Monkey.

Part 1 asked the expert panel to indicate whether each of the seven categories of

support established through early work in this investigation could be distinguished from

the six other categories along with identifying any additional domains for consideration.

Given support domains and descriptions, the expert panel was asked to read the following

information and indicate their agreement that the support domain was distinct from the

other support domains:

> A social-ecological conceptualization of disability focuses attention on the
> mismatch between people's personal competencies and the performance
> expectations associated with culturally valued settings and activities. Disability is
> evident when there is a significant and chronic mismatch. This conceptualization
> of disability is in contrast to more traditional conceptualizations (i.e., the medical
> model) where disability is understood as defect within a person, a trait that most
> others in the population do not have. "Supports" bridge the gap between the
> limitations in personal functioning and environmental demands. In terms of a
> general education classroom, anything that increases the capacity of the student to
> participate in classroom activities and anything that increases the capacity of
> classroom environment to fully include a student (i.e., mitigates the demands of
> settings or activities) is considered to be a support. Although there are multiple
> typologies for classroom supports, the following seven support domains represent
> one typology. Please indicate whether or not you agree that each domain of
> support can be distinguished from the other six domains.

Table 5

Vignettes and Supports

	Support Category	Support Type	Sarah-16 *(ID/Cerebral Palsy)*	Madison-10 *(ADHD)*	Adam-7 *(Autism)*	Eli-13 *(Learning Disability)*
Environmental Supports	Change the Environment: *Supplementary aids and services*	Assist the student (i.e., aide, peer, volunteer)	Peer tutoring for classroom assignments	Check and Connect Mentor	Paraprofessional to keep student connected to learning	Special education teacher co-teaches in academic classes
		Technology to the student (i.e., AT)	Calendar application on phone	Watch Minder Watch w/ cues to reinforce behaviors	AAC device with select vocabulary	Support eText & Portable spell checker
	Modify Expectations: *Adaptations, modification, accommodations*	Adapt classroom and learning materials (adaptations)	Highlighted readings	Preferential seating and seating schedule	Provide visuals in the classroom and school environment	Supported eText readings
		Modify performance criteria (modification)	Create a different/subset of exam questions	Narrowed list of multiple choice options on tests	Monitor performance through permanent products	Simplify test questions; provide extended time.
		Modify performance expectations (accommodations)	Answers provided orally for essay tests	Completion of classwork via laptop and word processing software	Create visual/tactile supports to use during whole group activities	Provide self-correcting materials for immediate feedback
Instructional Supports	Increase personal competency: *Skills instruction*	Instructional strategies targeted for content skill development (academic)	Tutoring from special education teacher	Teach "previewing" strategies for assignments & seatwork	Utilize manipulatives during instructional times	Teach SQ3R Method for study skills
		Instructional strategies targeted for behavioral skill development (behaviors)	Documentation of "crying episodes	Teach self-monitoring of on-task behaviors (Watch Minder)	Teach replacement behaviors for self-biting	Teach student how to request help

Findings from Part 1 of the expert panel survey indicated that the majority of

respondents perceived the seven categories of supports to be distinct from one another

(Table 6). In addition, the expert panel was asked to identify if any of the above

categories of support were not accounted for in the seven original items. Two

respondents noted that the researcher consider "personal assets," "peer supports," and

"self-directed supports" as additional support domains. After careful thought and

consideration, it was decided that "personal assets" could be placed under the

corresponding domain applicable to that type of support and that "peer supports" would

fall under the category of "Environmental Supports–People." In regard to "self-directed

supports," it was decided that although many supports may initially be teacher-initiated,

the goal should be for the supports to become student-initiated as proficiency is achieved.

Therefore, both teacher-directed and student-directed supports were discussed in Table 1

in Chapter I, but both remained under the overarching category of Instructional Supports.

Table 6

Expert Panel Findings: Part 1–Domains are Distinct (n=6)

Support Category	Interrater Agreement
Environmental Support–People	100%
Environmental Support–Technologies	100%
Environmental Support–Adaptations	100%
Environmental Support–Modifications	100%
Environmental Support–Accommodations	83.3%
Instructional Support–Content Instructional Support	83.3%
Instructional Support–Social-Behavioral Instructional Support	100%

Note. Interrater agreement when asked to consider whether support domains were distinct from other support domains.

Part 2 of the expert panel survey involved matching the supports from each vignette to the corresponding support category (Appendix G). For example, the panel was asked to "Match Sarah's supports to support domains." Findings from Part 2 indicated that the majority of respondents on the expert panel were able to re-categorize the supports identified in each vignette back into the appropriate categories. The only exception was for Vignette 2: Madison (Appendix I). Inconsistencies were noted between the support categories of Adaptations, Modifications, and Accommodations. Adjustments were made to the vignette to clarify the supports aligned with those three support categories and then a new survey was created to take these edits into consideration. Two additional respondents completed the updated survey and no inconsistencies were noted after completion.

Given that the support categories and typology of supports identified in each vignette made sense, a pilot and discussion about the survey was then conducted with a class of students in their junior year of college, who were participating in field experience in classrooms two days per week. The students were all enrolled in coursework in the department of special education at the university. The students were told that a colleague needed assistance determining the time involved in completing a survey and clarifying any vague information in either the survey or presentation introducing the survey. This pilot process involved presenting the recruitment presentation, time to complete the survey, and a discussion of areas for further clarification. No issues in comprehension of the vignettes or surveys were noted and therefore, participant recruitment was initiated.

Content validity to ensure the survey was measuring what was expected was initially addressed through the panel's review of the survey. Vogt (2007) indicates "the

typical procedure is to assemble a panel of experts to judge the relevance of the test items

to the content the test is meant to measure" (p. 118). Reliability of the surveys was

calculated based on the panel's level of agreement on vignette support categories. If

experts on the panel agree substantially on the categories in which they place the

specified support vignettes, then the reliability will be high.

Data Collection

Survey data were collected face-to-face during the fall 2015 academic semester.

This was advantageous because it allowed for participant recruitment and data collection

to occur at one point in time while the researcher was present, providing opportunities for

clarification where needed. Most participants were recruited through a university in

central Illinois. To identify courses to recruit from, the university Internet site was used

to identify courses of study for pre-service and graduate level educators in the three

colleges of education departments. Courses of study were then used to identify courses

in which pre-service and practicing educators could be recruited from. It was important

to identify education courses that only those pursuing an education degree, either

undergraduate or graduate, would be enrolled in so as not to recruit those from outside

the field of education. Once courses had been narrowed down, the university's Internet

site was used to identify instructors and contact information. Instructors of all identified

courses from the three academic departments were then emailed (Appendix A) seeking

permission to recruit participants and collect data. Course numbers, instructors, contact

information, and verification of date and time for recruitment were then entered into

Microsoft Excel and used as a method for tracking recruitment appointments.

To recruit practicing educators from school districts, administrators from schools with whom the researcher had established a rapport with were contacted via email (Appendix B). Five school districts were initially contacted seeking permission to recruit participants: two university laboratory schools, two public school districts, and one private school district. Three school districts responded verifying a date, time, and location for the researcher to recruit participants and collect data. Of the administrators that responded, recruitment and data collection occurred during the month of November 2015 from an elementary university laboratory school, K-2 public school, and K-12 private school.

During data collection, recruitment totals and numbers of completed surveys by vignette were documented to ensure that the minimum number ($n = 20$) was completed for each of the four surveys. Total surveys completed by vignette can be seen in Table 7.

Table 7

Total Number of Surveys Completed by Vignette (n = 405)

Vignette	*n*	%
Vignette 1: Sarah	103	25.4
Vignette 2: Madison	100	24.4
Vignette 3: Adam	102	25.2
Vignette 4: Eli	100	24.7

After each recruitment session, the recruitment totals were updated to ensure a representative number was being collected across all vignettes. In addition, demographic and survey were entered into the Statistical Package for the Social Sciences (SPSS; IBM

Corp., 2012). The final recruitment and data collection date occurred on November 30, 2015, at which point data were coded, entered, and cleaned for analysis.

Data Analysis Procedures

All data necessary for analysis were entered into SPSS (IBM Corp., 2012). The process of preparing the data involved four main steps, including, "designing the codes, coding, data entry, and data cleaning" (Fowler, 2014, p. 127). Codes were designed to allow for clear coding and entering of data into the appropriate systems. A serial identifier was created for each completed survey and was used to help track the data.

Once data were coded and entered, 81 of the total 405 (20%) cases entered were verified for accuracy. Of the 81 cases, three errors were noted in the SPSS file and edited for accuracy. The data were further cleaned through running frequencies to look for any outliers and identifiers that appeared to be out of place. Cases were reviewed with the original surveys where necessary and updated.

Once the data files were cleaned, frequencies for demographic data and descriptive statistics were run for all scales. The variable created for number of special education courses taken was recoded to reduce the number of options within the variable. For instance, the number of special education courses taken ranged from zero to "all." To make this variable more useful, it was recoded as follows: no special education courses taken, one special education course, two or more special education courses, and special education teacher/major. This coding allowed distinctions to be made between pre-service and practicing educators that had not taken any special education coursework and those that had taken some; while being able to account for those who had a degree in special education. The multiple descriptive codes for Current Educator Position were

merged and recoded into one new variable. The question on the demographic form that led to this variable asked practicing educators to identify their current employment position. Each respondent provided a unique response based on the title of his/her current position and therefore, codes were collapsed into the following: special educator, special education administrator, general educator, and general education administrator. In addition, new variables were created to allow comparison between pre-service and practicing educators and special and general educators. Compute commands were then created for overall importance and intensity ratings for all four vignettes.

The new variables and compute commands were used to run a two-way ANOVA with the independent variables (pre-service vs practicing educators and general vs special educators) for all importance ratings to answer research question one, "Do pre-service and practicing educators differ in regard to the importance they place on providing different types of classroom-based supports to students with IEPs in the general education setting?" The goal of this analysis was to investigate whether there is a difference in the importance that pre-service educators might place on different categories of supports when compared to their practicing counterparts.

A repeated measures ANOVA was run to answer research question two, "Do pre-service and practicing educators perceive any of the seven potential support types to be more important than others when assuring students with IEPs have access to a FAPE in the LRE?" This was done by comparing the seven importance ratings for all vignettes in the ANOVA test. The purpose of this design is to investigate whether participants differ significantly in their ratings across all conditions.

To investigate research question three, "Are pre-service and practicing educator attitudes toward the seven types of support related to their perceptions of intensity of support?" a nonparametric Spearman correlations analysis was conducted for all paired supports by importance and intensity. The Spearman Rank-Order Correlation Coefficient was chosen because it provides a measure of association between two ordinal variables, in this case, support importance and support intensity (Siegel & Castellan, Jr., 1988). For instance, "people supports importance" was paired with "people supports intensity" to investigate whether or not the importance rating was related to the rating of intensity. This was done for all seven support importance and intensity categories. To further investigate and discuss relationships between importance and intensity, the crosstabulation analysis with χ^2 specified was run by support importance and intensity categories. This was primarily done to investigate where and what the nature of the relationship might be. A significance level of $p < .01$ was established for all analyses due to the large sample size ($n = 405$).

Chapter Summary

The purpose of the study was to investigate pre-service and practicing teachers' perceptions of different types of supports to assure that children receive a FAPE in the LRE. To accomplish this, a survey design was employed to investigate the three main research questions. An expert panel was constructed to validate the approach to investigating the perceptions of support importance and intensity as well as the typology established for the support categories. Changes to the survey as a result of the expert panel resulted in the final version used with the 405 participants. Data were collected from a university and three school districts during the fall academic semester of 2015

using a face-to-face format. Descriptive and inferential statistics were run were run to

explore the research questions. Qualitative data from the open-ended responses were

used to further explore participant ratings where necessary.

CHAPTER IV

ANALYSIS OF THE DATA

This study explored pre-service and practicing educators and their perceptions of supports used to increase access to a FAPE in the LRE for students with IEPs. Three main research questions were investigated through this study:

1. Do pre-service and practicing educators differ in regard to the importance they place on providing different types of classroom-based supports to students with IEPs in the general education setting?

2. Do pre-service and practicing educators perceive any of the seven potential support types to be more important than others when assuring students with IEPs have access to a FAPE in the LRE?

3. Are pre-service and practicing educators' attitudes toward the seven types of support related to their perceptions of intensity of support?

These questions were addressed through the Perceptions of Supports Survey that was administered to practicing and pre-service educators through face-to-face survey method. Data collected through this survey were used for the following analyses.

Research Question 1

Do pre-service and practicing educators differ in regard to the importance they place on providing different types of classroom-based supports to students with IEPs in the general education setting?

A two-way analysis of variance (ANOVA) was conducted to determine ratings of support importance between pre-service educators enrolled at a central Illinois university

and practicing educators enrolled in graduate level work at the same university or

employed at local school districts (Educator Rank). Further analysis investigated differ-

ences between special and general educators (Educator Type). Educator Rank included

two levels (pre-service educators, practicing educators) and Educator Type included two

levels (special educator, general educator). Last, the interaction effect of Educator Type

by Educator Rank was examined. Two-way ANOVA results are presented in Table 8.

Table 8

ANOVA Summary Table for Support Importance

DV	Source	SS	df	MS	F	p	Partial η^2
Sarah	Between treatments	1096.39	4	274.10	2061.87*	.00	.99
	Educator Rank	.05	1	.05	.38	.54	.00
	Educator Type	.18	1	.18	1.38	.24	.01
	Rank x Type	.03	1	.03	.21	.65	.00
	Within treatments	13.16	99	.13			
	Total	1109.55	103				
Madison	Between treatments	998.84	4	249.71	1881.45*	.00	.99
	Educator Rank	.03	1	.03	.19	.67	.00
	Educator Type	.03	1	.03	.19	.67	.00
	Rank x Type	.23	1	.23	1.72	.19	.02
	Within treatments	12.74	96	.13			
	Total	1011.58	100				
Adam	Between treatments	1181.66	4	295.42	2307.66*	.00	.99
	Educator Rank	.14	1	.14	1.09	.30	.01
	Educator Type	.16	1	.16	1.21	.27	.01
	Rank x Type	.03	1	.03	.25	.62	.00
	Within treatments	12.55	98	.13			
	Total	1194.20	102				
Eli	Between treatments	1028.48	4	257.12	1855.04*	.00	.99
	Educator Rank	1.42	1	1.42	10.25*	.00	.10
	Educator Type	1.78	1	1.78	12.82*	.00	.12
	Rank x Type	.10	1	.10	.68*	.41	.01
	Within treatments	13.31	96	.14			
	Total	1041.78	100				

Note. *Significant at the p < 0.01 level. DV = Dependent Variable.

Results reflected no significant differences in interactions between Educator Rank and Educator Type across the four vignettes. Analysis of results also reflected no significant main effect differences for three of the four vignettes (Sarah-–intellectual disability/cerebral palsy, Madison–ADHD, Adam-–autism); however, there were significant differences for Eli (learning disabilities) in Educator Rank and Educator Type. The main effects for each vignette are discussed below.

Ratings of support for Sarah did not significantly differ between practicing and pre-service educators (practicing educator $M = 3.24$, $SD = .06$; pre-service educator $M = 3.29$, $SD = .05$). Likewise, ratings did not differ between special and general educators (special educator $M = 3.22$, $SD = .06$; general educator $M = 3.31$, $SD = .05$). In general, all educators rated the importance of Sarah's supports in ensuring she received a FAPE in the LRE similarly, in the importance range.

For Madison, there were no significant differences between practicing and pre-service educators ratings of support importance (practicing educator $M = 3.11$, $SD = .07$; pre-service educator $M = 3.15$, $SD = .05$). There were also no significant differences between ratings of support importance between special and general educators (special educator $M = 3.15$, $SD = .07$; general educator $M = 3.11$, $SD = .05$). Overall, Madison's supports were rated similarly, regardless of Educator Type or Educator Rank.

Results for Adam reflected no significant difference between practicing and pre-service educators (practicing educator $M = 3.34$, $SD = .07$; pre-service educator $M = 3.42$, $SD = .05$). Furthermore, no significant differences were noted between special and general educators (special educator $M = 3.33$, $SD = .07$; general educator $M = 3.43$, $SD = .05$). On average, the ratings of support importance for Adam did not differ between

special and general educators, nor practicing and pre-service educators.

Significant differences were noted between Educator Rank and Type for Eli. The main effect of Educator Rank for Eli yielded an F ratio of $F(1, 96) = 10.25$, $p < .01$, indicating a significant effect, (practicing educator $M = 3.03$, $SD = .07$; pre-service educator $M = 3.28$, $SD = .05$). The main effect of Educator Type for Eli yielded an F ratio of $F(1, 96) = 12.82$, $p < .01$, also indicating a significant effect (special educator $M = 3.01$, $SD = .06$; general educator $M = 3.30$, $SD = .06$). On average, the ratings of support importance for Eli indicated that general educators rated the combined mean of the seven categories of supports higher than special educators. In addition, pre-service educators rated the importance of the combined mean of the seven categories of supports higher than practicing educators.

Results of the four two-way ANOVAs indicated that although pre-service and practicing educators did differ in regard to the importance they placed on providing different types of classroom-based supports to students with IEPs in the general education setting, it was to a minimal degree. In general, pre-service general and special educators rated supports slightly higher than practicing general and special educators in regard to importance. Despite slight differences between ratings of support importance, any of these differences could be due to chance. However, results for Eli indicated significant differences in perceptions of supports between practicing and pre-service educators, as well as special and general educators. Differences in ratings of support importance between Eli and the other three vignettes are discussed in the next chapter.

Research Question 2

Do pre-service and practicing educators perceive any of the seven potential support types to be more important than others when assuring students with IEPs have access to a FAPE in the LRE?

A one-way repeated measures ANOVA was conducted to compare the perceived importance across the seven support categories. Descriptive statistics for the seven support importance categories indicated that adaptation supports were rated as more important than any other category of support, while assistive technology supports were rated as the least important (Table 9). It is important to note however, that support importance was rated on a 4-point Likert-type scale with "4" being the highest importance rating.

Table 9

Descriptive Statistics for Support Importance Categories (n = 403)

Support Importance Categories	M	SD
Assistive Technology Support	3.05	.80
Accommodation Supports	3.20	.79
Social behavioral instructional supports	3.24	.87
Modification supports	3.27	.76
People supports	3.29	.66
Content Instructional Supports	3.36	.72
Adaptation supports	3.41	.75

As seen in Table 9, educators perceived all types of support to be important (3.05 to 3.41) in ensuring that students receive access to a FAPE in the LRE.

Results of the repeated-measures ANOVA indicated a significant difference of ratings of support importance, Wilks' Λ = .87, $F(6, 397)$ = 10.11, p = <.001, partial

multivariate $\eta^2 = .13$. These results suggest that educators did, in fact, perceive some of the seven potential types of support to be more important than others. In order to investigate where differences between support categories might exist, a paired samples t-test was run (Table 10).

Table 10

Paired Samples T-Test and Descriptives for Paired Support Categories

Pair Category	M	N	SD	t	df	p
People Supports vs Other Categories	3.28	404	.66			
1 Assistive Technology Supports	3.05	404	.79	4.68*	403	.00
2 Accommodation Supports	3.21	404	.80	1.71	403	.09
3 Social behavioral instructional supports	3.24	404	.87	.83	403	.41
4 Modification supports	3.27	404	.76	.26	403	.80
5 Content Instructional Supports	3.36	404	.72	-1.74	403	.09
6 Adaptation supports	3.42	403	.75	-2.70*	402	.00
Assistive Technology Supports vs Other Categories	3.04	404	.79			
7 Accommodation Supports	3.21	405	.80	-3.03*	404	.00
8 Social behavioral instructional supports	3.24	405	.87	-3.85*	404	.00
9 Modification supports	3.27	405	.76	-4.21*	404	.00
10 Content Instructional Supports	3.36	405	.73	-5.90*	404	.00
11 Adaptation supports	3.42	404	.76	-7.14*	403	.00
Adaptation Supports vs Other Categories	3.42	404	.75			
12 Accommodation Supports	3.21	404	.79	4.42*	403	.00
13 Social behavioral instructional supports	3.24	404	.87	3.10*	403	.00
14 Modification supports	3.27	404	.76	2.97*	403	.00
15 Content Instructional Supports	3.36	404	.73	1.28	403	.20
Modification Supports vs Other Categories	3.27	405	.76			
16 Accommodation Supports	3.21	405	.80	1.53	404	.18
17 Social behavioral instructional supports	3.24	405	.87	.57	404	.57
18 Content Instructional Supports	3.36	405	.73	-1.80	404	.07
Accommodation Supports vs Other Categories	3.21	405	.80			
19 Social behavioral instructional supports	3.24	405	.87	-.62	404	.53
20 Content Instructional Supports	3.36	405	.73	-3.38*	404	.00
Content Instruction Supports vs Other Categories	3.36	405	.73			
21 Social behavioral instructional supports	3.24	405	.87	2.24	404	.03

Note: *Significant at the p < .01

Results for the support category of "people supports" versus other support categories indicated that there were significant differences between two of the six paired combinations (1 and 6). Findings on pair 1 indicated that educators perceived people supports ($M = 3.28$, $SD = .66$) to be more important than assistive technology supports ($M = 3.05$, $SD = .79$), $t(403) = 4.68$, $p = <.01$. Results on pair 6, however, indicated that educators perceived people supports ($M = 3.28$, $SD = .66$) to be less important than adaptation supports ($M = 3.42$, $SD = .04$), $t(403) = -2.70$, $p < .01$. No significant differences were found between "people supports" and any of the other support categories (2 through 5).

Results for the category of "assistive technology supports" versus other support categories indicated that educators perceived *all* other support categories to be more important, with significant differences in the scores for all paired combinations (pair 7-11; pair 6 above). Findings for each of the following categories paired with assistive technology supports included: pair 7, accommodation supports ($M = 3.21$, $SD = .80$), $t(404) = -3.03$, $p < .01$; pair 8, social behavioral instructional supports ($M = 3.24$, $SD = .87$), $t(404) = -3.85$, $p <.01$; pair 9, modification supports ($M = 3.27$, $SD = .76$), $t(404) = -4.21$, $p = <.01$; pair 10, content instructional supports ($M = 3.36$, $SD = .73$), $t(404) = -5.90$, $p <.01$; and pair 11, adaptation supports ($M = 3.42$, $SD = .76$), $t(403) = -7.14$, $p = <.01$. These results indicated that assistive technology supports were perceived as the least important category of support when paired with the other six categories of supports.

Results for the category of "adaptation supports" versus other support categories indicated that there were significant differences between five out of the six paired combinations (6, 11, 12, 13, 14). For these pairs, educators perceived adaptation supports

to be more important than accommodation supports ($M = 3.21$, $SD = .79$), $t(403) = 4.42$, $p <.01$; social behavioral instructional supports ($M = 3.24$, $SD = .87$), $t(403) = 3.10$, $p < .01$; and modification supports ($M = 3.27$, $SD = .76$), $t(403) = 2.97$, $p < .01$. Adaption supports were also statistically significant when paired with assistive technology supports and people supports (pairs 1 and 11; above). This suggests that adaptation supports were perceived as more important at ensuring a FAPE in the LRE than all other supports, except content instructional supports.

Results for the category of "modification supports" versus other support categories indicated that there was a significant difference between one of the six paired combinations (pair 9; above). No significant differences occurred when paired with people supports, accommodation supports, content instructional supports, and social behavioral supports were identified (pairs 4, 16, 17, 18), $p > .01$. This suggests that educators perceived modification supports to be more important than assistive technology supports, yet less important than the other support categories.

Results for the support category of "accommodation supports" indicated significant differences between the six paired combinations; however, only one of these pairs was in favor of this support. Although significant differences were noted when paired with content instructional supports ($M = 3.36$, $SD = .73$), $t(404) = -3.38$, $p < .01$ (pair 20), in this case, educators perceived this support to be less important than content instructional supports. The only significant difference where accommodation supports were more important was when they were compared to assistive technology (pair 7; above).

Results for the support category "content instructional supports" indicate significant differences when paired with two of the six paired combinations (pair 10: assistive technology, pair 20: accommodations; above). No significant differences were identified when paired with any other support categories. As discussed above, the only significant differences were noted when content instructional supports were paired with assistive technology supports and accommodation supports.

Results for the support category "social behavioral instructional supports" have been discussed in the above paragraphs; however, significant differences were noted between this category and three other support categories: assistive technology supports (pair 8), adaptation supports (pair 13), and content instructional supports (pair 21). In general, educators only perceived social behavioral instructional supports to be more important than assistive technology supports with regard to ensuring students with IEPs receive a FAPE in the LRE. It was significantly lower than the two other categories.

In summary, educators perceived all six support categories to be more important in ensuring students with IEPs receive a FAPE in the LRE than assistive technology. Adaptation supports were perceived to be more important than people supports, assistive technology supports, modification supports, accommodation supports, and social behavioral instructional supports. Educators also perceived content instructional supports to be more important at ensuring a FAPE in the LRE than assistive technology supports, accommodation supports, and social behavioral instructional supports. Assistive technology supports were perceived as the least important support category when paired with other categories; while adaptation supports and content instructional supports were found more often than other support categories to be more important. These findings

reject the H_o, which indicated that there would be no differences in educators'

perceptions of importance in relation to the seven support categories.

Research Question 3

Are pre-service and practicing educators' attitudes toward the seven types of support related to their perceptions of intensity of support?

Participants were asked to read one vignette and rank the seven supports based on

their perceptions of importance and intensity in assuring access to a FAPE in the LRE.

Rankings for all seven support importance and intensity categories were combined across

the four vignettes to allow for analysis. A nonparametric procedure, the Spearman's rank

order correlation coefficient, was run to see if ratings of importance were related to

ratings of intensity for each paired support (i.e., importance of people supports and

intensity of people supports). The data are presented in Table 11.

Table 11

Relationship between Paired Support Importance and Intensity

Support Category	n	r_s	p
Adaptation Supports Importance – Intensity	402	.01	.81
People Supports Importance – Intensity	404	.16*	<.01
Content Instructional Supports Importance – Intensity	403	.19*	<.01
Accommodation Supports Importance – Intensity	404	.20*	<.01
Assistive Technology Supports Importance – Intensity	404	.25*	<.01
Modification Supports Importance – Intensity	403	.26*	<.01
Social Behavioral Instructional Supports Importance – Intensity	404	.30*	<.01

Note. *Correlation significant at the 0.01 level (2-tailed).

A series of Spearman Rank-order correlations were conducted to determine if

there were any relationships between practicing and pre-service educators' ratings of

support importance and support intensity. The Spearman's rho revealed a statistically significant (p < .01) positive relationship between ratings of support importance and ratings of support intensity for six of the seven pairs: people supports (r_s(404) = .158), content instructional supports (r_s(403) = .193), accommodations supports (r_s(404) = .201), assistive technology supports (r_s(404) = .250), modification supports (r_s(403) = .262), and social behavioral instructional supports (r_s(404) = .277). In general, the higher the importance rating for a given support, the higher the intensity ranking. The only exception was for adaptation supports; while it was not statistically significant, there was a positive relationship between importance and intensity (r_s(402) = .012, p = .81).

The crosstabulation analysis with χ^2 specified was run by support and intensity categories to further investigate the relationship between perceptions of important and intensity of support. Results of the analysis are presented in Table 12.

The crosstabulation analysis revealed a positive relationship between importance and intensity for all support categories. Importance ratings were assigned on a scale from one to four, with one meaning the support was "completely unnecessary to assuring the student a FAPE in the LRE" and four meaning the support was "absolutely essential to assuring the student a FAPE in the LRE." Intensity ratings were assigned on a scale from one to three, with one being "low" and three being "high" as far as the effort and resources needed to implement the support.

In general, where respondents provided a rating of one or two (completely or only minimally important), they provided an intensity rating of one or two (low or medium intensity). Numbers were reported as percent's across each row adding up to 100% (Table 12). Percentages that are bolded in each row are meant to show where the highest

percentage of importance and intensity are distributed.

Table 12

Relationship between Ratings by Support Importance and Intensity

		Support Intensity % within Importance		
Support Importance % within Importance	Rating	1	2	3
People Supports Importance	1	33.3	0.0	**66.7**
	2	26.3	34.2	**39.5**
	3	15.1	**45.4**	39.5
	4	12.0	31.0	**57.0**
Assistive Technology Support Importance	1	**40.0**	**40.0**	20.0
	2	**39.3**	34.8	25.8
	3	20.8	**48.3**	30.9
	4	17.3	28.3	**54.3**
Adaptation Support Importance	1	**75.0**	12.5	12.5
	2	23.1	**41.0**	35.9
	3	24.6	**45.5**	29.9
	4	35.3	25.3	**39.4**
Modification Support Importance	1	**75.0**	16.7	8.3
	2	40.0	**42.5**	17.5
	3	24.2	**53.4**	22.5
	4	21.4	31.2	**47.4**
Accommodation Support Importance	1	**63.6**	27.3	9.1
	2	30.6	**51.6**	17.7
	3	15.8	**63.6**	20.6
	4	23.5	32.5	**44.0**
Content Instructional Support Importance	1	**42.9**	**42.9**	14.3
	2	30.8	**56.4**	12.8
	3	15.5	**67.1**	17.4
	4	24.5	30.6	**44.9**
Social Behavioral Instructional Support Importance	1	33.3	**40.0**	26.7
	2	37.5	**47.2**	15.3
	3	24.4	**56.3**	19.3
	4	18.2	31.3	**50.5**

Note: Bold indicates the greatest percentage by rating for each support importance category. Generally, this is 40% or above.

For example, for Adaptation Supports, where raters provided an importance rating of "completely unnecessary (1), they rated intensity as "*low*" (1), at a rate of 75%. Additionally, where raters provided an importance rating of "*minimally important*" (2), they provided an intensity rating of "*medium*" (2), at a rate of 41%. Similarly, where rates provided importance ratings of "*important*" (3), they also provided an intensity rating of "*medium*", at a rate of 45.5%. Finally, where raters provided an importance rating of "*absolutely essential*" (4), they provided an intensity rating of "*high*" (3), at a rate of 39.4%.

Additionally, where respondents provided a rating of importance at two or three, they also provided an intensity rating of two. Furthermore, respondents providing an importance rating of four generally rated intensity of the support as a three. With few exceptions (i.e., Social Behavioral Instructional Supports), the relationship between ratings of importance and ratings of intensity were positively related and generally, statistically significant.

Summary

Results from investigations highlighted in the three research questions were summarized above. Findings from research question one indicated that while there are slight differences between ratings of support importance for pre-service and practicing educators and special and general educators, these differences were not statistically significant across three of the four vignettes. Differences were found for Eli (learning disability) between both Educator Rank and Educator Type. Although the H_o can be accepted for Sarah, Madison, and Adam, it was rejected for Eli. Significant differences in perceptions of supports between practicing and pre-service educators, as well as

special and general educators were noted in the data.

Results from research question 2 indicated that educators rated the importance of the seven categories differently. They perceived assistive technology supports to be less important than all other support categories in ensuring students with IEPs receive a FAPE in the LRE. On the other hand, adaptation supports and content instructional supports were found more often than other support categories to be perceived as more important. These findings reject the H_o, which indicated that there would be no differences in educators' perceptions of importance in relation to the seven support categories.

Findings from research question 3 indicated that, in general, the higher the rating of support importance, the higher the rating of support intensity. The only exception was for adaptation supports; while it was not statistically significant, there was a positive relationship between importance and intensity. The H_o which assumes that educators' attitudes toward the seven support categories are not related to their perceptions of intensity was rejected. A discussion of these findings will be presented in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Students with disabilities found eligible for special education and related services are afforded the right to a free and appropriate education (FAPE) in the least restrictive environment (LRE; U.S. Sec. 1412[a][l] & [a][5]). Additionally, schools are required to "ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education" as mandated by the No Child Left Behind Act (NCLB; Sec. 1001, 2001). These two pieces of legislation highlight the fact that schools are not only responsible for the educational progress of all students, but are also required to provide access to and ensure progress in the general education curriculum. However, the idea of access alone may not be sufficient for students found eligible for special education and related services, and supports may be necessary in order to provide instruction in the general education curriculum to the maximum extent possible.

The social-ecological approach, based on the premise of utilizing supports to increase engagement and human functioning, further promotes the idea of using supplementary supports and services as a method for bridging the gap between personal competencies and demand of the environment. In order to meet the needs of students with disabilities in the general education setting, proper supports are necessary and a full array of supports must be considered when making determinations on behalf of students with IEPs. Although the importance of providing supports to students with disabilities

has a long-standing history, very little is known about educators' perceptions and understandings of the importance of arranging supports for students with disabilities (Lee et al, 2009; Luckasson et al., 1992; Schalock et al., 2002; 2010; Soukup et al., 2007; Thompson et al., 2009; Walker, DeSpain, Thompson, & Hughes, 2014). If educators are to put personalized supports in place for students with IEPs, then it is imperative for them to perceive supports aligned with a student's needs as valuable and necessary. Therefore, it is important to understand the extent to which educators perceive different types of supports as useful.

The purpose of this study was to better understand the priority that educators ascribe to different types of supports provided in the general education to students with IEPs. The purpose was also to investigate the extent to which the intensity (amount of time, resources, energy needed to implement) of supports related to the priority that educators placed on providing different types of supports. To ensure this purpose was fully investigated, vignettes and surveys were developed to collect data on educators' perceptions of seven different categories of support (i.e., people supports, assistive technology supports, adaptation supports, modification supports, accommodation supports, content instructional supports, and social behavioral instructional supports). This chapter provides conclusions regarding analysis of data as they relate to the research questions, limitations, and recommendations for future research.

Summary of Findings and Discussion

Research Question 1

Do pre-service and practicing educators differ in regard to the importance they place on providing different types of classroom-based supports to students with IEPs in the general education setting?

Summary of findings. A two-way analysis of variance (ANOVA) was conducted to investigate ratings of support importance between pre-service and practicing educators (Educator Rank), as well as special and general educators (Educator Type). In addition, the interaction effect of Educator Type by Educator Rank was examined. These will be discussed below.

Interaction effect of educator rank by type. Results reflected that there were no significant differences in the interaction between Educator Rank and Educator Type. In other words, being a pre-service special or general educators, or practicing special or general educator had no relation to ratings of support importance. This finding was true for all four vignettes (i.e., Sarah, Madison, Adam, Eli).

Educator rank. Perceptions of support importance were not related to Educator Rank across three of the four vignettes (i.e. Sarah- intellectual disability/cerebral palsy, Madison- ADHD, Adam- autism). This means that pre-service educators did not rate the seven categories of support significantly different than practicing educators. Significant differences were, however, found between ratings of support importance for both pre-service and practicing educators for Eli (learning disability). On average, practicing educators rated the importance of the combined mean of the seven categories of supports higher than pre-service educators.

Discussion. Given that the only significant differences found were for Eli, a discussion of results will only focus on potential reasons for differences related to this vignette. The reason for the differences in ratings between pre-service and practicing educators were not investigated in this study. However, one reason for differences

between pre-service and practicing educators could be the result of experience in the field and understanding the necessity of supports for all students with disabilities.

Given that pre-service educators have little experiences in the classroom setting, they may be naïve in their understanding of the supports that students with specific learning disabilities might need and how their disability impacts them in the general education setting. Therefore, they might have a more positive view of the abilities of students with learning disabilities and for them to be less in need of supports. Furthermore, they might view the learning disability to only affect the student in one subject area, and while the supports might be helpful, they might not view all of them as essential for the student. Research suggests that pre-service teachers have more positive attitudes towards the inclusion of students with disabilities in the general education setting early on in their respective programs (Mintz, 2007) or after included experiences in schools (Barr & Bracchitta, 2008; Golmic & Hansen, 2012; Jung, 2007).   These authors identified a need to focus on topics related to inclusion and equitable treatment of students with disabilities in teacher education programs in order to promote more successful inclusionary experiences for all students (Berry, 2010; Crowson & Brandes, 2012; Jung, 2007). Practicing educators likely have some classroom experience working with students with specific learning disabilities, and therefore, might have a better understanding of how the disability can impact them in the general education setting; leading to higher ratings of support importance than those from pre-service educators.

Educator type. Perceptions of support importance were also not related to Educator Type across three of the four vignettes (i.e. Sarah–intellectual disability/cerebral palsy, Madison- ADHD, Adam–autism). Again, this means that general educators did

not rate the seven categories of support significantly different than special educators. Significant differences were, however, found between ratings of support importance for both general and special educators for Eli (learning disability). On average, the ratings of support importance for Eli indicate that general educators rated the combined mean of the seven categories of supports higher than special educators.

   Discussion. The reasons for the differences in ratings between special and general educators were not investigated in this study. However, one reason for differences between pre-service and practicing educators could be the result of experience in the field. In relation to Educator Type, general educators rated the combined mean of the seven categories of supports higher than special educators for Eli. According to the vignette, Eli received services under the IDEA eligibility category of specific learning disability. Course work and experience working with a range of student abilities might have led special educators to believe the supports suggested in the vignette were not as essential in ensuring a FAPE in the LRE. On the other hand, general educators might have less experience brainstorming and implementing supports and perceived the supports to be more essential because the IEP team in the vignette suggested the supports were necessary.

   If the eligibility category did sway the perceptions of the importance of supports among educator groups, it is strange that ratings of support importance for Madison were not rated significantly different given that she too, received services for a high incidence disability. Yet given that Madison had some behavioral tendencies that interfered with her academic achievement, these behaviors may have prompted participants to rate each category of support similarly.

Although some may identify autism as a high incidence disability, students identified for special education and related services under this eligibility category generally need supports to facilitate progress in all areas of school life (i.e., social, emotional, behavioral, communication, academics, functional). Educators' prior experience or beliefs about working with students with autism might have led to the perception that all supports would be necessary in order for a student, such as Adam, to receive benefit from the general education setting. In regard to this, Sansosti and Sansosti (2012) found that teachers viewed students with autism as needing supports more frequently than other students with disabilities. In light of this finding, the participants in this study might have perceived all of Adam's supports to be necessary.

Sarah was eligible for special education and related services under the eligibility category of intellectual disability (cerebral palsy) and given the extent of mismatch between her personal competencies and demands of the general education setting, all educators might have perceived all supports to be important. Sarah also had ambulatory and behavioral issues, which could have further led to perceptions of greater support need across all educator groups. Given this, behavioral issues and physical limitations may have also led participants to perceive supports as more important for Sarah, Madison, and Adam, regardless of Educator Rank and Educator Type.

Researchers have found that the presence of challenging behaviors negatively impacts educators' attitudes towards students with challenging behaviors. Furthermore, behaviors such as hyperactivity, impulsivity, screaming, aggression, and opposition often resulted in diminished relationships between the student and teacher (McGregor & Campbell, 2001; Robertson, Chamberlain, & Kasari, 2004; Wilkerson, 2012). In light of

this research, educators in this study might have perceived the suggested supports to be of even more importance for Sarah, Madison, and Adam due to the presence of challenging behaviors and their previous attitudes towards students with behavioral tendencies. Although educators might have perceived supports for students with learning disabilities, such as Eli, to be necessary, those with more expertise in working with this population may perceive some categories of support to be less important than others because there was no presence of behavioral tendencies or physical limitations.

Johnson and Pugach (1990), who investigated general educators who had students with mild learning and behavioral problems, found that these educators rated supports higher when they related to collecting data and highlighting engagement in positive behaviors. Educators rated supports lower when they related to providing systematic feedback, collaborating with other educators on methods to address the problem behaviors, and analyzing academic skills and teaching prerequisite skills. The researchers indicated that educators most often cited that they did not use an intervention strategy because they did not feel they had the authority to implement it. The supports highlighted in the corresponding vignettes may have been strategies that general educators felt they would have authority to implement and related to; therefore leading to higher combined mean scores for the support categories, especially related to Eli. Led

Summary. Several studies have investigated pre-service and practicing educators' attitudes toward inclusion. Gokdere (2012) found that there were significant differences between pre-service and practicing teachers' attitudes. Pre-service teachers held more positive views than practicing teachers. Mintz (2007) also found that many pre-service educators held positive views toward inclusion and needs of students with

disabilities. Additionally, Jung (2007) identified that students held more positive views of inclusion early on in their education program than during their student teaching experience. Gokdere (2012) also found that those who indicated greater knowledge of special education also held more positive attitudes toward students with disabilities. Educators' perceptions of supports in this study only differed for Eli. General educators rated the importance of supports higher than special educators, and therefore, one could conclude that special educators had slightly higher perceptions of the student's abilities and perceived the supports to be less important. This is important given that Eli was the only vignette in this study who did not have additional maladaptive behaviors or physical limitations that necessitated supports specific to those issues. IDEA provides provisions for supplementary aids and supports in the IEP that must be utilized in providing a FAPE in the LRE. For this reason it is important that all educators perceive all categories of support as important so that they consider a full array of supports that may be necessary, regardless of a student's eligibility category.

Research Question 2

Do pre-service and practicing educators perceive any of the seven potential support types to be more important than others when assuring students with IEPs have access to a FAPE in the LRE?

Summary of findings. Educators' ratings of seven categories of support were investigated to identify whether there were perceptions that certain categories of supports were more important than other categories of support. Descriptive statistics on support importance for the mean of the seven categories of support indicated that assistive technology supports were rated as the least important (3.05), while adaptation supports were rated as the most important (3.41). Categories of support were rated on a 4-point

Likert scale with "4" being the highest rating. Given this, the mean scores for the seven support categories indicated that educators perceived all of the categories to be important (3.05 to 3.41). Results of the repeated-measures ANOVA, however, indicated that even though educators rated all supports as important, there were significant differences in ratings of support importance. Given this, a paired samples t-test was run to determine where differences existed in regards to which support categories were perceived to be more important.

Results reflected that adaptation supports (i.e., highlighted readings, preferential seating, visuals, supported eText readings) and content instructional supports (i.e., tutoring, teach previewing, teach SQ3R, utilize manipulatives) were perceived more often than other support categories to be more important; while assistive technology supports (i.e., calendar application, Watch Minder, AAC device, supported eText device) were perceived as the least important when paired with all other support categories.

Discussion. Explanations targeted at investigating why some supports were perceived to be more important than others are beyond the scope of this study; however, possible reasons for these differences will be discussed below and will focus on those supports perceived to be the most or least important.

Intensity of implementation and perceptions of support importance. The mean score for assistive technology supports (M = 3.05) indicated that educators perceived these supports to be less important than the other six categories. IDEA 2004 requires that IEPS teams consider assistive technology devices and services based on the unique learning needs of the student and to maximize access to the general education setting (IDEA, 2004; 20 U.S.C. 1400(c)(5)(H)). The Common Core State Standards Initiative

(CCSS, 2014) also discusses the need for students to have access to assistive technology supports in order to foster engagement and individual support for learning within the common core framework. Based on the fact that assistive technology supports are specifically discussed in these two documents, it is surprising that the combined mean score was not higher.

Although the participants in this study did not rate assistive technology supports as "minimally" or "not" important, they did rate this category lower than the other six categories of support. Lower ratings of importance could be due to perceptions of intensity (i.e., time, resources, energy) confounding perceptions of importance. Flanagan and colleagues (2013) reported that cost was a barrier to using assistive technology specifically related to literacy instruction, even though the educators included in the study perceived assistive technology to be an important tool. Findings from research question three, as will be discussed shortly, indicated that intensity did not negatively relate to importance. Given this, the cost involved in purchasing assistive technology devices, as well as the time it might take to train and implement the device, were not the reasons for the lower mean rating in the current study. In general, the intensity of implementing assistive technology supports did not relate to ratings of importance, nor did intensity relate to importance for any of the other six categories of support. Given this, other possible explanations are explored below.

Experience and perceptions of support importance. Because the intensity of the supports was not related to educators' perceptions of importance, educators' prior experiences with assistive technology devices may have led to the lower mean ratings. The participants in this study may have had limited experience or training in using these

devices, or their experiences may have been negative in cases where they had prior experience. Furthermore, the assistive technology supports suggested in the vignettes (i.e., calendar application, Watch Minder, AAC device, Supported eText & portable spell checker) may have been unfamiliar or viewed as less essential in ensuring a FAPE in the LRE for students with IEPs. Flanagan and colleagues (2014) investigated teachers' perceptions of assistive technology and identified that usability and lack of training or experience in using assistive technology were barriers to using such devices in the general classroom. Ludlow (2001) also identified that lack of knowledge, even for educators who are aware of assistive technology devices, may hinder understanding of use or application. Furthermore, difficulty using and managing assistive technology during instruction, negative attitudes, and time constraints were reported to be other barriers impacting educators' perceptions (Copley & Ziviani, 2004). Yet educators' positive experiences and student success led to confidence in using assistive technology (Flanagan, Bouck, & Richardson, 2013). As discussed above, the participants in this study may have slightly less experience, knowledge, and/or training with assistive technology supports than the six other categories of support which led to the lower mean rating.

Adaptations supports (M = 3.41; i.e., highlighted readings, preferential seating, visuals, Support eText readings) and content instructional supports (M = 3.36; i.e., tutoring, teach previewing strategies, utilization of manipulatives, teach SQ3R), were found more often when paired with other support categories, to have statistically significant higher mean scores. Higher ratings of importance could reflect the frequency with which educators rely on these types of supports in the general education setting.

Higher ratings could also be related to previous knowledge and experience with these type of supports. McLesky and Waldron (2002) investigated curricular adaptations in inclusive settings prior to and one year after professional development and implementation of inclusive practices. They found that educators were supportive of implementing and managing curricular adaptations, especially in light of the yearlong training they received prior to the establishment of inclusive practices in the school. Avramidis and colleagues (2000) and deBettencourt (1999) reported similar findings.

Response to Intervention and other tiered models of intervention may also be contributing to higher mean ratings of importance for these categories. Based on this researcher's participation on RtI teams, it seems that intervention teams often suggest adaptions (i.e., creating or adapting classroom materials to make them accessible to the student) and content instructional (i.e., strategies targeted to content skill development) types of supports as a first line of defense when implementing strategies for students struggling to make adequate progress in the general education setting. Ciullo and colleagues (2016) investigated implementation of evidence-based practices primarily for literacy development. They found that explicit instruction, cognitive strategy instruction, content enhancements, and independent practice opportunities were not implemented with frequency; many of which fall under the adaptation and content instructional support categories in this study. Klinger and colleagues (2010) reported similar findings. Much of the literature on RtI focuses on best practices and available evidence-based practices to date, rather than focusing on the frequency of use or perceptions of interventions and supports used within an RtI framework. It is surprising however, if this is the reason for the differences, that modifications and accommodations weren't rated more similarly.

Summary. The social-ecological model provides a framework for understanding disability as a mismatch between personal competencies and the demands of culturally valued environments and activities (Luckasson et al., 1992, 2002; Schalock et al., 2010). Within this framework, supports are necessary to bridge the gap between those competencies and demands of the environment. In order for educators to fully address any mismatches, supports must be considered from a full array of supports available. If educators perceive some supports to be more important than others, then they may not be fully considering a fully array of supports for each student. This may cause issues with supports that are misaligned given the context and competencies of the student included in the general education setting, and therefore led to limited access to the general education setting. Findings from this investigation highlight the importance of educator training on addressing the support needs of students with disabilities in the general education setting, as well as, the need for experience in using an array of supports to meet the needs of students in inclusive settings.

Research Question 3

Are pre-service and practicing educators' attitudes toward the seven types of
support related to their perceptions of intensity of support?

The Spearman's rank order correlation coefficient was run to see if ratings of support importance and intensity were related. Essentially, this researcher wanted to investigate whether the resources, time, or energy it might take to implement a support would relate to educators ratings of the importance of those supports. Statistically significant positive relationships ($p < .01$) were found between all support categories with the exception of adaptation supports. The higher the importance rating, the higher the

rating of intensity for six of the seven support categories (i.e., people supports, content instructional supports, accommodation supports, assistive technology supports, modification supports, and social behavioral instructional supports). Although adaptation supports were not statistically significant, there was a positive relationship between importance and intensity. To further investigate the relationship between ratings of support importance and intensity, the crosstabulation analysis with χ^2 specified was run.

       Summary of results. Results indicated that where participants provided a lower importance rating, there was typically a lower intensity rating. Similarly, where participants provided a higher importance rating, they also provided a higher intensity rating. In general, the relationship between ratings of importance and intensity were positively related and statistically significant, albeit, adaptation supports. This suggests that the intensity of implementing a support (i.e., resources, time, effort) did not relate to educators perceptions of the importance of implementing these supports. In other words, educators' perceived supports that were more intense to implement as supports that were also more important, while supports that were relatively easy to implement as less important. They did not seem to separate intensity from importance.

       Discussion. Had the mean ratings of support intensity been relatively low where the mean ratings of support importance were relatively high, we might deduce that ratings of importance were negatively related to ratings of intensity. This would allow us to conclude that educators perceived supports to be more important when they perceived them to be less intense to implement. Similarly, had the mean ratings of support intensity been relatively high when the mean ratings of importance were relatively low, then we might conclude that supports perceived to be very intense to implement were viewed as

less important. Except for people supports, where intensity rating was "medium" or "high" regardless of the importance rating, this was not the case for participants in this study. As with the other research questions, it is unclear as to why ratings of support importance and support intensity were positively related as it is beyond the scope of this investigation, however a discussion on possible explanations are presented below.

High intensity of supports. Educators included in this investigation appeared to perceive intensity (i.e., effort, time, and resource) as an indicator that supports were more or less worthwhile. For example, if a support was viewed as very intense to implement and would take a great deal more time, they perceived it to be more important or more valued because of the investment; whereas, if the support was relatively easy to implement and did not take that much time or energy, then it was perceived to be of less value. This may be a positive finding in that educators in this study were not deterred by rating supports as more important if they were intense to implement.

Johnson and Pugach (1990) investigated teachers' perceptions of the reasonability of intervention strategies for students with learning and behavior problems. They reported that teachers found talking with and collecting data from others, providing statements of praise, adjusting performance expectations, and providing encouragement to the student were the types of intervention strategies teachers rated as most reasonable. In contrast to the current study, these authors found accommodations, modifications, and people supports for consultative purposes to have higher ratings than other categories of support. Wilson and colleagues (1998) investigated teachers' knowledge and use of classroom interventions through use of a vignette where the teachers provided a list of necessary interventions that the student might need. The authors found the majority of

interventions suggested were behavioral in nature, followed by instructional interventions and adaptations to the classroom structure. Interventions in the study were not rated, rather they were only suggestions. Kargin and colleagues (2010) reported findings on perceptions of different adaptations that an educator might make to the physical and/or educational environments. Although educators reported both types of adaptations to be necessary, physical adaptations were implemented most often. The authors indicated that physical adaptations were more accepted and implemented because they required less knowledge of and were easier to implement. Contrary to the findings from Kargin and colleagues, educators in this current investigation did not necessarily perceive supports to be more important because they were easier to implement.

Another possible explanation is that educators might have only considered the rating of importance and merely marked an intensity rating to mirror it without fully considering whether the intensity would truly influence their rating of importance. As the idea of utilizing supports to improve access to culturally valued settings is relatively new in terms of research, it was difficult to find research that investigated how the intensity of supports relates to or impacts the value that educators place on different types of support, as in the current study. Research to date has primarily focused on barriers to implementation and perception studies. Connecting the findings in this investigation to research, as a result, was difficult.

Summary. Findings on this research question are important because it may be necessary for school personnel to consider the impact that intensity can have on educators' perceptions of importance. If educators only view supports that are more intense to implement (i.e., greater time, effort, resources) as important in supporting

students in the general education setting, then schools may be confronted with issues of availability of resources. Furthermore, there are likely instances where supports that are very inexpensive and take minimal effort to implement would be better. In addition, it is important for educators be able to thoroughly consider the pros and cons of implementing supports from an array of supports given that every child is unique in the needs they bring to the inclusive setting.

Implications for Practice

This investigation is important because it provides those working in teacher education programs (i.e., researchers, professors, administrators) a closer look at educators' perceptions of supports that could be implemented to better meet the needs students with IEPs in the general education setting. Researchers have found that educators often rate supports differently based on ease of use and those they felt they had the authority to implement (Johnson & Pugach, 1990; Kargin, Guldenoglu, & Sahin, 2010; Wilson, Gutkin, Hagen, & Oats, 1998). Therefore, early experience for pre-service educators that provides opportunities to learn about and practice assessing support needs, brainstorming and researching potential supports, and implementing those deemed most appropriate through a team based approach may be necessary. Furthermore, researchers investigating attitudes and perceptions of educators towards students with IEPs included in general education settings have identified a need to focus on topics related to inclusion and equitable treatment of students with disabilities in teacher education programs (Berry, 2010; Crowson & Brandes, 2012; Jung, 2007). This is important in order to promote more successful inclusionary experiences for all students and educating teachers about inclusion and equitable treatment. In addition, providing graduate level coursework

for practicing educators that focuses on assessing and implementing supports through structured projects in their own classrooms may help expand their capacity to utilize a social-ecological framework (Walker, DeSpain, Thompson, & Hughes, 2014).

The findings in this study also have implications for teacher education programs and providing opportunities for future educators to develop an understanding and knowledge of disability related issues; specifically, how disability (i.e., intellect, physical, emotional, behavioral issues) and demands of the inclusive environment create a unique set of support needs for each individual student. Particularly in light of findings that suggest educators working with students who engage in a high degree of challenging behaviors have more negative attitudes toward and diminished relationships with those students (McGregor & Campbell, 2001; Robertson, Chamberlain, & Kasari, 2004; Wilkerson, 2012). One would hope that by providing the necessary supports needed to bridge the gap between competency and demands of the environment, whether it be behaviorally or academically, educators' attitudes toward those students would also be improved because they would be better able to participate in the environment. Similarly, it would be important for educators who did not receive any of these educational opportunities in their pre-service teacher training to participate in workshops or in-service trainings on assessing and utilizing supports to improve access to and participation in the general education setting for students with disabilities.

Limitations of the Study

The questions in this study were investigated through surveys and self-reported perceptions. It is assumed that participants were honest in their answers; however. investigations based on self-reports are not the same as the actions one might observe

from the same participants. Therefore, the findings cannot be extended beyond that which

is reported as an opinion. Furthermore, participants were recruited through a convenience

sample rather than a random sample of pre-service and practicing educators. Although a

larger sample size of educators was recruited than initially assumed, the sampling method

limits the generalizability of findings to the population of educators. In addition,

participants were recruited from a university in central Illinois as well as three school

districts in the surrounding area with which the researcher had an established

relationship. It is possible that the educators recruited through the university in this study

were not reflective of the population of pre-service and practicing educators at all

universities with education programs, especially given the high number of educators

graduated from the university's education programs each semester. Similarly, it is also

possible that educators from the three schools (i.e., public elementary, laboratory high

school, private K-12) were not representative of the population of educators and that,

given the relationship between the schools and the researcher, the willingness of

educators to participate was different than what might be expected from a randomized

sample. Lastly, the vignettes created for the current study only highlighted students

eligible for special education and related services under four different eligibility

categories. IDEA (2004) discusses 13 eligibility categories in the federal law that

students can receive special education and related services under. Had the vignettes

highlighted students under the other categories as well, we might have uncovered other

areas for exploration that impact educators' perceptions of support importance.

Recommendations for Future Research

There are many avenues to explore as a result of the findings and limitations in this study. Participants (i.e., practicing special and general educators, pre-service special and general educators) in this study did not differ significantly in regard to their perceptions of support importance, with the exception of Eli, who was diagnosed with a learning disability. We might expect there to be differences in ratings of support importance between these groups due to level of experience and continued education and training. Given that this was not the outcome of this investigation, it might be important to replicate the current study and continue to explore whether other groups of educators rate the importance of supports similar to those included in this investigations or if there are significant differences in ratings between those groups. As the sampling procedure was a limitation in this study, it would also be interesting to see the results of a replication study with a purely randomized sample of pre-service and practicing educators.

As there were only four vignettes highlighting four different students with disabilities created for the current study, it may be worthwhile to create additional vignettes highlighting students with disabilities representative of the 13 eligibility categories for special education and related services. This would allow the investigation to explore whether disability related variables impact perceptions of support importance. Furthermore, adding to the vignettes might allow for a more in-depth investigation of how emotional and behavioral issues can further confound perceptions of support importance.

Due to limited existing research on the interaction between intensity of supports and perceived importance of supports, further investigating the effect that intensity (i.e., time, resources, energy) has on the value ascribed to different supports might be warranted. Intensity did not relate to perceptions of importance in this study, so continued investigations to see if similar findings are produced from replication studies is important. In addition, investigating why intensity might or might not relate to perceived importance may be another avenue to explore.

There is a growing body of research assessing the support needs of school-aged children through the social-ecological lens (Thompson & DeSpain, in press; Thompson et al., 2009; Walker, DeSpain, Thompson, & Hughes, 2014), however, little research exists that investigates educators' perceptions of different categories of supports that might be implemented for students with IEPs in the general education setting as a part of this framework. Furthermore, investigating more closely how subject area, years of teaching, number of special education courses taken, and experience with students with disabilities influences ratings of support importance.

Chapter Summary

This investigation was a first attempt at identifying specific categories of supports and developing a survey that investigates educators' perceptions of these categories of through the lens of the social-ecological framework. IDEA requires that all students with disabilities have access to a FAPE in the LRE and provisions for supplementary supports and services are embedded within this law. In line with the social-ecological framework, CCSS, and IDEA, supports are an essential component in ensuring students with IEPs have access to and make progress in the general education curriculum. There is also a

push in education today to include all students in the general education setting as can be a testament to contemporary trends in education (i.e., RtI, SWPBIS, UDL) and legislation (i.e., IDEA, NCLB). The purpose of this investigation was to explore educators' perceptions of different categories of support aimed at bridging the gap between competencies and environmental demands to promote the success of students with IEPs in the general education setting.

Conclusions drawn from this study suggest that educator groups rated supports similarly, despite differences in Educator Rank and Type with the exception of one vignette. Although the seven categories of support had mean scores in the "important" range (rating score "4"), there were significant differences when categories were paired against each other. Assistive technology supports had the lowest mean score, while adaptation supports had the highest mean score. Furthermore, the conclusions suggest that the higher the importance rating, the higher the intensity rating. Seemingly, educators appeared to perceive that supports were more important if they were more intense to implement.

Recommendations to improve understanding of the social-ecological approach and assessing and implementing supports chosen from a comprehensive array of possible supports includes coursework at the pre-service level, trainings or workshops for practicing educators, and consultation with school team from researchers in the field of support needs. If educators are to value all categories of supports and thoroughly weigh the pros and cons when deciding which supports to implement, then something must be done in the way of educator training and consultative support to promote understanding and acceptance of this approach.

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APPENDIX A

E-MAIL TO INSTRUCTORS TEACHING GRADUATE AND UNDERGRADUATE

COURSES IN THE COLLEGE OF EDUCATION, DEPARTMENT OF SPECIAL

EDUCATION, AND SCHOOL OF TEACHING AND LEARNING

Dear [ISU instructor],

I am sending you this e-mail because you are listed as an instructor for an under-graduate or graduate level course during the Fall 2015 semester. I, or my dissertation advisor (Dr. Nicole Uphold), would like to come to your class at some point during the semester to recruit your students to participate in my study and collect data. We will spend approximately 10 minutes describing the purpose of the study and providing instructions to the students. Then, I will distribute a manila envelope with a consent form, survey, vignette, and article to students. Any student who wishes to participate in the study will be asked to sign the consent form, read the enclosed vignette, and complete the survey. Any student who does not wish to participate in the study will be asked to check the box "I do not wish to participate at this time" on the consent form and provide a signature. They will also be asked to read the enclosed article on assessing and implementing supports in a K-12 setting (Walker, DeSpain, Thompson, & Hughes, 2014). Every student in your class will be asked to check the box that corresponds with their willingness to participate in the study and provide a signature. The survey will take approximately 20 minutes to complete. In total, I would use approximately 30 minutes of class time. To minimize coercion, your presence is not required, and I will contact you when the potential participants have finished.

The purpose of the survey is to investigate the relative priority that educators place on providing different types of supports to assure that children with disabilities receive a free and appropriate public education (FAPE) in the least restrictive environment (LRE). Specifically, participants will be asked to rate the importance they place on the supports indicated in their vignettes.

Once again, the purpose of the research study will be explained to your class and your students will have the opportunity to agree or decline participation. Each student will get a different vignette and survey, but everyone will get a copy of the same article.

If you are interested in having me or my dissertation advisor (Dr. Nicole Uphold) come to your class, please send me an e-mail indicating the date and time that would be most convenient for you. This research project has been approved by the Illinois State University Institutional Review Board. Questions or concerns regarding this activity should be addressed to the Chairperson of the Institutional Review Board, Research Ethics and Compliance Office, Illinois State University, Campus Box 3330, Normal, IL 61790-3330; (309) 438-2529.

Thank you in advance for your consideration,

Stephanie N. DeSpain
Instructional Assistant Professor & Doctoral Candidate
Department of Special Education
Illinois State University -MC 5910
Normal, IL 61790-5910

APPENDIX B

EMAIL TO SCHOOL DISTRICT ADMINISTRATORS

Dear (Administrator),

I am sending you this e-mail because you have been identified as an institution that might be willing to allow recruitment of educators that might be interested in participating in my study. I, or my dissertation advisor (Dr. Nicole Uphold), would like to come to your school at some point during the fall 2015 semester to recruit educators to participate in my study and collect data. We will spend approximately 10 minutes describing the purpose of the study and providing instructions to the educators. Then, I will distribute a manila envelope with a consent form, survey, vignette, and article to students. Any educator who wishes to participate in the study will be asked to sign the consent form, read the enclosed vignette, and complete the survey. Any educator who does not wish to participate in the study will be asked to check the box "I do not wish to participate at this time" on the consent form and provide a signature. They will also be asked to read the enclosed article on assessing and implementing supports in a K-12 setting (Walker, DeSpain, Thompson, & Hughes, 2014). Every educator in your school will be asked to check the box that corresponds with their willingness to participate in the study and provide a signature. The survey will take approximately 20 minutes to complete. In total, I would use approximately 30 minutes of time.

The purpose of the survey is to investigate the relative priority that educators place on providing different types of supports to assure that children with disabilities receive a free and appropriate public education (FAPE) in the least restrictive environment (LRE). Specifically, participants will be asked to rate the importance they place on the supports indicated in their vignettes.

Once again, the purpose of the research study will be explained to you and the other educators in the building and you will have the opportunity to agree or decline participation. Each educator will get a different vignette and survey, but everyone will get a copy of the same article.

If you are interested in having me or my dissertation advisor (Dr. Nicole Uphold) come to your school, please send me an e-mail indicating the date and time that would be most convenient for you. This research project has been approved by the Illinois State University Institutional Review Board. Questions or concerns regarding this activity should be addressed to the Chairperson of the Institutional Review Board, Research Ethics and Compliance Office, Illinois State University, Campus Box 3330, Normal, IL 61790-3330; (309) 438-2529.

Thank you in advance for your consideration,

Stephanie N. DeSpain
Instructional Assistant Professor & Doctoral Candidate
Department of Special Education
Illinois State University -MC 5910
Normal, IL 61790-5910

APPENDIX C

LETTER OF CONSENT FOR PARTICIPATION IN STUDY

Dear Educator:

We are professors in the Department of Special Education at Illinois State University. We are conducting a research study to investigate the importance that pre-service and practicing teachers ascribe to different types of supports implemented on behalf of students with disabilities in the general education setting.

I am requesting your participation, which will involve:
1. Consenting to participate in this research by reading and signing this form.
2. Completing a demographic form.
3. Reading a vignette about a student with a disability.
3. Completing a corresponding survey which asks you to rate the importance and intensity of supports indicated in the vignette.
4. Returning the completed forms to Stephanie DeSpain or Dr. Nicole Uphold.

Your participation in this study is voluntary. If you choose to participate, it will take you approximately 20 minutes to read the vignette and complete the corresponding survey. The results of the research study may be published, but your responses will be completely confidential. You may choose to withdraw from the study at any point without penalty. There is no direct benefit, nor are there adverse consequences to you from participating in this study.

If you have any questions concerning the research study, please contact us at snabaker@ilstu.edu or nmuphol@ilstu.edu.

Please know that this research project has been approved by the Illinois State University Institutional Review Board. Questions or concerns regarding this activity should be addressed to the Chairperson of the Institutional Review Board, Research Ethics and Compliance Office, Illinois State University, Campus Box 3330, Normal, IL 61790-3330; (309) 438-2529.

Sincerely,

Stephanie N. DeSpain & Dr. Nicole Uphold

☐ I consent to participating in the above study.
☐ I do not consent to participating in the above study.

_____   _____   _____
 Printed Name   Signature   Date

APPENDIX D

RECRUITMENT PRESENTATION

Recruitment Presentation

EDUCATOR PERCEPTIONS OF SUPPORTS IN THE GENERAL EDUCATION SETTING FOR STUDENTS WITH IEPS

Stephanie DeSpain & Nicole Uphold

SCHEDULE FOR 5 MINUTE INTRODUCTION

- I will explain the reason for the study and describe what you will be asked to do.
- You can ask me any questions.
- You can choose to participate or not. If you decide to participate, you can change your mind at any point in time.

THE BIG IDEA

- People with ID/D are different from the general population because .....

  - they need more intensive and different types of support to live in an interdependent world

    - Extra supports to make a contribution
    - Extra supports to fully participate in life activities
    - Extra supports to be safe from danger and exploitation
    - Extra supports for a high quality life

UNDERSTANDING PEOPLE WITH ID/D BY THEIR SUPPORT NEEDS IS MORE FUNCTIONAL (I.E., USEFUL) <u>FOR PURPOSES OF PLANNING</u> THAN UNDERSTANDING THEIR DEFICITS, ETIOLOGY, ETC.

FEDERAL LAW…

- Provides that all students with IEPs should receive a FAPE in the LRE.

- In order to educate students with disabilities in the LRE, supports are needed to enhance meaningful engagement and success in the general education curriculum.

- Yet, little is known about educator perceptions of the importance of arranging supports for students with disabilities to increase their engagement in regular education classrooms.

THE PURPOSE OF THIS INVESTIGATION…

- Is to investigate the relative priority that you might ascribe to different types of supports provided in general education classrooms to students with IEPs.

- Additionally, the extent to which the intensity of the support influences the priority you place on providing different types of supports will be investigated.

YOUR PARTICIPATION REQUIRES

- Reading the consent form, indicating your level of participation, and providing your signature

- If you choose to participate,
  - Completing the enclosed demographic form
  - reading the vignette enclosed in the vignette and completing the corresponding survey (ratings and explanation for ratings)

- If you choose not to participate there is an article that you may read enclosed in the same envelope

- Upon completion, return the consent form, vignette, and survey in the original envelope to the researcher– it should take you 15 to 20 minutes.

REMEMBER.

- You can choose to participate or not. If you decide to participate, you can change your mind at any point in time.

QUESTIONS?

APPENDIX E

PRACTICING EDUCATOR DEMOGRAPHIC FORM

Gender:　　　☐ Male　☐ Female

Do you consider yourself primarily a:　　　☐ Special Educator　　☐ General Educator

　　　　　　☐ Special Educator Administrator　　☐ General Educator Administrator

1. Are you currently employed as an educator?　　☐ YES　　☐ NO

2. If no, what year were you last employed as an educator? _____

3. Current or Most Recent Position in Education: _____

4. Other positions held in education: _____

5. Which age level best describes the children with whom you currently work or with whom you worked during your last teaching job?

   ☐　Elementary

   ☐　Middle School

   ☐　Secondary

6. How many years have you been employed as an educator for your entire career?

   _____

7. How many courses have you taken that directly relate to special education?

   _____

8. What type of licenses or certificates do you hold? _____

   _____

Instructions for Survey: The purpose of this research study is to investigate the importance that educators ascribe to different types of supports provided to students with disabilities in the general education setting to ensure a free and appropriate education in the least restrictive environment.

It should not take you more than 20-30 minutes to complete. There are no right or wrong answers; the only requirement is that you provide your thoughtful and honest ratings and opinions. Please be assured that your responses will remain confidential and will be locked in a secure location.

APPENDIX F

PRE-SERVICE EDUCATOR DEMOGRAPHIC FORM

Gender:　　　☐ Male　☐ Female

1. Teacher education program:

      ☐ LBS-1　　　　　　　☐ SLP　　　　　　☐ Audiology

      ☐ LVB　　　　　　　☐ DHH　　　　　☐ Middle School

      ☐ Middle Education　　　☐ Secondary Education

2. Year in Program: _____

3. Experience working with students with disabilities: _____

_____

4. Which age level best describes the children with whom you would like to work?

      ☐ Elementary　　☐ Middle School　　☐ Secondary

5. How many courses have you taken that directly relate to special education?

_____

Instructions for Survey: The purpose of this research study is to investigate the importance that educators ascribe to different types of supports provided to students with disabilities in the general education setting to ensure a free and appropriate education in the least restrictive environment. There are four total vignettes and corresponding surveys, you will only receive one vignette and survey. It should not take you more than 20-30 minutes to complete. There are no right or wrong answers; the only requirement is that you provide your thoughtful and honest ratings and opinions. Please be assured that your responses will remain confidential and will be locked in a secure location.

APPENDIX G

EXPERT PANEL SURVEY

Part 1: Distinct Categories of Support-

1. A social-ecological conceptualization of disability focuses attention on the mismatch between people's personal competencies and the performance expectations associated with culturally valued settings and activities. Disability is evident when there is a significant and chronic mismatch. This conceptualization of disability is in contrast to more traditional conceptualizations (i.e., the medical model) where disability is understood as defect within a person, a trait that most others in the population do not have. "Supports" bridge the gap between the limitations in personal functioning and environmental demands. In terms of a general education classroom, anything that increases the capacity of the student to participate in classroom activities and anything that increases the capacity of classroom environment to fully include a student (i.e., mitigates the demands of settings or activities) is considered to be a support. Although there are multiple typologies for classroom supports, the following seven support domains represent one typology. Please indicate whether or not you agree that each domain of support can be distinguished from the other 6 domains.

Support Category	This domain is distinct from the other six domains	This domain overlaps with one or more of the other six domains
Environmental Support #1 - People - Providing people to assist the student (this could include paid staff or volunteers, adults or peers).		
Environmental Support #2 - Technologies - Providing assistive technology or another type of technological support that enables a student to participate in settings and activities in ways that s/he otherwise could not.		
Environmental Support #3 - Adaptations - Adapting classroom and learning materials in ways that make them more accessible to the student.		

Environmental Support #4 - Modifications - Modifying performance expectations so the student is not required to submit the same level of work (i.e., could differ in quantity and/or quality) as most of the other students in a classroom. Environmental Support #5 - Accommodations - Modifying performance expectations so that the student can submit assignments and/or participate in classroom activities in alternative ways. Instructional Support #1 - Content Instructional Support - teaching strategies targeted to content (e.g., academic) skill development. Instructional Support #2- Social-Behavioral Instructional Support - teaching strategies targeted to social-behavioral skill development.		

2. Are there any areas or domains of support that are not accounted for in the 7 domains listed in the prior question? If so, what are they?

Part II: Categorizing Vignette Supports

1. Match Sarah's supports to the support domains.

	People - People offer a student special assistance/ support	Technologies - Assistive or other technologies are used to increase student participation	Adaptations - Classroom and learning materials are changed in order to make them accessible	Modifications - Different expectations (quality/ quantity) for a student's work on assignments /tests	Accom-modations – Alt. ways to participate in class and/or submit assign's/ tests	Content instructional supports - strategies targeted to content (e.g., academic) skill development	Social-behavioral instructional support-strategies targeted to social-behavioral skill development
Peer tutoring Sarah's assignments completed in class (e.g., labs)							
Add a calendar application to Sarah's smart phone to assist her with keeping track of assignments and responsibilities							

Adapt Sarah's textbooks by highlighting key information to make textbook reading assignments more accessible						
Create different and/or select a subset of examination questions for Sarah's classroom tests that reflect individualized learning expectations						

Allow Sarah to answer question(s) orally on Essay tests or test items						
Tutoring for Sarah from a special education teacher (using more explicit instruction) in all subjects						

Documentation of Sarah's "crying" incidents to monitor frequency and intensity, respond consistently across instructors and settings						

2. Match Madison's supports to the support domains.

	People - People offer a student special assistance/ support	Technologies - Assistive or other technologies are used to increase student participation	Adaptations - Classroom and learning materials are changed in order to make them accessible	Modifications - Different expectations (quality/ quantity) for a student's work on assignments /tests	Accom- modations – Alt. ways to participate in class and/or submit assign's/ tests	Content instructional supports - strategies targeted to content (e.g., academic) skill development	Social- behavioral instructional support- strategies targeted to social- behavioral skill development
Retired special education teacher (Check and Connect Mentor) volunteer to work with Madison on organization and self- monitoring							

Reminders and reinforcement of Madison's desired behaviors through a Watch Minder watch						
Preferential seating and seating schedule for Madison to use during testing and independent class work						
Designated area in which Madison can to stand and/or move around in during tests						

Completion of classwork via laptop and word processing software						
Teach Madison "previewing" strategies for assignments and seatwork						
Teach Madison self-monitoring of on-task behaviors (use with Watch Minder)						

3. Match Adam's supports to the support domains.

	People - People offer a student special assistance/ support	Technologies - Assistive or other technologies are used to increase student participation	Adaptations - Classroom and learning materials are changed in order to make them accessible	Modifications - Different expectations (quality/ quantity) for a student's work on assignments /tests	Accom-modations – Alt. ways to participate in class and/or submit assign's/ tests	Content instructional supports - strategies targeted to content (e.g., academic) skill development	Social-behavioral instructional support-strategies targeted to social-behavioral skill development
Help Adam stay connected to the learning environment through support from a paraprofessional							

Provide and teach Adam to use an Augmentative and Alternative Communication device with select vocabulary						
Add visuals in classroom and school environments to promote Adam's compliance with procedures and routines						
Monitor Adam's performance through permanent products, rather than classroom tests						

Create visual/tactile supports for Adam to use during whole group activities						
Utilize manipulatives with Adam during instructional times						
Teach Adam replacement behaviors for self-biting and reinforce working without self-stimulatory behavior						

4. Match Eli's supports to the support domains.

	People - People offer a student special assistance/ support	Technologies - Assistive or other technologies are used to increase student participation	Adaptations - Classroom and learning materials are changed in order to make them accessible	Modifications - Different expectations (quality/ quantity) for a student's work on assignments /tests	Accom-modations – Alt. ways to participate in class and/or submit assign's/ tests	Content instructional supports - strategies targeted to content (e.g., academic) skill development	Social-behavioral instructional support-strategies targeted to social-behavioral skill development
Special education teacher to co-teach in Eli's literature class							
Provide and teach Eli to use supported eText and portable spell checker							

Embed illustrations, picture/video links, and self-monitoring guided questions in Eli's Supported eText readings						
Simplify test questions and allow Eli extended time on tests						
Provide self-correcting materials for Eli to gain immediate feedback, correction, and submission of class work						

Teach Eli to use the SQ3R Method for studying and use outside of the classroom						
Teach Eli to request help through instruction, modeling, and role play						

APPENDIX H

VIGNETTE 1 AND SURVEY

Sarah is a 16-year old student at Gilmore High School. She has a diagnosis of intellectual disability and cerebral palsy. She uses a wheelchair to move about the school, but she can get out of the wheelchair on her own and walk a few steps without any support if she wants or needs to do so (e.g., in the cafeteria she will transfer from her wheelchair to a regular chair because she prefers to be out of her chair during lunchtime).

She takes 5 classes attended by students in the general education program during her school day, has a free "study hall" period where she can either go to the school library or attend a study hall, a lunch period, and a "resource period" where she meets 1:1 with a special education teacher who is also her case manager. The activities during the resource period vary from day to day. There are days when she receives guidance on studying for a test, other days she receives direct assistance on a course assignment, and still other days where the focus is on organizing materials and thoughtfully planning for up-coming events and assignments. Sarah has difficulty keeping her materials and schedule organized, and it not uncommon for her to forget to turn in assignments, forget to bring materials to class or bring the wrong materials, and to not keep track of homework assignments.

Sarah has made steady academic progress throughout her school career, but her proficiency in academic skills lag significantly behind the vast majority of her typically functioning peers in important ways. Currently, reading material written above a 4th grade-reading level is very difficult for Sarah to comprehend. Her writing is at a much lower level than her reading. Spoken language, however, is a relative strength. Although Sarah has shown the ability to complete computation problems (i.e., addition, subtraction, multiplication, division) in the past, she almost always uses a calculator for anything other than the most basic operations. Although Sarah has difficulty with mental arithmetic, she has demonstrated a basic understanding of certain higher order mathematic concepts such as estimation and ratio/proportion.

Sarah's teachers report that she pays attention in class and appears to understand the main ideas expressed during class presentations and class discussions. She is friendly with peers and adults. Peers view her as nonthreatening, and except for the occasional bully, she and most of her peers get along with one another quite well. Most peers and adults would state that Sarah can be quite charming in her own, unique way. However, she does engage in behaviors that suggest social immaturity. For example, Sarah cries rather easily over small matters, and she tends to continue crying as long as there are people are around her who are willing to express sympathy.

The IEP team has determined that Sarah's schedule (i.e., 5 periods in general education courses, 1 period for lunch, 1 study hall period, 1 resource period) during the school day offers her the least restrictive environment in which she can receive a free and appropriate public education. They are considering providing the following supports for Sarah to maximize her learning and participation in her general education classrooms:

1. Peer tutoring for assignments completed in the classroom (e.g., labs) – a peer would work with Sarah on in-class assignments to assure all aspects of the assignments were completed in a timely fashion, and Sarah had full access to the learning opportunities associated with each assignment. The special education and the general education teachers will share responsibility for selecting the peer tutors (there will be a different one for each class), provide the tutors with some brief training and direction on working with Sarah, and monitor their work with Sarah (intervening when needed).

2. A calendar application will be purchased for Sarah's smart phone. The application is designed specifically for students who have difficulty keeping track of their assignments and responsibilities. The special education teacher will help Sarah install the application, teach her how to use it, and monitor Sarah's use of it. The intent is for Sarah to use the application as an organizational and memory aid.

3. Adapt assigned readings by highlighting key information to make reading assignments more accessible. Each content area teacher will work with the special educator to use a yellow highlighter to indicate the parts of reading assignments that are crucial for her to focus on, and, conversely, which parts of assigned reading should be ignored unless she is particularly motivated or has extra time to read.

4. Create different and/or select a subset of examination questions for classroom tests that reflect the individualized learning expectations for Sarah (which are different than those for others in the class). Content teachers will create and prepare Sarah's tests, but the special education teacher will be available for consultation and problem-solving as needed.

5. For any essay test, allow Sarah to answer orally. Content teachers will conduct the examinations outside of classroom hours, possibly during Sarah's free "study hall" period, her resource period, her lunch period, or just before or after school. The special education teacher will assist in making arrangements for Sarah to take oral tests.

6. Provide Sarah with tutoring during her resource period, which would involve more content specific instruction than is offered in the classroom. The special education teacher will provide this instruction, but the general education teachers will be available for consultation especially in regard to content.

7. To address the "crying" behavior, all teachers will (a) document any "crying episode" to monitor frequency and intensity of the behavior and (b) respond consistently (i.e., short acknowledgement of whatever problem prompted the crying, then a clear communication that the classroom is not a time for crying, and that she needs to stop crying and her resource teacher will be happy to talk with her about the situation in her resource period). The special education teacher will take responsibility for facilitating communication between the teachers, and the teachers will compare notes to determine if this approach is working or if a different plan for responding is warranted.

Description of Sarah's Support	Priority Level Rating Rate each of the following supports being considered by the IEP team in regard to its importance in assuring that Sarah receives a free and appropriate public education (FAPE) in the least restrictive environment (LRE). If at all possible, please briefly explain why you rated the item the way you did.					Intensity Level Rating *Rate the School District's investment of time, effort, and resources in providing this support*		
	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely essential to assuring a FAPE in the LRE		Low	Medium	High
1Peer tutor for assignments completed in class (e.g., labs)	1	2	3	4		1	2	3
Explanation for priority level rating								
2. A calendar application on her smart phone that is intended to keep track of assignments and responsibilities	1	2	3	4		1	2	3
Explanation for priority level rating								
3. Adapt textbooks by highlighting key information to make textbook reading assignments more accessible	1	2	3	4		1	2	3
Explanation for priority level rating								

Description of Sarah's Support	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely essential to assuring a FAPE in the LRE		Low	Medium	High
4. Create different and/or select a subset of examination questions for classroom tests that reflect individualized learning expectations	1	2	3	4		1	2	3
Explanation for priority level rating								
5. For essay tests, allow student to answer question(s)orally	1	2	3	4		1	2	3
Explanation for priority level rating								
6. Tutoring from special education teacher (using more content specific instruction) in all subjects	1	2	3	4		1	2	3
Explanation for priority level rating								
7. Teachers document incidents of "crying" to monitor frequency and intensity, respond consistently across instructors and settings	1	2	3	4		1	2	3
Explanation for priority level rating								

APPENDIX I

VIGNETTE 2 AND SURVEY

Madison is an 11-year old student at Marquette Elementary School. She has a diagnosis of Attention Deficit Hyperactivity Disorder and Learning Disability. Madison struggles with academics, as she gets lost in lengthy discussions, and has trouble identifying relevant information. Furthermore, Madison has poor penmanship and her work is often illegible and difficult to read.

As a fifth grader, Madison's classes are organized in pods of four teachers. Rather than receiving all of her education from one teacher, the students rotate between four teachers in preparation for the transition to junior high. Each teacher is responsible for a core academic subject (i.e., reading, math, science), along with acting as the homeroom teacher for a class of students. The homeroom teacher is responsible for attendance, specials, and other activities that take place from day to day. Madison's pod also has a special education teacher that moves between the classrooms and co-teaches in various co-teaching models. At times, the teacher even works one-on-one with students to support their academic growth and development. Madison has a great deal of difficulty staying focused and organized during class. As a result, she regularly works with the special education teacher on organizational skills, study skills, and completing assignments.

Madison is a bright, young girl, capable of meeting the demands of the regular education curriculum; however, difficulty attending has led to diminishing grades. She is currently working at grade level with an extensive amount of reminders from others in her environment (i.e., teachers, peers, parents) to "get back to work" and "focus." Madison is very talented athletically, competing on both a competitive swim team and traveling softball league. Although she experiences extreme frustration with her academic growth, she feels very successful in swimming and softball.

Madison's teachers report that she is a very well-liked at school, and gets along well with peers and staff. She is often the first picked when organizing teams during physical education or play at recess. However, in the classroom she struggles with organization, completing independent seat work, staying seated for more than 10 minutes at a time, and focusing during instructional lessons provided by her teacher. She often forgets to turn in assignments that she has completed. Madison is beginning to realize her limitations and has become increasingly frustrated with her performance over the school year. She often becomes overwhelmed and attributes her lack of academic success to being "too dumb" to do any better.

The IEP team has determined that Madison's daily schedule, which involves her attending all courses in the general education classroom, is the least restrictive environment in which she can receive a free and appropriate public education. They are considering the following supports to maximize her learning and participation in her general education classrooms:

1.   Madison will be provided Check and Connect Mentors to work with her on the organization of school materials as well as self-monitoring of on-task behaviors.

The Check and Connect Mentors will be two retired teachers who volunteer at the school, and they have agreed that one of them will be there every day to (a) check in with Madison every morning before the school day officially begins, and work with her on setting up a binder system to assist with organization of notes, materials, and homework for the day, and (b) help initiate and monitor a self-monitoring schedule. The special education teacher assigned to Madison's pod will monitor the mentors' work with Madison and provide assistance as needed. However, the mentors will take the lead in setting up materials, counseling Madison, etc. Madison's parents have reported that getting her to school 15 minutes early to connect with a mentor would pose no difficulties for the family.

2.   Watch Minder, a watch that allows users to setup cues throughout the day to provide signals or reinforce behaviors, has been purchased for Madison to use to assist with self-monitoring of on task behaviors. The watch will be set to provide a vibration and textual message (e.g., "pay attention") at intervals throughout her school day. The special education teacher will teach the mentors on how to set up the watch, and will monitor Madison's use of it in the classroom situations. The watch is intended to provide consistent support to Madison in order to increase her attention to task and engagement in the classroom.

3.   Preferential seating will be used for different times of the day so that Madison will be seated in the least distracting and most preferred area of the room during testing times and independent work. The special education teacher and general education teachers will work together to create seating assignments in each of Madison's classrooms that will provide her with the best seating arrangement for completing tests and independent work.

4.   Madison will be given multiple choice tests with one of the choices eliminated. Having three, rather than the typical four choices, on these tests will allow Madison the opportunity to focus and consider a slightly smaller number of options. This is advantageous for her because she often has difficulty narrowing down the best option, losing focus before she has marked the correct answer.

5.   Madison will be allowed to use a laptop computer and word processing program (e.g., Microsoft Word) to complete all in class written assignments that require more than a paragraph of writing. The special education teacher will be responsible for any training Madison needs on the use of this program, will assure she has access to a laptop, and will monitor her progress. Several other students in the classroom also use a computer and word processing program for written assignments, and students are randomly chosen to use computers for assignments in order to encourage keyboarding and computing skills. Thus, the use of the laptop should not be stigmatizing or embarrassing.

6.   The special education teacher and volunteer (Check and Connect Mentor) will teach Madison to "preview" her assignments and class work (i.e., read directions,

read headings, read captions, look at pictures, look at the organization). Previewing strategies are intended to assist Madison with comprehension of the activity and help her identify the details important for completion of content (e.g., subject matter) work.

7. The special education teacher and volunteer (Check and Connect Mentor) will teach Madison how to self-monitor her "on-task" behavior using a data recording sheet and the Watch Minder. Each time a reminder signal goes off from the Watch Minder, Madison will indicate whether she was on or off-task by placing a checkmark on a corresponding tracking form. The special education teacher and volunteer will monitor the tracking form and consult with Madison regarding her "on task" progress. The goal is for the percentage of intervals that Madison is "on task" to increase as she gains experience with this system.

Description of Madison's Support	Priority Level Rating Rate each of the following supports being considered by the IEP team in regard to its importance in assuring that Madison receives a free and appropriate public education (FAPE) in the least restrictive environment (LRE). If at all possible, please briefly explain why you rated the item the way you did.					Intensity Level Rating *Rate the School's investment of time, effort, and resources in providing this support*		
	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely Essential to assuring a FAPE in the LRE		Low	Medium	High
1. Retired special education teacher (Check and Connect Mentor) volunteer to work with Madison on organization and self-monitoring	1	2	3	4		1	2	3
Explanation for priority level rating								
2. Watch Minder watch for reminders and reinforcement of desired behaviors	1	2	3	4		1	2	3
Explanation for priority level rating								
3. Preferential seating and seating schedule for use during testing and independent class work	1	2	3	4		1	2	3
Explanation for priority level rating								

Description of Madison's Support	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely Essential to assuring a FAPE in the LRE		Low	Medium	High
4. Narrowed list of multiple choice options on tests (three choices vs. four)	1	2	3	4		1	2	3
Explanation for priority level rating								
5. Completion of classwork via laptop and word processing software	1	2	3	4		1	2	3
Explanation for priority level rating								
6. Teach "previewing" strategies for assignments and seatwork	1	2	3	4		1	2	3
Explanation for priority level rating								
7. Teach self-monitoring of on-task behaviors (use with Watch Minder)	1	2	3	4		1	2	3
Explanation for priority level rating								

APPENDIX J

VIGNETTE 3 AND SURVEY

Adam is a seven-year old student at Douglas Elementary School. He has a diagnosis of autism and has limited functional communication. Adam is included in the general education first grade class, and he loves drawing and music. Adam gravitates towards gross motor activities, and is often reluctant to engage in fine motor activities (other than drawing). He engages in a high degree of self-stimulatory behaviors including biting his hands and arms.

Adam attends a full inclusion school serving students in Kindergarten through second grade. Class-wide peer tutoring is utilized across all classrooms, along with mixed grade tutoring where older students tutor younger students. While this has helped meet the needs of the diverse student body in each classroom, Adam's peers often struggle to meet his needs. Adam works well with his peers when focusing on letters and numbers, but struggles with activities that move beyond rote recall. In addition, his limited communication has made it difficult for Adam and his peers to communicate even functional information.

Adam made good academic progress during his kindergarten year; however, in first grade he is beginning to struggle with concepts (i.e., one and one more, big/little, matching) and moving beyond rote recall of information. Currently, he can identify all 26 letter names and sounds, rote count to 30, identify the numbers one through 10, and write his first and last name. Assessing his knowledge has also proven to be a difficult task. Adam's communication is another area of concern. Rather than communicating a want or need, Adam will find something else to do. In addition, he does not initiate interaction with peers or adults.

Adam's teachers indicate that he willingly participates in group lessons that incorporate gross motor movements, videos, and songs. He also enjoys art class especially when there are activities that involve drawing. Yet, it is difficult for him to complete other fine motor activities (i.e., cutting, writing letters). He often becomes frustrated with these activities and will bite his hands and arms sometimes to the point that he draws blood.

The IEP team has determined that Adam's daily schedule where he attends all classes with typically functioning peers is the least restrictive environment in which he can receive a free and appropriate public education. They are considering providing the following supports to maximize his learning and participation in the general education classroom:

1. A paraprofessional to assist Adam with completion of activities that are difficult for a peer tutor to assist with, reinforcing engagement in less desirable class activities, and using calming techniques when he is upset. The paraprofessional will also assist with keeping Adam connected to what is happening in the classroom.

2. An Augmentative and Alternative Communication device (AAC device) will be provided with pre-programed vocabulary related to activities conducted in the class.

The Speech and Language Pathologist (SLP) will assist with training Adam and programing the device. The SLP and the classroom teacher will collaborate on a daily/weekly basis, as needed, to plan for activities and discuss vocabulary that will be important to participating in classroom activities.

3. Provide visual supports (e.g., schedules, cues) in the classroom and other school settings to help Adam move about and fully participate in the school environment. The use of visual supports will also promote compliance with classroom and school procedures and routines (e.g., a "No Computer" sign over the computer monitor to indicate that it is not time to use the computer). The special education teacher and general education teacher will collaborate to design and set up the necessary visual supports for classroom and school environments.

4. Adam's academic growth and progress in school will be monitored through examining his performance on permanent products, rather than classroom tests. Each product will have its own evaluation criteria designated through collaboration by the special education teacher and general education teacher. For example, a short video will be made of Adam completing an addition problem using manipulatives (e.g., getting two sticks from one pile, three sticks from another pile, and counting out that together these make five sticks) to document his progress in math.

5. Visual/tactile supports will be created to use during whole group activities. For example, during calendar activities, Adam could have a "calendar" book with manipulative answers to use when answering questions and following along (see picture of example). The special education teacher, general education teacher, and paraprofessional will work together on designing and creating these materials.

6. Manipulatives will be used during instruction and class activities to promote understanding of mathematical concepts. The special education teacher will take responsibility for creating or supplying the necessary manipulatives, and will collaborate with the general education teacher to identify opportunities for the use of the manipulatives during lessons and in-class activities.

7. Replacement behaviors for self-biting will be taught. This will be done through providing a chew stick (see picture) and using a reinforcement schedule to guide Adam when he is "working without self-biting." The special education teacher will teach the paraprofessional how to implement the reinforcement schedule and how to teach replacement behaviors, directly demonstrating what should be done with Adam on several occasions. The paraprofessional would then be responsible for implementing this support strategy with ongoing monitoring from the special education teacher. Data will be collected to judge the success of this behavioral intervention, and any adjustments to the procedure will be made accordingly.

Description of Adam's Support	Priority Level Rating **Rate each of the following supports being considered by the IEP team in regard to its importance in assuring that Adam receives a free and appropriate public education (FAPE) in the least restrictive environment (LRE). If at all possible, please briefly explain why you rated the item the way you did.**					Intensity Level Rating *Rate the School's investment of time, effort, and resources in providing this support*		
	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely Essential to assuring a FAPE in the LRE		Low	Medium	High
1. Paraprofessional to keep student connected to the learning environment	1	2	3	4		1	2	3
Explanation for priority level rating								
2. Augmentative Alternative Communication device with select vocabulary	1	2	3	4		1	2	3
Explanation for priority level rating								
3. Visuals in classroom and school environments to promote compliance with procedures and routines	1	2	3	4		1	2	3
Explanation for priority level rating								

Description of Adam's Support	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely Essential to assuring a FAPE in the LRE		Low	Medium	High
4. Monitor performance through permanent products	1	2	3	4		1	2	3
Explanation for priority level rating								
5. Visual/tactile supports to use during whole group activities	1	2	3	4		1	2	3
Explanation for priority level rating								
6. Utilize manipulatives during instructional times	1	2	3	4		1	2	3
Explanation for priority level rating								
7. Teach replacement behaviors for self-biting and reinforce working without self-stimulatory behavior	1	2	3	4		1	2	3
Explanation for priority level rating								

APPENDIX K

VIGNETTE 4 AND SURVEY

Eli is a 13-year old at Centennial Junior High School. He has a diagnosis of specific learning disability related to reading and writing. He is a very quiet kid and seems to lack self-confidence. As a result, Eli rarely asks for clarification or help.

Eli receives all instruction within the general education classroom, but receives additional instruction for reading, writing, and study skills from the special education teacher for 60 minutes each day through pull-out services. Eli's teachers have noticed his hesitation to socialize with others and to seek assistance from teachers. Two of his teachers have attempted peer tutoring, and have noticed the same hesitation with peers as with the teacher. Often, Eli will sit with his head down doing nothing because he does not understand what to do and is apprehensive to ask for help. He happily talks to others if they initiate the conversation, but rarely does he begin the correspondence.

Eli is doing relatively well in his math, science, history, and physical education classes. With the exception of needing assistance with written directions, note taking, and reading of his textbook, he is maintaining satisfactory grades with minimal modifications. However, he significantly struggles in his other two classes: Composition and Literature. His skills are at a third grade level in reading, writing, and spelling. His special education teacher works with him on a daily basis utilizing Direct Instruction methods to improve his literacy skills, and Eli is beginning to make good progress with the Direct Instruction programs.

Eli's teachers report that he is a kind student, but is very apprehensive to participate and communicate with others in school. They are worried that he will fall further behind if he does not begin seeking clarification and gain confidence in the classroom. Eli's parents and the special education teacher have developed a close relationship over the course of the school year, and they have seen good carry-over of skills between the home and school environments.

The IEP team has determined that Eli's schedule, with the six hours of instruction in general education classrooms and 1 hour of "pull-out" for Direct Instruction is the least restrictive environment in which he can receive a free and appropriate public education. They are considering providing the following supports to maximize his learning and participation in the general education classroom:

1. A special education teacher will begin co-teaching in Eli's literature class. This will allow more direct/individualized support and attention during class time to promote work completion. The special education co-teacher will not be working exclusively with Eli as there are several other students in the class who would benefit from additional support. Eli, however, will definitely receive extra support from the introduction of this new teacher in the classroom.
2. Supported eText and Portable Spell Checker device to assist with reading, comprehension, and spelling. The special education teacher will work with the general education teacher to identify upcoming reading activities. The special education teacher will them create supported eText readings for Eli to utilize.

3. Illustrations, picture/video links, and self-monitoring guiding questions will be embedded within the supported eText readings. The support eText through a tablet or computer will allow all of Eli's teachers to link additional text and media to further support comprehension. In addition, eText applications make it easy to adjust the reading level and organization of the text to further meet his learning needs. Though the special education teacher will take primary responsibility for creating, editing, and monitoring use of the eText, Eli's general education teachers will need to collaborate by providing guidance regarding what content to include. This will require for each general education teacher to meet with the special education for 20 to 30 minutes at least once per week.

4. Allow extended time on tests and simplification of test questions to eliminate jargon, wordiness, and lower the reading level. The special education teacher and general education teacher will work together to identify the most relevant concepts on which to test Eli and simplification of test questions. This will also require regular collaboration between the special education teacher and Eli's general education teachers.

5. Provide self-correcting materials for immediate feedback, correction, and submission of in-class activities, seatwork, and homework. The general education teachers and the special education teacher will create answer keys that correspond with activities, seatwork, and homework.

6. Teach the SQ3R method for reading comprehension and studying to give Eli a strategy to use when at home or reading independently. SQ3R is a reading comprehension strategy prompting students to survey, question, read, recite, and review text information (as cited in Gargiulo, 2014). The special education teacher will provide instruction and scaffolding of the SQ3R strategy so that Eli gains understanding and independence in studying and completing work when outside of the classroom.

7. Teach Eli how to request help through modeling and role play. The special education teacher will work with Eli on teaching to request help. The general education teachers will also facilitate this through discussions and role play in the general education classroom, and will specifically plan to provide Eli at least one opportunity each class session to request help or clarification of expectations in regard to an assignment.

Description of Eli's Support	Priority Level Rating Rate each of the following supports being considered by the IEP team in regard to its importance in assuring that Eli receives a free and appropriate public education (FAPE) in the least restrictive environment (LRE). If at all possible, please briefly explain why you rated the item the way you did.					Intensity Level Rating *Rate the School's investment of time, effort, and resources in providing this support*		
	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely Essential to assuring a FAPE in the LRE		Low	Medium	High
1. Special education teacher co-teaches in literature class	1	2	3	4		1	2	3
Explanation for priority level rating								
2. Supported eText and portable spell checker	1	2	3	4		1	2	3
Explanation for priority level rating								
3. Illustrations, picture/video links, and self-monitoring guided questions embedded in Support eText readings	1	2	3	4		1	2	3
Explanation for priority level rating								

Description of Eli's Support	Completely unnecessary to assuring a FAPE in the LRE	Only minimally important to assuring a FAPE in the LRE	Important to assuring a FAPE in the LRE	Absolutely Essential to assuring a FAPE in the LRE		Low	Medium	High
4. Simplify test questions and allow extended time on tests	1	2	3	4		1	2	3
Explanation for priority level rating								
5. Provide self-correcting materials for immediate feedback, correction, and submission of class work	1	2	3	4		1	2	3
Explanation for priority level rating								
6. Teach SQ3R Method for study skills and use during work outside of the classroom	1	2	3	4		1	2	3
Explanation for priority level rating								
7. Teach student to request help through instruction, modeling, and role play	1	2	3	4		1	2	3
Explanation for priority level rating								