Examining Teachers' Attitudes Toward the Inclusion of Students Using Alternate

Standards in Regular Standards Core Academic Classes

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ABSTRACT

Creating a fully inclusive educational environment continues to be a topic for educational reform. Children with disabilities have the right to access their education in the Least Restrictive Environment. In the United States, this right is protected by the Individuals with Disabilities Education Act (2004). Approximately 13.3% of the total number of students with disabilities in the United States are educated in a separate setting. In comparison, 49.2% of all students with a disability in the United States identified as having a cognitive impairment continue to be educated in a separate class setting (U.S. Department of Education, 2019).

This study will use mixed methods (quantitative and qualitative data) analysis to examine the attitude of middle school teachers toward the inclusion of students with a cognitive impairment who access their curriculum using alternate standards in the regular education class setting, available training, and needed resources.

This study identified factors which influence teacher attitudes toward the inclusion of students using alternate standards, available training, and teacher perceptions for needed resources for an effective inclusion program at the middle school level. The information from the study will be used to provide recommendations to school leaders related to improving supports, training, and services for teachers with the goal of increasing the participation of students using alternate standards in the regular education setting.

Keywords: Cognitive Impairment, Inclusion, Alternate Standards, Teacher Attitude, Middle School

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS ACKNOWLEDGEMENTS

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INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS CHAPTER 1: INTRODUCTION

A country's educational system mirrors the values of their society. Schools give children the tools to gain academic knowledge through structured classes which build upon knowledge year after year. Attending school also provides children with opportunities to learn societal rules and norms through interactions between people. Interacting with a diverse population can foster a child's understanding that there are differences between people in terms of ability, physicality, values, temperaments, and ideals. Increased inclusion of marginalized groups of people into all levels of the educational system shows the progression of tolerance, acceptance, and inclusive practices throughout a nation. However, one marginalized group, students with disabilities (SWD), continues to face difficulties with being included at all levels of society. This lack of inclusion is demonstrated by their continued seclusion from the mainstream educational setting in many schools even with the protection of federal mandates against segregation.

Special Education

The acceptance of SWD into the mainstream educational system remains an ideal with inconsistent success in everyday practice. In the United States, the Individuals with Disabilities Act (IDEA) (2004) is the federal governing law protecting the educational rights of SWD. IDEA (2004) recognizes a child as having a disability if they have one of the following impairments: "mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (... 'emotional disturbance'), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities" (§602).

Every student who qualifies for services in the special needs program under IDEA will have an Individual Education Plan/Program (IEP) developed for them. The IEP will address the

specific needs and supports a SWD needs to receive a Free Appropriate Public Education (FAPE).

While states must follow IDEA (2004) to receive federal funding to provide educational programs for SWD, they have some leeway to adjust and define the characteristics of a disability. For example, in Florida the term "intellectual disability" (InD) is used in place of IDEA's term "mental retardation" (Florida Department of Education, 2020). Furthermore, the child's disability label should not determine the placement for their education.

Least Restrictive Environment

SWD have the right to be educated in the Least Restricted Environment (LRE). The LRE refers to an environment in which children with disabilities:

Are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (IDEA, 2004, §612).

IDEA (2004) reinforces the person-first culture of respect which advocates for children with disabilities to be thought of as children first and not defined solely by their disability.

Many educators use the informal term *inclusion* in place of *LRE* to describe a child with a disability being educated in a regular education setting. However, there is a vast difference between the two terms. LRE is the legal term used in IDEA (2004) to mandate a child with a disability must be given access to their typically developed peers to the greatest extent possible. Inclusion is less formal and lacks a legal definition. Inclusion can mean a child with a disability attends regular education classes along with their typically developed peers and is never

separated from the regular education setting. It is also appropriate to use the term inclusion to mean a child receives their education in a separate class setting but within a regular public school for part or all of the day with varying degrees of access to their typically developed peers.

While teachers have differing attitudes toward inclusion, IDEA (2004) states LRE is the right of every student. Approximately 63.5% of children in the United States with a disability receive their education in the regular education setting for the majority of the day (U.S. Department of Education, 2019). IDEA (2004) stipulates disability labels should not automatically determine the educational placement of a child; rather the needs of the individual child defined through data (assessments; evaluations; performance demonstration; and input from parents, service providers and teachers) determine the appropriate setting. Children should be included with their typically developed peers to the greatest extent possible. The expectation is to separate children only when the needs of the student cannot be met in a regular education setting even with accommodations and supports.

Determining Least Restrictive Environment

While IDEA is clear on the expectation children should receive their education in the Least Restrictive Environment, how to determine best placement is only vaguely defined. Neither monetary cost to the Local Education Agency (LEA) nor type of disability may be used to determine the LRE for a child. IDEA (2004) stipulates supplementary aids and services must be provided to a child to allow them to participate in their education alongside their peers regardless of cost or disability. What makes this vague, IDEA does not define what constitutes appropriate support or services. The LEA determines what constitutes appropriate supports and services.

Shared characteristics and traits of an identified disability allow for some generalization in determining needed supports and services. For example, people identified with a hearing impairment may need support to ensure their impaired hearing does not impede their participation in the educational environment. The supports will center on minimizing the effect a hearing impairment has on the child. Depending on the severity of the impairment, the student may need the teacher to use a voice amplifier and give written directions or the students may be better served in a school for the deaf and hard of hearing specializing in sign language and alternate forms of communication. Needed supports and services vary depending on the severity of the disability and the presence of multiply disabilities. It can be difficult to determine when a child is best served in a separate setting regardless of the supports or services available. Children with disabilities associated with higher needs may be more likely to participate in their education away from their typically developed peers.

Disability Labels and Least Restrictive Environment

The percentage of children in inclusion settings is not equal between disability labels. Statistics from the U.S. Department of Education (2019) indicate determining if a child is better served in a separate setting continues to be influenced by the type of disability. Approximately 13.3% of the total number of SWD in the United States are educated in a separate setting. In comparison, 49.2% of all SWD in the United States identified as having an intellectual disability continue to be educated in a separate setting (U.S. Department of Education, 2019). This indicates children who have intellectual disabilities are not placed in the regular education setting to the same degree as children with disabilities not impacted by a cognitive impairment (CI).

Having an intellectual disability is associated with having a higher need of support. Students with reduced intellectual capacity may need additional supervision due to having

trouble making safe choices. They may have decreased ability to demonstrate knowledge of "right" and "wrong", may be subject to increased bullying, reduced impulse control, and an inability to master academic skills. The LEA may determine a separate setting with built in supports is more effective than supplying the needed services and supports in the regular education setting.

Cognitive Impairment

According to the National Center for Biotechnology Information (NCIB) (2020), CI often manifests as delays in reaching developmental milestones, trouble retaining or learning new information, difficulty understanding information, difficulty making age-appropriate decisions, difficulty learning simple routines, or difficulty understanding new settings. Although specific IQ scores are not the sole factor determining the presence of a CI, an IQ under 70 is an indicator of this type of impairment. A moderate cognitive disability indicates a greater severity of cognitive impairment. The term *moderate cognitive impairment* is generally used when an IQ is under 50 and presents with other symptoms listed above (NCIB, 2020). Students with a CI may demonstrate an inability to master grade level skills to the depth of the regular standards. Children with CIs may also have difficulty interacting with typically developed peers due to their delayed development.

The term *cognitive impairment* is often used as a synonym for InD. Although CI is one of the qualifying characteristics for identification of having an intellectual disability, it is not the only qualification. Students identified with an InD show intellectual functioning and adaptive behavior a minimum of two standard deviations below the mean (fldoe.org, 2020). While having an InD is characterized by being cognitively impaired, other disabilities can also manifest with a CI. For example, a child who experiences severe seizures may qualify for the special needs

program under the disability category of Other Health Impaired. The result of the seizures may decrease their cognitive function until the student demonstrates a CI in remembering newly learned skills but may have age-appropriate adaptive behavior skills. The student would not automatically qualify as a student in the InD program because their adaptive behavior skills are not two standard deviations from the mean. Students with a CI may not have the ability to master grade level skills even with accommodations and supports, however, they may be able to interact socially at an age-appropriate level with their peers.

Children with moderate to severe CI which affects their ability to master regular academic standards even with accommodations and supports can access their education through alternative standards. Progress could be measured by taking an alternate assessment in place of the regular standardized assessment given to non-cognitively impaired students (IDEA, 2004). Alternative standards mirror regular content standards but to a less complex level. According to No Child Left Behind (NCLB), academic rigor is a requirement of every student's education and schools are held accountable for providing rigorous education. Progress is measured through annual testing of students to determine if the students are making adequate progress. Alternative standards were designed to ensure appropriate academic rigor was still required while providing modifications to curriculum to meet the support needs of children with a CI. Children who access their education through these alternate standards participate in annual alternative assessments which are modified to their cognitive ability to measure their progress and hold school accountable for providing them an appropriately rigorous education.

By providing alternate standards which mirror the regular standards, students who access their education using the alternative standards can work on the same skills as children on the regular standards in the same setting. According to the U.S. Department of Education (2019)

only 17% of children with an intellectual disability in the United States are educated in the regular education setting. In Florida, the number of children with an intellectual disability educated in the regular education setting for the majority of the day drops to 11.1% (U.S. Department of Education, 2019). Even though alternate standards were developed to align with regular standards, there continues to be a disconnect in the inclusion of students using alternative standards in regular education settings.

Statement of the Problem

Educational systems throughout the world struggle to successfully include children with disabilities into mainstream educational settings. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) continues to address the need for inclusive education as a fundamental human right for all children. When students learn alongside others who are different than themselves, the opportunity to learn tolerance and acceptance increases (UNESCO, 1994). Regular education teachers who are highly qualified in their content area provide the most effective instruction therefore, the regular education setting increases access to academic learning (Gregory & Noto, 2012). While the subject of inclusion has been a part of worldwide education reform since the 1970s, inclusion continues to be inconsistent in the educational settings despite benefits associated with heterogeneous groups.

Inclusion is a complex, global issue with many influencing factors contributing to its success or failure. One driving factor in the success of an inclusionary program is the teacher's attitude (Hammond & Ingalls, 2003; Van Laarhoven et al., 2007). A positive attitude and acceptance for students using alternate standards can lead to increased achievement for their students (Hammond & Ingalls, 2003). There are many factors affecting teacher attitudes. Once

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the factors influencing teacher attitudes are identified, programs can be created to provide the needed supports for teachers to develop positive attitudes toward inclusion.

There are many factors which may have a negative influence on a teacher's attitude toward inclusion. These factors may include: a lack of training in meeting the needs of SWD, lack of collaboration between teachers, unclear definitions of inclusion, inconsistency in grading criteria, perceived lack of support in the classroom, and a lack of self-confidence within the teacher to meet the needs of students with increased needs. Another barrier is a perceived lack of resources available to the classroom teacher to meet the needs of the student (Timberlake, 2014). Teachers feel there is a lack of time allocated to planning lessons, modifying curriculum, and collaboration (Ballard & Dymond, 2017; Hammond, & Ingalls, 2003; Kos, 2010). Without collaboration, teachers have difficulty in sharing ideas and strategies to meet the needs of the students. Teachers also have limited access to training and professional development in meeting the needs of SWD (Allday et al., 2013; Bae, 2012; Bemiller, 2019; Boylan, 2016; Ferguson, 2014; Haegele et al., 2016; Hammond & Ingalls, 2003; Kos, 2010; Smith, 2000; Malki & Einat, 2018; UNESCO, 2020). Teachers also need to understand the legal requirements and positive effect inclusion has on children (Hammond, & Ingalls, 2003). Lack of understanding how to meet the needs of students leads to a lack of self-confidence. This lack of self-confidence also has a negative effect on a teacher's belief they can meet the needs of a student using alternative standards (Yu, 2019). Increasing a teacher's belief that they can meet the needs of the students is paramount to effective inclusionary programs.

One final factor which cannot be ignored is the access to funding for resources. Without funding, the additional resources needed to create and sustain an effective inclusionary program are missing (Ferguson, 2014; Timberlake, 2014). In 1975, IDEA funded 40% of the cost of

special education. In 2019, the Federal Government funds approximately 14% of Special Needs funding (Nagel, 2019). While this study does not explore how to fund inclusionary programs, the perceptions of proper funding may influence a teacher's attitude toward the inclusion of students using alternate standards due to the increased resources required to meet the needs of the student.

Students identified as having a CI may be eligible to participate in their education through alternate standards if the IEP teams determines they cannot be successful in mastering regular standards even with support and accommodations. Administering curriculum using alternate standards require educators to modify curriculum, students may need additional supervision, and individualized support as well. Many educators feel students using alternate standards should not be educated alongside their typically developed peers due to the higher need for support (Bae, 2012; Smith, 2000). Research continues to be needed on the inclusion of students with a CI to determine how to best meet LRE.

Overview of Study

While inclusion is mandated by legislation and supported by research, creating inclusive schools remains inconsistent (Ferguson, 2014; Haug, 2017). The inclusion of students with disabilities in the mainstream educational system has been the subject of multiple research studies, articles, and legislation. Teacher attitude has been identified as a driving factor in the success of implementing school inclusionary programs (Gregory & Noto, 2012, 2018; Hammond & Ingalls, 2003; UNESCO, 1994, 2020; Van Laarhoven et al., 2007; Weiner, 2003). There have been limited studies focused on the attitude of teachers toward inclusion (Gregory & Noto, 2018). The object of this study is to further the understanding of the attitude teachers have toward the inclusion of students using alternate standards in the regular class setting.

The study will use mixed methods to examine the attitudes teachers have about inclusionary practices for students who are using alternate standards in the regular education setting for core content instruction at the middle school level (sixth, seventh, and eighth grades). The study will be conducted in a Central Florida school district with a convenience sample of middle school core teachers from twelve public middle schools.

There will be three tools used to gather data: a demographic questionnaire, a modified "Attitudes Towards Teaching All Students (ATTAS-mm), and a semi-structured interview. Data from all instruments will be conducted using the online survey platform, Survey Monkey[™]. The data from the three tools will be analyzed using an Analysis of Variance test (ANOVA) to determine if significant relationships exist between demographic characteristics and an overall positive attitude toward inclusion of students with a CI in the regular education setting. Thematic analysis will be used to determine underlying themes found in qualitative data influencing attitudes as well as to determine what teachers feel they need to develop a positive attitude toward inclusion. Together, the data will further the understanding of teachers' attitudes toward inclusion to help develop appropriate professional development opportunities, determine needed supports, and influence development of policies to meet the needs of students in an inclusive setting.

This study seeks answers to the following research questions:

- 1. What are the attitudes of public-school teachers toward inclusion of students with Cognitive Impairment?
- 2. In relation to students with a disability, what professional development opportunities have been provided to teachers?

3. From the perspective of the teacher, what elements (resources, supports, training) are needed for the successful inclusion of students with a cognitive impairment into regular education core classes?

Definition of Terms

Special needs education has a vocabulary specific to its purpose. Below are some common terms used in special needs. Some of these terms are subject to multiple interpretations and not defined by a legal definition. The following definitions are the operational definitions used in this study.

- Academic standards (Regular education standards) describe what every student should know and be able to do in the core academic content areas (e.g., mathematics, science, geography) (Department of Education, 2020).
- Attitude A mental position with regard to a fact or state; a feeling toward a fact or state (Merriam-Webster, 2020).
- Alternate standards Academic expectations based on grade level standards for a content area which address the same concept or skill but at a reduced complexity level than the regular course standards. Only students identified with a moderate, severe, or profound cognitive impairment are eligible for assessment using alternate standards. Each state determines how a child qualifies for education using alternate standards (Department of Education, 2020).
- Cognitive Impairment (CI) Delays in reaching developmental milestones, trouble retaining or learning new information, difficult understanding information, difficulty making ageappropriate decisions, difficulty learning simple routines, difficulty understanding new settings. One of the indicators of having an intellectual disability but cognitive disabilities

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS are comorbid in other identified disabilities. Demonstrated IQ under 70. Moderate cognitive disability starts with an IQ under 50.

- Core Content Core subject areas include the following content area taught in the school setting: mathematics, science, language arts, reading, English, foreign languages, civics and government, economics, arts, history, and geography (IDEA (2004, §300.10). For the purposes of this study, *Core Content* identifies the following courses: mathematics, language arts, science, history, or Civics unless otherwise specified.
- Free Appropriate Public Education (FAPE)- Special education and related services provided at the public expense without cost to the individual and conforms to the individualized education program (IEP) and provides an appropriate education for the individual and conforms to the standards of the state educational agency (IDEA (2004, §602).
- Individual with Disabilities Education Act (2004) (IDEA, 2004) United States national law enacted to provide a Free Appropriate Public Education to children, ages 3-21, with disabilities through providing special education and related services.
- Inclusion Nonlegal term commonly used to describe the education of children with disabilities in the regular education setting or having access to typically developed peers in the educational setting.
- Individual Education Program/Plan (IEP) a written statement for each child with a disability that is developed, reviewed, and revised in accordance with IDEA §614(d).
- Local Education Agency (LEA) the state recognized board of education or other recognized administrative body which has administrative control and provides direction for the public elementary or secondary schools within its control.

Professional Development - Informal and Formal training activities designed to improve an

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS educator's academic knowledge improve classroom management skills, advance knowledge of effective instructional strategies, and lead to a positive change in the classroom (DOE, 2020).

- Regular education teachers- Also known as general education teachers. These are teachers who are certified to teach typically developed students using grade level standards (also classed regular standards).
- Significant Cognitive Impairment Students who have a disability which negatively impacts the intellectual functioning and adaptive behavior (ability to develop safe independent living skills) to a degree where they are not capable of mastering grade level standards even with accommodations and support.
- Special Education Specially designed instruction or related services provided to a child with a disability at no cost to the family which meets the requirements set forth by IDEA (2004).
- Least Restrictive Environment (LRE) According to IDEA (2004, §615.5) To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

Summary

The inclusion of children with disabilities into mainstream educational systems continues to be a challenge globally. While there has been progress in legislation to protect the rights of individuals to receive an education in the least restrictive environment, barriers continue to exist

to integrating children with disabilities into the educational setting. Children who access their education using alternate standards are isolated from their peers more than children with disabilities which do not affect their cognitive function.

Chapter Two provides global context to the difficulties of educational inclusion and explores teachers' attitudes toward including students using alternate standards into mainstream classes. Teachers must create a positive learning environment for every student, however; a teacher's attitude is often a mix of acceptance and doubt when it comes to inclusion (UNESCO, 2020). The literature review will also explore the following aspects of inclusion: benefits, global attitudes, United States legislation, attitudes of teachers, and elements affecting that attitude. Like inclusion, what influences a person's attitude is also complex. Chapter Two will also explore the makeup of *attitude* and its effect on an inclusionary program.

Chapter Three will focus on detailing the procedures to conduct a mixed methods study focused on the attitude of regular education teachers toward including students using alternate standards into their regular education classes. Mixed methods further allow the exploration of the issue from multiple viewpoints. Quantitative data will identify relationships between elements of inclusion and acceptance of the teacher. The ATTAS -mm developed by Jess Gregory and Lori Noto will measure the three domains of attitude to determine whether teachers have a positive or negative attitude toward inclusion. Qualitative data centered on common themes will provide indepth data on the abstract concept of *attitude*. Together, both types of data will help further understanding of the barriers to including children with cognitive impairments in the regular education setting. This understanding will assist in the creation of effective inclusionary programs the educational system.

Chapter Four will focus on the results of the study. Quantitative data will be analyzed using descriptive statistics and ANOVA to determine what influences the teacher's attitude toward inclusion of students with using alternate standards in the regular class setting. Qualitative date from the Questionnaire and Interview will be analyzed using thematic analysis to gain a deeper understanding of teachers attitudes toward inclusion. Analyzed data will be presented as it relates to each segment of the study (operational definitions, attitude, training, and resources). Combing the analyzed data from the quantitative and qualitative portions of the study, a holistic picture will be revealed to further the understanding of inclusionary programs.

Chapter Five will provide a summary of the findings based on the data analysis. This study will help extend knowledge on how to address teacher concerns concerning inclusion, available training, and resource needs. Conclusions will be drawn from the finished analysis and will provide data to policy makers regarding tools needed for effective inclusionary programs. The implications from the results will discussed and explored. Finally, Chapter Five will give recommendations for further research needed and address limitations found in the study.

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS CHAPTER 2: LITERATURE REVIEW

The following literature review will focus on research addressing the inclusion of SWD in multiple countries including the United States. The review will examine characteristics of successful inclusionary programs and barriers to the full integration of children with a cognitive impairment (CI) using alternate standards into the mainstream educational setting.

Teachers vary in their perception of the best place for children using alternate standards to receive their education. Many educators do not agree placement of children with severe disabilities in the regular education classroom is the most appropriate placement (Ballard & Dymond, 2017). This chapter will explore inclusion including the definition of *inclusion* as it relates to special education and benefits, barriers, and teacher attitudes toward inclusionary practices and programs. The next section explores the use of the term *inclusion* as it relates to the classes and settings provided to educate a child with a disability.

Definition of Inclusion

The term *inclusion* is not used in IDEA (or other US legislation) to describe LRE, however; inclusion is often used in place of the term *LRE* when discussing a SWD who is educated alongside their typically developed peers. Due to the lack of a legal definition, there are many interpretations of inclusion when used in the educational setting (Dymond et al., 2007; Haug, 2017). The lack of a legal definition allows for great variances in creating inclusionary programs and may also affect the perception of LRE by teachers, administrators, and policy makers.

Inclusion as it relates to education is open for interpretation by lawmakers, districts, school-based employees, and parents. Inclusion can reference the physical setting where learning takes place or the sense of fellowship and belonging among peers. This lack of clear guidelines

leaves teachers and school districts leeway to interpret the meaning of inclusion and create policy based on what is accepted in the school system.

Full inclusion (educating SWD in the regular education classroom for the majority of the school day) is thought to ultimately reduce marginalization of the child (Haug, 2017; UNESCO, 2020). This understanding of inclusion goes beyond simple integration of students but speaks to increasing the feeling of fellowship and a sense of belonging between all students (Haug, 2017).

Another debate over the definition of inclusion centers on whether inclusion should focus on the general setting for instruction or on the best placement for the student to receive all needed services. While the concept of inclusion is readily accepted, the application of inclusion remains a source of tension and uncertainty (Haug, 2017). Inclusion can be used to describe the setting a child receives their education in or inclusion can be used to indicate a child has access to the same curriculum but in a separate setting (Dymond et al., 2007). Bemiller (2019) found half the teachers in the study defined inclusion as children with a disability in a regular education classroom all day; 25 percent of teachers in the same study defined inclusion as children with special needs educated in a separate classroom with limited exposure to typically developed children; and the remaining 25 percent defined inclusion as the child being educated in the best setting to meet their needs. As shown by this study, multiple interpretations of inclusion lead to inconsistent implementation of effective inclusionary programs.

Inclusion can also be defined as the best learning environment for the child. This interpretation does not automatically support full membership in every aspect of school. Rather, this definition determines where the child will learn best and receive the most appropriate support (Haug, 2017). Inclusion in this sense examines where a child will best receive support

and services. This form of inclusion focuses on providing therapies and specialized instructional techniques which may not be possible in a mainstream classroom.

The narrowest definition of inclusion involves defining the setting in which a student with a disability receives their education (Haug, 2017). One belief consists of including students in mainstream classes and increasing active participation in the regular school setting. This definition of inclusion goes beyond simple physical integration to the student being a fully participating member in the culture of the school.

Despite multiple interpretations of inclusion, a majority of educators define inclusion as, "a student with a disability receiving his/her education in a regular education classroom with the regular education teacher as the student's primary instructor" (Gregory & Noto, 2018, p.2). It is important to note, successful inclusion may require additional support such as accommodations, assistance by a special-needs teacher or paraprofessional.

For studies to be successful, an operational definition of *inclusion* must be understood by all participants and researchers as it is used in the study (Bemiller, 2019). The operational definition for inclusion must be understood by all participants before surveys or questionnaires are given. Inclusion must be given an operational definition when describing the study (Bemiller, 2019; Timberlake, 2014). Without an operational definition of inclusion, inconsistencies in reporting, implementation, and misunderstandings in communication occur. To determine the efficiency of an inclusionary program, stakeholders need to measure student progress (both academically and socially), number of students served in an inclusive setting, participation level of the students (Duke & Dukes, 2009) and use common language in measurement and definitions (Bemiller, 2019). Once *inclusion* is defined, influential factors in implementing a successful

inclusionary program can be examined. The next section will explore the benefits for children who participate in inclusionary programs.

Benefits of Inclusion

Schools are a microcosm of the society where they exist and mirror the overall tolerance and acceptance found in the community the school serves. In addition to academics, children learn how to communicate, develop appropriate social skills, and become more independent in daily living skills. In studies, both students with and without disabilities increased their acceptance of others when in the inclusionary settings (Ballard & Dymond, 2017; Downing & Ryndak, 2010; Ferguson, 2014; Kleinert et al., 2015; Pickard, 2008; UNESCO, 1994,2020; Yu, 2019) and academic achievement intensified (Ballard & Dymond, 2017; Downing & Ryndak, 2010; UNESCO, 1994,2020; Yu, 2019). Academic skills, the ability to communicate, the ability to interact socially, and increased self-esteem increase from interaction between SWD and typically developed peers.

Academic Benefits

Children are exposed to a more rigorous curriculum in the mainstream educational setting. Ballard & Dymond (2017) found students with a CI who received instruction alongside their typically developed peers showed increased academic gains in math, writing, and vocabulary skills when compared to students in a separate setting. It is important to note, access to curriculum is not the same as mastery of the curriculum. The benefit of inclusion hinges on the access to instructional topics. Mastery of content may not be the academic goal rather access to the concepts and topics found in the regular education setting (Ballard & Dymond, 2017). Access leads to participation and improvement in academic skill acquisition. Enhanced success with the curriculum has recently increased with the introduction of Universal Design for Learning (UDL)

(Ballard & Dymond, 2017). UDL focuses on providing instruction in content using various learning styles. When incorporating UDL, the teacher works with students using their learning styles to strengthen mastery or content. Students with and without disabilities benefit from access to instruction using their preferred learning style.

Academic progress is at the forefront of a teacher's evaluation in the mainstream classroom. Educators may be concerned typically developed students would fall behind when working with a student with a CI. Research suggests the opposite is true. Low performing students who worked alongside students with a CI improved in their acquisition of academic skills (Ballard & Dymond, 2017; Downing & Ryndak, 2010, p.11). Increased academic progress for students without disabilities may be linked to increased teacher feedback in collaborative groups. Students may have the opportunity to "teach" the academic skill which increased academic acquisition for all students involved (Downing & Ryndak, 2010, p.11-12). In addition to academic benefit, students who work alongside each other in the academic setting also develop social skills to problem solve and foster relationships.

Social Benefits

Inclusion in mainstream classrooms increases understanding of social communication, social rules, and social interaction (Ballard & Dymond, 2017; Ferguson, 2014; Kleinert et al., 2015; Pickard, 2008; Taylor et al., 2020). Interacting with typically developed peers helps students with cognitive impairments develop stronger communication skills (Ballard & Dymond, 2017). The development of communication skills increases the ability to communicate using ageappropriate language. When students with disabilities are able to communicate with their peers, relationships develop.

All children must learn social skills. School provides an environment outside the home where children learn how to solve conflict, work collaboratively, and interact appropriately with others. Children must learn how to interact with others who may not look the same as they do, learn differently, or have different values. The inclusion of students with significant cognitive disabilities increased the ability for all students to socially interact using appropriate social skills (Ballard & Dymond, 2017). To increase social skills, Ballard & Dymond (2017) also found students must be active participants in the classroom. Active participation relies on the cultivation of peer acceptance and the promotion of social belonging. Many students with a CI have the ability to learn how to interact socially with typically developed peers when in the same classes. Developing the ability to socially interact with their peers is one of the greatest benefits to including students with disabilities in the mainstream classes (Ballard & Dymond, 2017; Ferguson, 2014). Relationships between peers develop naturally as acceptance increases.

Self-esteem Benefits

Perhaps one of the largest benefits to the inclusion of SWD in the regular education setting is the increase in self-esteem of the students. Students with a CI increased their social skills and the ability to interact with peers during educational interaction. Through positive interactions with peers, the self-esteem of students with CI increase (Ballard & Dymond, 2017). Students with higher self-esteem exhibited improved behavior and appeared happier.

In the regular education setting, students with cognitive disabilities learn social norms from typically developed peers and all students have the chance to learn tolerance and acceptance of others. When SWD are actively included in the regular education classroom, students and adults alike are more likely to see people as different but also determine the differences are superficial (Yu, 2019). Acceptance and tolerance increase in children and teachers because the SWD are seen as part of the culture (Baglieri et al., 2011). Acceptance can lead to full participation in post-secondary educational programs and positive employment opportunities.

Post-secondary Benefits

A primary goal of education includes preparing children to successfully attend postsecondary educational programs and to find gainful employment. Preliminary studies found children in middle and high school with a CI who participated in their education alongside their typically developed peers were more likely to have a positive outcome with their post-secondary goals (Taylor et al., 2020). Students with a CI who participated in an inclusive educational setting were more likely to gain employment in the competitive workplace and earn better wages and work hours than their peers who did not participate in an inclusive setting (Taylor et al., 2020).

Simply knowing the benefits of inclusion is not enough to create successful programs by itself. Developing school programs which celebrate the differences (academic, social, and physical) between individuals is paramount to furthering the inclusion of students who have been identified by society as having a disability. Creating a culture of inclusion continues to be the focus of educational reform around the globe.

Global Attitude Toward Inclusion

"Inclusion" is not a topic unique to any one country. Advocates (parents, educators, community members) for and against the inclusion of SWD into the educational system have been vocal in espousing their opinions. Legislation guaranteeing every child has access to education is required to ensure children are not denied the human right to an education (United Nations, 2013). Many countries have legislation and programs designed to bring typically and

atypically developed children together in educational programs, however; the full integration of children with disabilities continues to be a global issue (UNESCO, 2020). The United Nations continues to address the need for inclusionary practices through the United Nations Conventions on the Rights of Persons with Disabilities (UNCRPD). In 1994, ninety-two governments signed the "Salamanca Statement" which called for inclusive education of children with disabilities (United Nations, 2013). All people have a right to education without discrimination based on their disability (UNESCO, 1994, 2020; IDEA, 2004). Teachers should receive training with a positive orientation toward inclusion in using assistive technology, adapting curriculum, and assessing student progress during pre-service and in-service programs (UNESCO, 1994, 2020). However, inclusion remains inconsistent and a topic of study and concern for many nations (Haug, 2017). This section focuses on studies, based outside of the United States, which demonstrates the inclusion of children with disabilities into the educational system is a global issue and not an isolated issue for any single country.

Cameroon (a country in South Africa) has been working to create inclusive schools since the 1980s. Teachers were generally positive about the theoretical benefits of inclusion but were not open to teaching in inclusive classrooms (Mngo & Mngo, 2018). Teachers did not feel they were qualified in meeting the needs of the students and this impacted their openness to inclusive classrooms. The majority of teachers did not think inclusion was beneficial to typically developed students. When training was provided in pre-service courses, the attitude toward inclusion was more positive. There is also a need for trained special needs educators in Cameroon to meet the needs of children with disabilities in the school setting. Continuous professional development must also increase in the school setting. Historically, the responsibility for educating persons with disabilities fell to the family. Mngo & Mngo (2018) concluded the

responsibility for educating children with disabilities must shift to include the school system for systemic change toward inclusion to occur. While Mngo & Mngo (2018) did not separate types or severity of the disability of the students in determining acceptance of SWD in mainstream schools, it illustrates the continued challenges associated with teacher attitudes and the need for continued training and education at all levels of the educational system.

In Brazil, SWD have been protected since 1988 under the Federal Constitution and again by the Federal Law 13146 of 2015. These laws seek to increase the inclusion of people with disabilities in society and specifically in schools. Overall, educators expressed a positive attitude toward the ideal of inclusion but even with mandates dating back to the late 80's, educators continue to be unsure of the feasibility of the inclusion of SWD into the regular school setting (Haegele, 2016). Much like Cameroon and the USA, educators desire more training in meeting the needs of SWD.

In 1977, South Korea enacted the Special Education Promotion Act (SEPA). In 1994, SEPA set forth rules to increase the inclusion of children with disabilities into the regular education setting and mandated compulsory education for pre-school children with disabilities by 2012 (Bae, 2012). Bae (2012) determined educators who participated in professional development tended to have a more positive attitude toward the inclusion of SWD in the regular education setting. While attendance in college courses did not appear to influence attitudes toward inclusion, attendance in professional development did have a positive impact on attitude. According to Bae (2012), educators demonstrated a more positive attitude toward students with a physical disability than children with emotional or intellectual disabilities. After years working toward inclusion, South Korea continues to explore the topic to develop more inclusive programs.

In Ireland, teachers and parents have an overall positive view on the inclusion of intellectually disabled students in the mainstream educational setting. There was also agreement that special schools continued to have a place in education (Ferguson, 2014). Inclusion of intellectually disabled students tended to focus on social integration rather than academics. While attitudes were generally positive, inclusionary practices placed more demands on teachers including modifying curriculum and meeting the diverse needs of students in larger classes. According to Ferguson (2014), teachers do not feel prepared or trained effectively in meeting the needs of students with intellectual disabilities. Findings also showed a positive attitude toward inclusionary practices with the understanding that separate settings are required for some students who have extensive needs. Both children with and without disabilities showed improvement in social mannerisms when in an inclusive setting. Concerns from the participants also included lack of funding and supports to meet the needs of inclusion.

Many countries have been working toward the inclusion of SWD as far back as the 1970s. The United Nations (2013) recognizes the inclusion of SWD into the educational setting is a global issue fundamental to obtaining human rights for all. Like many countries, the United States continues to struggle with creating and implementing successful inclusionary programs.

Attitude Toward Inclusion in the United States

The United States also struggles with consistent inclusionary programs for SWD. Overall, teachers are supportive of the concept of inclusion when the proper supports and training were available (Fisher, 2017; Hawpe, 2013; Wilkerson, 2012). Teachers indicated concern over the lack of training and supports available when asked to teach students with disabilities in the regular education setting. Teachers who exhibit a higher degree of self-

confidence and feel adequately trained in meeting the needs of SWD in the educational setting have a more positive attitude toward inclusion (Fisher, 2017; Wilkerson, 2012).

The attitude toward the inclusion of students with disabilities into the regular education setting is diverse. Teachers were more likely to have a positive attitude toward the inclusion of students whose disabilities did not hinder them from meeting regular education standards (Hawpe, 2013; Kos, 2010; Petersen, 2015). Teachers felt more comfortable with providing accommodations that did not modify the content of the curriculum (Hawpe, 2013). This indicates the attitude toward the inclusion of SWD into the mainstream setting may be influenced by the severity of the disability. Children who present as typical (or nearly typical) and require only surface accommodations (such as extended time) and supports appear to be accepted into the mainstream class (Hawpe, 2013). If SWD require modifications or more intense supports, there appears to be pushback to their inclusion in the mainstream setting. While research and legislation support inclusion, there remains a gap between theory and practice. The following section shifts to examining inclusion of children with disabilities in the United States starting with U.S legislation supporting inclusion.

Special Education Law in the United States

The history of inclusive practices in the United States can be traced through the legislation passed in Congress. For inclusion to be effective, it is important for educators to understand the laws set forth by IDEA (Individuals with Disabilities Education Act, 2004) as well as the spirit of the law (Dukes &Dukes, 2009). This section provides a brief history of educational legislation focused on the inclusion of children with disabilities into the mainstream educational setting. Table 2.1 shows an abbreviated progression of legislation in the United States addressing the rights of children with disabilities to receive FAPE.

Table 2.1

Progression of US Legislation for the Education of SWD

Year	Federal Cases and Legislation	Effect
1910	White House Conference	Began the development of segregated
		programs for people with mental retardation
1954	Brown v. Board of Education	All children have a right to Free
		Appropriate Public Education
1958	Expansion of Teaching in the	Provided funding to train teachers of
	Education of Mentally Retarded	children with mental retardation
	Children Act	
1965	Elementary and Secondary Education	Congress provided funds to improve the
	Act	education of all children with disabilities
1972	Parc v. Comm. of PA	Stated children with mental retardation were
		being denied FAPE
1972	Mills v. Board of Ed	Stated children with all disabilities were
		being denied FAPE
1975	The Education for All Handicapped	Mandated LRE, FAPE, due process, and the
	Children Act	creation of an IEP, and a nondiscriminatory
		evaluation process
1990	Individuals with Disabilities	Changed to people first language, added
	Education Act (IDEA)	Autism and traumatic brain injury to list of
		disabilities

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2001	No Child Left Behind (NCLB)	Increased accountability for all subsections	

 2004
 Individuals with Disabilities
 Addressed placements, paperwork,

 Education Improvement Act
 accountability, school choice

Advocacy groups working to pressure lawmakers to create legislation for the inclusion of children with disabilities into the educational system can be traced back to the Council for Exceptional Children (CEC) in 1922, The Cuyahoga County Ohio Council for the Retarded Child in 1933, and The ARC in 1950.

In the Brown v. the Board of Education in 1954, it was determined children could not be denied enrollment to a school based on their race. Groups like the CEC and ARC (along with others) used the precedence created from the *Brown* case to advocate for the rights of children with disabilities to receive a FAPE. Groups stipulated SWD were also an identified group which had the same rights as students without disabilities. Using that reasoning, SWD were entitled to admission to public schools to the same extent as those without disabilities.

Through the Elementary and Secondary Education Act (ESEA) of 1965, the federal government mandated both public and private schools improve programs to meet the needs of students who were disadvantaged. With this Act, the federal government spent billions of dollars on new programs and resources to fund schools (Yell, 2019, p.136-144). ESEA paved the way for the Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB). These programs mandate every child has a right to a quality education and school systems would be held accountable for providing it.

In 1972, the case Parc v. Comm. of PA stated children with mental retardation were being denied FAPE. Also, in 1972, Mills v. Board of Ed. Stated children with disabilities not tied to mental retardation were also denied FAPE. These two cases, along with *Brown*, spearheaded legislation designed to increase the educational opportunities for SWD in mainstream schools (Yell, 2019, p.42-43). These two cases set precedence for future legislation to deny exclusion from schools based solely on having a disability. Legislation was enacted at the state level mandating SWD receive a public education.

No Child Left Behind Act of 2001 (NCLB) addressed the rights of all children to receive a quality education. NCLD required SWD (along with other subgroups) to make annual yearly progress. This increased accountability for SWD gaining access to regular education curriculum.

Both IDEA (2004) and NCLB (2001) came about in an effort for the federal government to improve the education of marginalized students. NCLB (2001) provides funding to Title I schools (socio-economic criteria) with accountability measures governing the availability of funding. IDEA (2004) provides funding based on states providing services to students with disabilities. This additional funding allows states to provide additional resources to students who need extra supports.

Historically, expectations for student with disabilities have been lower than typically developed students. SWD were educated in separate settings where they could not disrupt the rest of the school population. Academics was secondary to controlling behaviors and teaching social skills. With the adoption of NCLB, students with disabilities began to have an impact on school grades. IDEA (2004) also changed to mandate children must show meaningful progress in their educational setting. Both IDEA (2004) and NCLB advocate for children to be educated alongside their typically developed peers stating this placement provides the greatest

exposure to curriculum and social modeling. Both IDEA (2004) and NCLB mandate instruction follow the regular curriculum and all students must have access to the curriculum. Starting in the 2017 school year, students in Florida using alternate standards were added to the school grade based on progress on the Florida Alternate Assessment (Florida Department of Education, 2019).

IDEA (2004) addresses the rights of SWD to receive a FAPE. One characteristic of FAPE is for SWD to be educated in the LRE (IDEA, 2004). It is up to the IEP team to use data to determine the appropriate LRE for a student with a disability. This gives great leeway to the LEA in determining the degree of inclusion in the regular education setting a student with disability is given. Legal mandates alone do not guarantee successful inclusionary programs. Teachers also have great impact on the success of educational programs.

Importance of Teacher's Attitude on Educational Programs

One of the most influential forces on an educational program is the attitude of the teacher (Ballard & Dymond, 2017; Elshabrawy & Hassanein, 2015; Van Laarhoven et al., 2007; UNESCO, 2020). School programs are negatively impacted when teachers have a negative attitude toward a program or are not committed to the program's success (Hammond & Ingalls, 2003; UNESCO, 2020). When teachers do not support inclusion, the instances of pull-out services and students being educated in separate class settings increases (Ballard& Dymond, 2017; Hammond & Ingalls, 2003). Teachers need to understand the benefits of inclusion and have the supports needed to implement the program.

Academic learning is perhaps the most visible learning in the school setting; however, it is not the only learning taking place. Participating in the school setting contributes to children learning how to socialize, communicate, and take responsibility for their actions. Many students learn these skills by simply participating in the school setting. Some students with disabilities

may not learn these skills at the same rate as a child without a disability. Direct instruction may be required for these abstract skills a typically developed child "picks up" naturally (without explicit instruction). A student's IEP must address how a child will receive instruction or support in all domains of learning (academics, social emotional, independent functioning, and communication) according to IDEA (2004). Teachers recognize inclusionary practices help students learn these skills in the natural setting (Ballard & Dymond, 2017).

Teachers have a direct influence on how a child learns. Negative attitudes create barriers that are difficult to overcome (UNESCO, 2020; United Nations, 2013). Many children internalize a teacher's attitude toward them until it melds with the student's view of their worth (Rojewski et al., 1991). Building relationships between teachers and students set the tone for learning. Most children learn more from teachers who accept them and welcome them into class.

Teacher Attitude Toward Inclusion of Children with Disabilities

A teacher's attitude toward inclusive education is influenced by many factors. The type or severity of a disability influences the attitude toward the inclusion of children with disabilities into the regular education setting. Teachers demonstrated a more positive attitude toward the inclusion of students with mild or physical disabilities compared to students with cognitive delays or behavioral disabilities (Bae, 2012; Cameron, & Cook, 2013; Smith, 2000). This may be contributed to the level of confidence a teacher has in meeting the needs of students with mild disabilities.

The attitude of the teacher toward inclusion was also influenced by the type of accommodations or modifications required. Teachers were more willing to give general accommodations, such as extended time, which did not significantly change how a student showed mastery of content than accommodations which changed the way a student demonstrated

mastery (Hawke, 2013). Teachers indicated a belief; accommodations which changed the way a student responds gave an unfair advantage to SWD.

Teachers have a more positive attitude toward the inclusion of children with disabilities who are expected to learn the same material as their typically developed peers through showing mastery of grade level standards. When students are graded on a different scale, the perception of unfairness may occur (Rojewski et al., 1991).

Overall, when a teacher demonstrated higher confidence in their ability to meet the needs of the student, their attitude toward inclusion tended to be more positive (Charley, 2015; Elshabrawy & Hassanein, 2015). The next section explores the attitude of teachers toward SWD with a CI. Many times, the standards, tasks, and expectations must be modified to accommodate students with higher needs. While teachers can see the importance of inclusion, when it comes to core content areas, teachers are hesitant to accept students using alternate standards into their classes.

Teacher Attitude Toward Inclusion of Children with Cognitive Impairment

Students with moderate to severe intellectual and developmental disabilities access their education through alternate standards. Alternate standards mirror regular grade level standards but at a less complex depth of knowledge. Traditionally, students evaluated using alternate standards require direct instruction in a small group setting on content to show improvement in academic knowledge (Timberlake, 2014). Their independent functioning skills are traditionally underdeveloped requiring additional supervision throughout the day. Due to their cognitive level, these students may present as a much younger child and may not have age-appropriate social skills. Teachers need to modify content and teaching practices (break academic skills into small steps, use manipulatives, and provide direct instruction, providing opportunities to encourage

active participation) (Downing & Ryndak, 2010). This requires training and resources to plan and implement modified instruction.

Educators remain unsure how to meet the needs of SWD whose disability includes a CI. Educators vary in the perception of the best place for children with severe disabilities to receive their education. Teachers are more likely to have a negative attitude toward including children with a CI into the mainstream classroom (Elshabrawy & Hassanein, 2015). Some stakeholders feel students with more pronounced disabilities should be educated in a separate setting (Goodall, 2018; Smith, 2000). Adults are concerned students with pronounced disabilities will be teased or bullied by their peers. Students with pronounced disabilities report bullying and feeling alone when in the mainstream classes (Goodall, 2018). Stakeholders may feel the students must remain sheltered and therefore are safer in a separate class setting or in a separate school setting (Smith, 2000). Another concern is not being able to devote enough time or support to the students to enable them to learn the academic content. Finally, there is concern the education of their typically developed peers will suffer due to having to progress at a slower pace. Where is the best environment for the student and more importantly, how do we determine best placement?

Timberlake (2014) found teachers evaluated the best educational placement by the perceived *worth* of inclusionary practices based on a vague ideal of cost versus benefit. Teachers defined benefit as having lasting value in skills learned and cost as *wasting time*. Teachers felt successful students would have the skills to participate in the mainstream setting (Timberlake, 2014). They were concerned mainstream classes may prove to be too challenging or fast paced and did not allow for individual support for the students. Teachers stated they were concerned with the progress of SWD (Kurth et al., 2015; Timberlake, 2014) and the best result would be children

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Evaluating Attitude

A teacher's attitude has great influence on the success of school programs. IDEA (2004) and NCLB (2001) mandate the SWD receive their education in the LRE to the greatest extent possible. Currently, many SWD are physically included in regular education settings but students with moderate cognitive impairments using alternate standards remain separated from their typically developed peers. A potential barrier is the attitude of teachers toward full inclusion. Gregory & Noto (2018) published a scale measuring a teacher's attitude toward inclusion. According to the study, measuring attitude requires three domains studied: cognitive, affective, and behavioral.

The cognitive domain relates to the teacher's perceptions of a students. This domain focuses on how the teacher perceives the ability of the SWD to succeed in the regular education setting. The affective domain relates to the teacher's belief about their ability to form relationships and teach all students. The behavioral domain relates to the teacher creating a positive learning environment for all students in the class. All three domains combine to create a composite attitude toward the inclusion SWD in regular education settings. The attitude of the teacher has a significant impact on the success of inclusionary programs. By studying attitude, professional development (pre-service or in-service) can be developed to address any discrepancies.

Influences on Teacher Attitudes Toward Inclusion

One of the most influential elements to successful inclusion is a positive attitude toward educating SWD in the regular education classroom by the teacher (Hammond & Ingalls, 2003;

UNESCO, 1994, 2020; Van Laarhoven et al., 2007; Weiner, 2003). Teachers with a positive attitude toward SWD are more likely to have a positive attitude toward providing accommodations and holding high expectations (AlMahdi & Bukamal, 2019; Hawpe, 2013) which are required to meet the needs of the students. During the Hawpe (2013) study, teachers with a positive attitude toward inclusion were more willing to provide accommodations and some modifications for students with a disability.

Yet, some teachers feel trepidation when SWD are placed in regular classes. Multiple studies find teachers are not confident in their ability to meet the needs of SWD (AlMahdi, & Bukamal, 2019; Ferguson, 2014; Haegele et al., 2016; Kos, 2010; Smith, 2000). Self-confidence to meet the needs of students has a large impact on how teachers view inclusion. Educators understand the importance of inclusion but feel insecure in their ability to provide effective support (Charley, 2015; Yu, 2019). Self-confidence was linked to experience in working with SWD, training on meeting specific needs, and having knowledgeable support personnel to help in the classroom (Yu, 2019). Lack of confidence in supporting SWD continues to hinder full integration between children with and without disabilities even after over fifty years of research, lawmaking, and implementation of inclusionary practices. Training and supports are needed to increase self-confidence in meeting the needs of SWD.

Hesitation about inclusion linked to a lack of confidence may be caused by a perception there is a lack of support, training, and resources available to meet the needs of the student who has a disability (Charley, 2015; Timberlake, 2014; Petersen, 2016). By increasing selfconfidence, acceptance of SWD in the classroom may increase. The following sections will address the factors influencing a teacher's attitude toward teaching in an inclusionary setting to include: the amount of training received, availability of collaboration, perceived availability of

supports and services, the understanding of how to measure student progress, and years of service.

Training

Training is a major factor in how teachers perceive their ability to successfully meet the needs of a child with a disability. Several studies found educators were unsure of their ability of meeting the needs of SWD and indicated a need for training in special education (Allday et al., 2013; Bae, 2012; Bemiller, 2019; Boylan, 2016; Ferguson, 2014; Haegele et al., 2016; Hammond & Ingalls, 2003; Kos, 2010; Smith, 2000; Malki & Einat, 2018; UNESCO, 2020). Bemiller (2019) highlighted the lack of training as it relates to special needs when they conducted a study of two elementary schools in the area of inclusion. Seventy four percent of teachers in the study stated they had not received training in strategies to help students with disabilities learn; 71% of the teachers stated they were interested in receiving training. Preservice programs are the first exposure to training for many educators.

Programs designed to certify teachers (college education programs or alternate certification programs) are tasked with imparting the needed skills to become an effective educator. Many teacher preparation or pre-service programs offer courses related to children with special needs, however; pre-service programs have not consistently offered adequate training in regard to children with special needs (Snyder, 1999). Regular education teachers have few requirements in the field of special needs education during their pre-service programs. Allday et al. (2013) found out of 109 university programs studied, the required number of credit hours for regular education elementary certification averaged 2.35 credit hours in special education out of 124.39 hours in their pre-service elementary education programs. Pre-service programs averaged a requirement of one course, or 3 credit hours related to teaching children

with disabilities (Allday et al., 2013; Kos, 2010). Many teachers feel they do not receive sufficient training in inclusionary practices (Bemiller, 2019; Kos, 2010; Malki, & Einat, 2018).

Special needs pre-service programs continue to focus primarily on functional life skills as opposed to academic skills (Petersen, 2016). While IDEA (2004) require life skills to be a part of the services provided, instruction in academics is also required to be part of the educational curriculum. Regular education pre-service programs need to address how to teach SWD and go beyond the basics of how a disability is defined. Courses are also needed to help develop collaboration skills (Olson et al, 2015; Petersen, 2016; Snyder, 1999; Van Laarhoven et al., 2007). Only six universities offered courses in collaboration between special education and regular education teachers in their pre-service programs and none of the universities studied required students complete a course in collaboration skills (Allday et al., 2013). Gehrke & Cocchiarella (2013) discovered pre-service programs varied widely in requirements relating to inclusion for certification. Some programs did not offer courses in inclusion while some elementary programs offered up to two courses focused on inclusion. In the same study, elementary and secondary education programs offered courses specific to inclusion and collaboration while special education programs did not report courses specifically focused on inclusion or collaboration skills. Further findings showed participants in special education programs were able to give a textbook definition of inclusion, but courses did not focus on how to implement inclusion. Specifically, participants were not prepared to adapt materials, utilize personnel, or recognize inclusion beyond placement of the student in a regular education class (Gehrke & Cocchiarella, 2013). Participants in the special education programs voiced concerns on being unprepared to implement effective inclusionary practices in real world settings.

Many pre-service programs have some form of field experience requirement. In some field observations for special education majors, found there were either no identified SWD in the classes or the classes were in a separate setting without typically developed students (Gehrke & Cocchiarella, 2013). In other programs, interaction between typically developed and non-typically developed peers were observed (Gehrke & Cocchiarella, 2013). Field experience in elementary education programs provided more exposure to inclusion within the classroom while secondary programs reported fewer incidences of observed inclusion (Gehrke & Cocchiarella, 2013). Special education programs fell short in going beyond the textbook definition of inclusion without addressing effective implementation strategies in inclusion. Training does not stop with pre-services programs.

Teachers participate in professional development throughout their career which theoretically provides additional opportunities for teachers to receive training in meeting the needs of students with special needs. One area of continuing development centers on developing teacher leaders with expertise in their instructional areas has seen success in creating effective training programs (Boylan, 2016). Findings have shown support and sharing of information from teachers who are seen as experts in their field garner more confidence in the ability for teachers to support students with special needs (Boylan, 2016; Ferguson, 2014; Kos, 2010). Developing teacher training leaders may be helpful with increasing the knowledge and positive attitude toward inclusion by all educators in the special needs area.

Teacher training in the form of workshops have produced conflicting findings in regard to the effectiveness of workshops. Bae (2012) found training on the foundations of special education (types of disabilities, needs for special education, current policies, introduction to inclusion) has been found to have a positive effect on the attitude of pre-school teachers toward

inclusion, while Haegele et al., (2016) found workshops centered on laws, types of disabilities, and modifications to activities without hands-on practice of executing the strategies taught had limited impact on improving positive attitudes toward inclusion. Effective training topics included: characteristics of various disabilities, differentiation of instruction to meet the needs of a student with a disability, effective classroom management specifically to increase engagement while decreasing disruptive behavior, communication skills, and collaboration skills between teachers (Allday et al., 2013). Along with topics of need, the training itself may influence training effectiveness.

The type of training may be a deciding factor in how influential the training is in improving educator's attitudes or perceptions of self-confidence in meeting the needs of SWD (Herner-Patnode, 2009; Haegele et al., 2016; Bae, 2012; Wilkins & Nietfeld, 2004). Traditional Professional Development perceived to increase workload (Wilkins & Nietfeld, 2004) or Professional Development centering around one-time lectures with little input from participants (Herner-Patnode, 2009) is not effective in changing the culture of the learning environment. Bae (2012) found college courses in special education had less of a positive influence on attitude when compared with in-service training. College courses tended to be general, introductory courses while in-service training tended to be more specific in providing information on how to meet the needs of children with disabilities (Bae, 2012). Whether training was found to be effective or not, educators indicated a desire for increased opportunities to participate in disability-focused training (Haegele et al., 2016; Kos, 2010). One form of training found to be effective centered on the sharing of knowledge.

Professionals need to share their knowledge and continue to search for answers as opposed to being told what they need to do despite their experiences (Webster-Wright, 2009).

Collaborating may require conflict resolution skills between team members (Dukes & Dukes, 2009). Teachers have different styles of teaching, may interpret documentation differently, or have diverging views on best practices. The ability to navigate these differences is vital to create a collaborative environment. Open lines of communication between all stakeholders are essential for effective collaboration (Dukes & Dukes, 2009). There is also a need for professional development focused on collaboration (Dukes & Dukes, 2009; Weiss et al., 2018). Collaboration requires specific skills which may need to be developed in educators.

Collaboration

Along with training, collaboration between special needs and regular education teachers is essential to promote a positive attitude toward inclusion (Ballard & Dymond, 2017; Dukes & Dukes, 2009; Hammond & Ingalls, 2003; Van Laarhoven et al., 2007; Weiss et al., 2018). Collaboration requires time to work with teachers to provide needed services (Herner-Patnode, 2009; Kos, 2010). While time to collaborate is essential; by itself it is not enough to cultivate true collaboration. Collaboration requires team building between special education and regular education teachers (Dukes &Dukes, 2009). True collaboration lends itself to building a specific shared vision centered on all students meeting with success. One way to create this shared vision is though forming collaborative groups.

Collaborative Study Groups allow teachers to explore recent research, best practices, and have a voice in their learning. Collaborative study groups promote collaboration between educators and can reduce the feelings of isolation in learning (Herner-Patnode, 2009; Weiner, 2003). Study Groups including both regular education and special education teachers can be effective at promoting inclusion. Effective groups are created based on common needs such as tiered intervention, math strategies, implementing peer tutoring, etc. When every member of the

group is working to fulfill a common need or solve a shared problem, a shared responsibility develops this leads to active participation in the group because each group member has responsibility for the learning (Herner-Patnode, 2009). Collaborative groups share ideas for supports and strategies. Collaboration also allows discussion on how success is measured. Children using alternate standards work on the same standards as regular standard but at a less complex level. Collaboration between educators help to address how students are assessed to show meaningful progress on both grade level standards and IEP goals.

How to Measure Progress

Access to the regular education setting depended on building a positive learning community centered on a positive learning environment, having adult supporters, providing accommodations and modifications, and the actual location of the inclusion of SWD fostering peer acceptance. Educators (regular education teachers, special education teachers, and paraprofessionals) must create a learning environment which welcomes a child with a disability. All students need to feel safe and wanted in the classroom (Ballard and Dymond, 2017). The teacher must balance high expectations with providing the supports needed for each student to thrive.

Questions arise whether grades should be based on mastery of criteria, participation, social engagement, or on progress made toward mastery. Teachers need to determine and define how to measure the successful completion of the class beyond passing a standardized test.

Determining Criteria. Before the success of the student's education can be determined, the criteria for success must be defined. Students using alternate standards may be placed in regular education classrooms to increase their ability to interact socially with peers, increase their academic skills, or foster greater independence. It is important teachers know the function of

inclusion in order to set effective success criteria. Cameron, & Cook, (2013) found special needs teachers who support children with disabilities in the regular education classroom were more likely to set success criteria focused on social involvement when the included student has a severe disability while success criteria for students with mild disabilities centered on behavioral goals. While interpretation of inclusion is fluid, the principles of providing a quality education remain the same (Dukes & Dukes, 2009). Students must be educated with rigor at an appropriate level to facilitate learning (Dymond et al., 2007; NCLB, 2001). Rigorous level must be determined in relation to student ability.

Curriculum in the regular education setting may be too complex and not meaningful for students with cognitive disabilities (Ballard & Dymond, 2017). Prom (1999) found teachers perceived less participation from students with a CI as classroom tasks become more complex. Educators were concerned how to foster active participation in class when the content is beyond the capability of the student due to CI. Curriculum for a student with a CI needs to address social skills, academics, and balance higher academic skills with functional everyday skills designed to increase independent living. Students need to have access to higher academics with the understanding the student with a disability may not be able to master the content. Educators felt academics were important but developing social skills should be the primary focus for a student with a significant disability.

Teachers in general found it difficult to justify different success criteria for the same classroom (Rojewski et al., 1991). Over time and without consistent collaboration with a special education teacher, general education teachers tended to revert to regular standards for students with CI (Prom, 1999). This created difficulties in grading due to students of different abilities being given similar grades for different levels of mastery of the same content. Students may also

feel grades are unfair if they perceive they have to work harder for the same grade as an impaired student. Differentiation in grading may be seen as unfair to students and teachers alike. Regular education classes are also tied to specific curriculum and timelines. SWD have IEP goals which must be taught but may not fit into the curriculum. Melding IEP goals and regular education standards could cause barriers when the two do not align. To find ways to meet both IEP goals and provide access to regular academic curriculum requires communication between educators (Ballard and Dymond, 2017). Successful mastery of criteria is often measured and communicated to students through grades assigned using a grading system. These grades a student earns can have an impact on the student's self-esteem and social standing.

Self-esteem and grades. Teachers express concern over how students internalize grades. Many students use grades to determine their self-worth in all areas of their life, not just as a measure of their academic success (Rojewski et al., 1991). When students receive a poor grade, they may feel as if they are less worthy or incapable of achievement (Rojewski, 1990). This can have a negative impact on how they see themselves. To counteract negative interpretation of grades, grading criteria must be defined and the teacher must create a positive classroom.

Learning Environments. Positive learning environments measure success of both typically developed and atypically developed students. A positive inclusionary setting depends on all students interacting with each other and participating in learning activities as partners (Ballard & Dymond, 2017). Students with cognitive disabilities may not have the ability to gain knowledge to the depth of the regular standards but they can learn academic skills at their level alongside their typically developed peers. Interaction with nondisabled peers will help them develop social skills and form relationships with typically developed peers, and develop social awareness (Charley, 2015). Nondisabled peers will develop connections with people who appear

different thereby decreasing bullying and a sense that people who are not typically developed do not *belong* (Ballard & Dymond, 2017). Creating a positive learning environment can be used as an indicator of success.

While access to academics was viewed as important, it is important to note that the emphasis is not always on academic success but on simple access to the regular education setting (Ballard & Dymond, 2017). Criteria to determine progress must be defined and communicated to all stakeholders before the success of the student or program can be determined. Teachers may require professional development on differentiating curriculum and differentiation in grading criteria to create a positive learning environment for all students.

Professional development. Lack of training in how to grade students and what a grade symbolizes compounds the uncertainty for both students and teachers (Rojewski et al., 1991). Adding to the confusion, teachers do not see how the Alternate Assessment, IEP goals, and Curriculum align and feel they need to be addressed separately (Petersen, 2016). It is imperative teachers are given guidance on reasonable grading practices which are fair and objective to both students with and without disabilities (Rojewski et al., 1991). It is difficult for the teacher to define success in terms of the individual student without training.

Years of service

Finally, years of service may have an impact on a teacher's attitude toward inclusion. Teachers with greater experience may have a higher confidence in providing support and meeting the needs of a SWD. However, Fisher (2017) found teachers with less teaching experience showed a more positive attitude toward inclusionary programs than teachers with more experience. This might be contributed to a less biased outlook or having fewer negative experiences with inclusion. Pre-service programs which provide instruction in meeting the needs

of SWD may also contribute to a higher feeling of competence in beginning teachers (Dunst & Bruder, 2014). Teachers with six to twenty-five years of experience tended to exhibit a more positive attitude toward inclusion (Mngo & Mngo, 2018). After thirty years, the support for inclusion begins to decline. This decline may be contributed to negative experiences or lack of supports. Addressing the issues which lead to negative experiences must be a priority in teachers maintaining a positive attitude toward inclusion. Inclusionary practices may be mandated by law, but success is linked to the attitude of teachers.

Inclusion of persons with moderate to severe disabilities must entail more than physical placement in a regular education classroom. SWD must be an active participant in their educational setting. Supports and systems must be in place to meet their increased needs. Students may need smaller classes or a place to go when they are overstimulated (Goodall, 2018). Supports must be provided, students must be seen as individuals before they are seen as their disability and the culture of the school must be one of tolerance and acceptance.

Purpose of the Study

The purpose of this study is to explore teacher attitudes toward the inclusion of students using alternate standards in regular education core classroom settings and if the act of inclusion altered the teacher's attitude. Inclusion remains inconsistent across populations. Teachers showed acceptance and a positive attitude toward the concept of inclusion but stated supports are needed for an effective inclusionary program. Successful inclusionary programs included the following characteristics: special education teachers supporting the regular education teachers, a clear plan and help with modifying content, effective IEPs, overall smaller class sizes, and limited numbers of special needs students per class (Kos, 2010).

According to the Annual Report to Congress (U.S. Department of Education, 2019), 65.6% of students in Florida with using alternate standards remain in a separate class setting over 80% of the school day. The main focus of this study is determining what is influencing the separation of children with moderate to severe disabilities from their typically developed peers. Currently, a small percentage of children using alternate standards receive instruction in the regular education classroom. This study is needed to determine how teachers' perception of providing services to students with cognitive delays are influenced.

Research Questions

The purpose of this study is to explore teacher attitudes toward the inclusion of students using alternate standards in regular education core classroom settings and if the act of inclusion altered the teacher's attitude. The study addressed the following questions:

- 1. What are the attitudes of public-school teachers toward inclusion of students with Cognitive Impairment?
- 2. In relation to students with a disability, what professional development opportunities have been provided to teachers?
- 3. From the perspective of the teacher, what elements (resources, supports, training) are needed for the successful inclusion of students with a cognitive impairment into regular education core classes?

Need for the Study

The subject of including individuals with disabilities in inclusive educational settings alongside their typically developed peers remains a relevant topic on a global scale. While overall inclusion has increased over the last fifty years, implementation of inclusive practices remains haphazard. Studies which separate acceptance level based on type or severity of the

disability show children with intellectual disabilities are placed in separate settings at a greater rate than their peers with disabilities not tied to intellectual ability. This study will examine the attitude of regular education teachers, in core subject areas, toward students using alternate standards to determine what influences improve acceptance of students with cognitive disabilities who are using alternate standards.

Summary

Difficulty with creating effective inclusionary programs spans multiple countries including the United States. In part, this difficulty stems from the lack of an operational definition for inclusion. Inclusion can mean SWD are educated in a public school but in separate classes and kept away from their typically developed peers throughout the school day. Inclusion can also mean SWD attend the same classes alongside their typically developed peers. Regardless of the interpretation used, inclusion references the education of children with disabilities participating in their education alongside their typically developed peers regardless of the severity of their needs, disabilities, gender, race, or other characteristics used to separate people. This is a slightly different definition than Least Restrictive Environment (LRE) in IDEA (2004). LRE indicates the education of children with disabilities be educated alongside their typically developed peers to the greatest extent possible. LRE stipulates a SWD receive supports and services to be able to attend school in the regular education setting to the greatest extent possible. Assigning children to *special* schools and classes should be the exception, not the norm. Separating a child from the regular education setting should occur only after all the use of all appropriate supports and services is shown to be ineffective. Special schools or classes continue to be needed for a select few children with extensive needs but should support regular

education standards and exposure to the regular education environment to the greatest extent possible as determined by the needs of individual student.

The research shows teachers have an overall acceptance of inclusion for SWD who can master grade level standards. Educational theory currently states, most students will progress farther if they are in a heterogeneous setting with their typically developed peers (Ballard & Dymond, 2017; UNESCO, 1994; Yu, 2019). This ideology seems to be accepted by most educational professionals when the disability does not involve moderate to severe CI (Bae, 2012; Smith, 2000). Educators are less sure of the benefits of inclusion when the child must access their education through alternate standards. More research is required to determine what influences a teacher's attitude toward the inclusion of students with CI and what supports are needed to how to increase acceptance of a child with a CI into the regular education setting.

Successful programs for the inclusion of students with cognitive disabilities also include collaboration between teachers (special needs and regular education), a sense of shared responsibility for all student learning, resources dedicated to meeting individual student needs (Dukes & Dukes, 2009; Kurth et al, 2015; Olson et al., 2016; Petersen, 2016; Weiss et al., 2018). Even though some elementary teachers may feel inclusion is not beneficial to all students (Hammond & Ingalls, 2003) data indicates students benefit both academically and socially from inclusion (Picard, 2008). Many teachers are willing to learn about meeting the needs of children with disabilities regardless of their attitude toward inclusion (Bae, 2013; Bemiller, 2019; Haegele et al., 2016; Kos, 2010). This acceptance for training on how to meet the needs of SWD indicates while many teachers remain skeptical of inclusion, they are open to learning more about the topic.

The aim of this study is to determine what influences a teacher's attitude toward the inclusion of a child using alternate standards in core classes and to determine how or if providing education in the core classes influence the teacher's attitude. The study also aims to determine what supports are needed to meet the needs of students using alternate standards in the regular education setting according to teachers. Chapter 3 outlines the methods used in the study (population, data collection tools, data analysis, study procedures, how confidentiality was maintained, how results will be presented and limitations of the study) in the regular education core classes. The overall goal of the study is to help shape educational policy and determine appropriate supports required for effective inclusion of students with a CI using alternate standards to receive their education alongside their peers in regular education core classes.

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS CHAPTER 3: METHODS

Implementing successful inclusionary programs for students using alternate standards continue to elude educational systems. Continued research is required to further understanding of how to increase the inclusion of students using alternate standards into regular education settings. The literature review supports the theory a teacher's attitude has a direct impact on the success of educational programs. There are many influences on a teacher's attitude toward the inclusion of students using alternate standards.

This section will provide the mechanics of the study. It will describe the methods, procedures, data analysis, and ethical considerations of the study. The purpose of this mixedmethods study is to determine influencers on teachers' attitudes toward the inclusion of a student using alternate standards in the regular education classroom. The study focused on three research questions:

- 1. What are the attitudes of public-school teachers toward inclusion of students with Cognitive Impairment?
- 2. In relation to students with a disability, what professional development opportunities have been provided to teachers?
- 3. From the perspective of the teacher, what elements (resources, supports, training) are needed for the successful inclusion of students with a cognitive impairment into regular education core classes?

The literature review found both quantitative and qualitative studies have been conducted on the topic of inclusion. Quantitative data provide descriptive statistics to uncover statistically significant relationships. The limitation to quantitative data is it may lack conceptual

understanding and underlying influences. Quantitative data provides context to how the attitude of the teacher is influenced but may oversimplify or overstate relationships found in the data.

Mixed-methods studies collect both quantitative and qualitative data and utilizes a variety of data analysis techniques in order to draw relevant conclusions. A mixed-methods approach may provide a more complete picture of the challenges in inclusion from the teachers' point of view. Formulating a complete picture can provide insight on policies and procedures designed to improve inclusionary programs and provide a positive effect on teacher attitudes.

As indicated by the literature review, teachers exhibit a generally positive attitude toward the inclusion of SWD into mainstream classes but have reservations about their own ability to meet the needs of those students (Yu, 2019). The literature also shows teachers have more acceptance toward students with learning disabilities as opposed to students with CIs (Goodall, 2018; Smith, 2000). Creating inclusive programs is complex as shown through the research. Thus, mixed research methods were chosen due to the need for quantitative data to compare generalized attitudes toward the inclusion of students using alternate assessment. Qualitative data will show the complexities of the topic to lead to a deeper understanding of inclusion from the teachers' perspective. A combination of both types of data (quantitative and qualitative) will provide holistic data to further address the question of effective inclusionary practices.

Population and Sample

The study will take place in a school district in central Florida. The overall population in the district is approximately 724,000 people. The county's median annual income is \$50,584 with 14% of the general population reported to live in poverty (US Census Bureau, 2019). The district oversees over 150 schools (22 of these are public middle schools) with more than 104,000 total students in grades K-12, and 6,800 teachers. The district services more than 21,000

Students with disabilities (White - 9,200; Hispanic - 7,000; Black - 3,900; Bi-racial – 600; Asian -300; Other -70) with a full continuum of services from regular class setting to individual hospital homebound services. Schools chosen to participate in this study must meet the following criteria: be a public middle school servicing grades 6-8 and not require a student application to attend.

Participants in this study will consist of teachers from public middle schools who teach core content areas (math, science, social studies, or language arts). In Florida public middle schools, core content areas are the only classes which determine if a student advances to the next grade level. All participants are fully certified teachers either on a three-year initial or five-year professional certificate. Long-term substitutes, paraprofessionals, or student teachers were not included in the sample. Participants will be contacted through work e-mail accounts and all consent forms and surveys will be conducted through the e-mail platform. All participants in the study completed an online survey gauging teacher attitude toward inclusion. Participants who taught or are currently teaching a student using alternate standards, will be asked to complete interview questions through the virtual platform, Survey MonkeyTM. The interview questions (see Appendix D) will focus on how teaching a student using alternate standards may have affected their attitude toward inclusion.

Data Collection Tools

Three instruments will be used to collect data for this study. The tools used for this study include: a Questionnaire for all participants; the Attitude Toward Teaching All Students (ATTAS-mm) developed by Jess Gregory and Lori Noto (2018), and Individual Interview for participants with students using alternate standards in their regular education classes. Data

Questionnaire

The Questionnaire was created by the researcher. Information collected will consist of age, gender, number of years teaching, special needs or regular education teacher, type of certification (3-year or 5-year professional), type of training in special needs (pre-service program, special needs workshops, in-school training, content area taught, grade level, family with a disability, having a student using alternate assessment in class. The demographics listed above have been shown to have an influence on the attitude toward inclusion (Hawpe, 2013; Weiner, 2003). There will be open-ended questions asking participants to describe their understanding of inclusion and LRE in relation as well as IDEA Law. A final question will ask teachers to voice their opinion of the best placement for children using alternate assessment. The Questionnaire can be found in Appendix A.

ATTAS-mm Instrument

The ATTAS-mm measures the three domains of attitude: cognitive, affective, and behavioral. The ATTAS-mm is based on the Teacher Attitudes Toward Inclusion Scale (TATIS, Cullen et al., 2010). The TATIS survey was developed to measure the attitude of teachers toward inclusion of students with mild to moderate disabilities in three areas: "attitudes toward SWD in inclusive setting, beliefs about professional roles and responsibilities, and beliefs about the efficacy of inclusion" (Cullen et al., 2012, p.6). Due to negative wording on some of the questions, there were discrepancies in the data. The updated ATTAS-mm corrected the discrepancies by using positive phrasing for all questions.

The ATTAS-mm survey uses descriptive statistics to define the positivity of a teacher's attitude toward inclusion. Using the scoring sheet - high scale scores indicate a positive attitude while low scores indicate a negative attitude toward inclusion. The ATTAS-mm was found to be both reliable and valid in measuring the three domains of attitude with a Cronbach alpha at .83 (Cognitive, .72; Affective, .93; Behavioral, .84).

The ATTAS-mm was chosen for this study because it has been tested for reliability and validity. This tool has been used in previous studies and been found to be both reliable and valid. The ATTAS-mm scale showed a reliability of .8333 on the Cronbach alpha and was vetted by a panel of experts to measure the attitudes toward teaching all students. See Appendix B for a copy of the survey.

Permission was obtained by Jess Gregory (the permission e-mail can be found in Appendix C). The ATTAS-mm survey was modified to evaluate inclusion programs for students using alternate standards by changing the term "mild or moderate disability" to "student using alternate standards". Operational definition for *inclusion* and *Alternate Standards* were given on the survey to normalize interpretation of terms. The definition was given after the demographic questionnaire was completed to minimize the impact of having a given definition of inclusion when teachers were asked for their interpretation of the term.

Individual Interview

Teachers, who are teaching or have taught students on alternative standards in the regular education setting, will participate in an individual interview. The interview will focus on perception of best placement, opportunities for collaboration, available supports, perceived benefits and barriers, training, and influences on perceptions. See Appendix D for Interview Questions.

Due to the Covid-19 shutdown and distancing policy, the interview will be incorporated into the online survey. The interview questions will be activated if the participant answers "yes" to having taught a student using alternate standards in their regular education classroom. Each question will be open-ended and address the third question of the study.

The interviews will provide rich description of complex feelings and attitudes toward the inclusion of students using alternate standards in the regular education setting. Interviews will be analyzed for recurring themes relating to inclusion through coding gathered data. The following section includes a description of the data analysis for each tool.

Data Analysis

Triangulation of data increases the credibility of a research study (Tracy & Tracy, 2013, p.236). This study uses three data collection tools (demographics questionnaire, TATIS Survey, and the individual interview) to achieve triangulation of data thereby increasing the credibility of the study.

An ANOVA will be used to determine if there is a statistically significant relationship between demographic characteristics and a positive or negative attitude toward inclusion of students using alternate standards. ANOVA has been used to determine the significance of the relationship between factors influencing the attitude of teachers toward inclusion (Charley, 2015). Positivity or negativity of teacher attitude toward inclusion of students with a CI will be determined according to the ATTAS-mm survey (Gregory & Noto, 2018).

Qualitative information will be analyzed using thematic analysis (TA). TA requires the researcher to interact with the data on a deep level and go beyond the superficial meanings found in the data (Xu & Zammit, 2020). According to Braun, & Clarke (2006), there are six steps in TA. These steps are as follows: First, the researcher must become familiar with the data. Second,

initial codes are identified for specific words or phrases which summarize basic information from the data. Third, from the codes, themes develop as codes are identified across the data. Themes describe deeper meanings found in the data. Fourth, themes are reviewed and tweaked for accuracy. Fifth, the themes are concretely defined and named. Sixth, the report is written. The final report is telling the story the data shows the researcher (Xu & Zammit, 2020). Both the demographic questionnaire and the interview will provide qualitative data and be analyzed using TA. Qualitative data will be collected on all three survey questions with focus on how students using alternate standards shape and influence teacher attitudes.

The computer program NVivo (https://portal.mynvivo.com/) will be used to assist in determining codes, themes, and relationships between data points. Maher et al. (2018) found using the NVivo program allowed storage and organization of vast amounts of data and helped with the initial coding phases during analysis. After the initial coding phase, the researcher will manually use the codes to determine themes and underlying meaning of the data (Maher et al., 2018). The following subsections will describe how the analysis will be conducted with each tool.

Questionnaire

The questionnaire will provide general characteristics of the participants, their understanding of the special needs program (knowledge of IDEA law and inclusion), special needs training the participant has received, and will determine which participants will participate in the Individual Interview. Participants who have had a student with a CI using alternate standards in their regular education classroom will be asked to complete the Individual Interview. Information will also be analyzed using the mode of responses to determine comfort level of teachers with special needs law, comfort with teaching special education students, and

determine what special needs training (college courses or professional development) the participant has received.

The open-ended questions will be analyzed using TA to discover underlying themes related to knowledge of inclusion and LRE. TA is an analysis technique to uncover recurring themes in qualitative data (Xu & Zammit, 2020). Significant relationships between characteristics of the participants can be identified using an ANOVA (Charley, 2015). An ANOVA test will be used to determine the relationship between demographic characteristics and overall positive attitudes identified using the ATTAS-mm Survey.

ATTAS-mm

Initial scoring to determine positive or negative attitudes toward inclusion of students using alternate standards will be determined using the ATTAS-mm Conversion Scale found in Appendix E. The Conversion Scale provides the T-score and percentage rank for each question. Higher scores indicate a positive attitude toward inclusion while lower scores indicate a more traditional view with favorability toward a separate setting. ANOVA will be used to determine if characteristics from the demographics correlate to a higher or lower score on the ATTAS-mm.

Individual Interview

A Critical paradigm will be used for this study. Successful inclusion programs rely on positive teacher attitudes (Ferguson, 2014; Hawpe, 2013; Weiner, 2013). The inclusion of students with mild disabilities or physical disabilities were more accepted by teachers in inclusionary programs than students with cognitive delays or behavioral disabilities (Bae, 2012; Smith, 2000). Teachers continue to have doubts on the effectiveness of inclusion for students using alternate standards (Timberlake, 2014; Kurth et al., 2015). The critical paradigm focuses on the transformation of norms to improve an aspect of society and address injustices (Tracy,

2013, p.42-44). The seclusion of children based solely on their disability meets the definition of injustice (IDEA, 2004). When injustice is normalized in a society, it may not be perceived by a population. The individual interview will provide insights to possible prejudices toward inclusion which participants may not be aware exist.

Thematic analysis will be used to identify recurring themes found in the qualitative data gathered. Qualitative methods in the form of a semi-structured interview with open-ended questions will be used to collect data. The interviews will first be coded then analyzed for themes. Preliminary coding will separate data into the following themes: understanding of inclusion, supports and training available or needed, how was workload affected by having a mixed class, and attitude of the teacher toward inclusion. More themes may be added if data supports the addition of additional themes. To counteract bias, the computer program NVivo will be used to identify themes throughout the interviews and open-ended questions on the questionnaire.

Data will be cross analyzed using coding between the questionnaire and the interview. The questionnaire and the ATTAS-mm will be cross analyzed using ANOVA. Before any datum is gathered, ethical guidelines will be set to ensure the safety of all participants. Specific ethical considerations and procedures are outlined in the following section.

Study Procedures

A mixed methods approach will be utilized for this study. All participants will answer a survey with closed ended questions and open-ended questions to allow teachers to fully share their perceptions on inclusion. Participants who have taught alternate assessment students in a core regular standards class will also participate in an open-ended interview. Data analysis will include ANOVA to determine if statistically significant relationships exist between demographic INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS information and attitudes. Thematic Analysis including open coding categories will be used to find trends offering insight on the data.

Stage 1 Pilot Study

A Pilot study of fourteen participants was conducted to evaluate the survey questions. Participants were all teachers in public schools on a professional teaching certificate. Participants were asked to complete the anonymous survey. Participants were asked to provide specific feedback on the survey through e-mail if desired. The researcher worked with the data to determine if the data addressed the survey questions. Minor changes to the demographic questionnaire and the interview questions were made after feedback from the participants and working with the data. The ATTAS-mm portion of the survey remained unchanged except for the modifications described in the previous section.

Stage 2 Gaining Permission

Permission to conduct the study in a Central Florida School District was obtained from the school district. Approval was then obtained by the Institutional Review Board (IRB) at Slippery Rock University in Slippery Rock, Pennsylvania (Appendix F). After permission was obtained, participants were contacted by their public work e-mail. The e-mail contained information about the study. The initial e-mail emphasized participation was voluntary and the participate could drop out of the study or skip any questions without consequence. Consent was given when the participant clicked on the link to complete the study.

Stage 3 Gathering Data

Participants received an e-mail introducing the study and requesting their participation. Participants consented to participate in the study by clicking on the link. The first question of the Survey contained an informed consent statement. The participant had to answer *yes* to complete

the survey. A reminder e-mail with a duplicate link will be sent to the participants once a week for three additional weeks unless 90% of the surveys are returned withing the three-week period. Participants who answered "Yes" to the question, "Do you now or have you ever instructed a student using alternate Standards in your core regular standards class?" will answer additional open-ended interview questions specifically related to educating children using alternate standards in a regular standards class. The interview questions are embedded in the Survey Monkey TM Platform and completed at the same time as the demographic questionnaire and the ATTAS-mm survey. The data collection phase of the study will take approximately four weeks to complete.

Confidentiality

The only identifying information used was the initial public e-mail address. Survey Monkey TM returned all completed surveys without any identifiable information. This includes removal of IP and e-mail addresses for all returned surveys before the results are viewable by the researcher. All research documents would be locked up in the researcher's home office to ensure confidentiality. Participating schools will not be listed in the final report. All original data will be kept locked up in the researcher's home office and be destroyed after the five-year holding period.

Presentation of Results

Upon completion and final approval of the finished dissertation, the finished dissertation will be shared with the Superintendent and the President of the Teachers Association in the district the study was conducted. Identifying markers will be removed from the data, information gathered from the ATTAS-mm survey will be shared with the author, Jess L. Gregory.

Proposed Limitations

The study was limited to one school district in central Florida. The researcher may bring bias to the study due to experience as a special needs teacher of cognitively impaired students. Findings were limited to public middle schools which did not require an application to attend. Results of the study may not translate to magnet, charter, or private school settings. The individual interview questions were not validated for bias from an outside agency and may have influenced the interpretation of the question. A final limitation was the use of a convenience sample for the participants. The sample may not be representative of the population.

Finally, this study was conducted during the 2019/20 Covid-19 pandemic. Due to social distancing and a reluctance to meet face to face, the decision was made to add the interview questions into the online survey format using Survey Monkey[™]. This was done by adding a third section to the online survey. At the end of the ATTAS-mm section the participant was asked if they had a student using alternate assessment in their class. If the participant reported having a student using alternate standards in their class, a third section opened with the interview questions. If the participant answered "no", then the survey ended. This decision may have limited the responses from the participants by eliminating the opportunity during the interview process to ask clarifying questions. Increased stressors associated with teaching during the pandemic may also influence how a teacher identifies their attitude toward including students with increased needs.

Summary

This study used both quantitative and qualitive research methods to form a mixed method study. Combing both methods allowed a holistic approach to examining the complex issue of teacher's attitudes toward the inclusion of students using alternate standards. Initial contact and

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subsequent data collection were completed using teacher work e-mails and the interview was completed either face to face or through a virtual meeting platform.

The demographics questionnaire served to define characteristics of teachers and the ATTAS-mm Survey provided quantitative data which measured positive and negative attitude toward inclusion. Both the questionnaire and the survey combined data using ANOVA to determine if characteristics of teachers impacted their attitude toward inclusion. Qualitative data was collected through open ended questions on the demographic's questionnaire and the individual interviews. Qualitative data focused on gaining in-depth data through TA to address all questions of the study. The qualitative data from the questionnaire and interview were analyzed using TA to determine common themes among teachers.

Ethical considerations were addressed through obtaining permission from the school board and teacher association to conduct the study in the school district. Approval for the study was granted by the Slippery Rock IRB which monitors ethical guidelines for human study. All data collection tools were approved through the Slippery Rock IRB.

Chapter four will report on the findings of the study to include both quantitative and qualitative data and findings from the data analysis. Specific findings for each of the three questions will be addressed.

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS CHAPTER 4: RESULTS

This Mixed Methods study examined public school teachers' attitude toward the inclusion of middle school students using alternate standards in regular standards classes. The study used both quantitative and qualitative data to identify possible relationships between attitude and specific characteristics of teachers. Further, the study sought to identify professional development opportunities focused on students with disabilities and what is needed to implement a successful inclusion program from the teachers' perspective. The following three questions were the focus of this research study:

- 1. What are the attitudes of public-school teachers toward inclusion of students with Cognitive Impairment?
- 2. In relation to students with a disability, what professional development opportunities have been provided to teachers?
- 3. From the perspective of the teacher, what elements (resources, supports, training) are needed for the successful inclusion of students with a cognitive impairment into regular education core classes?

Three tools were used to collect data: questionnaire, ATTAS-mm modified survey, and an interview. All tools were sent with one survey link on the Survey Monkey[™] platform. Participants completed the questionnaire first, then the ATTAS-mm survey. If participants reported they serviced a student with a CI using alternate standards in their regular standards classroom, the interview opened up to gain specific information related to their experiences. The average time to complete the survey was 14 minutes. Descriptive statistics combined with Analysis of Variance (ANOVA) was used to analyze the quantitative data. Thematic Analysis with the support of the NVivo[™] program was used to analyze the qualitative data. Qualitative

and quantitative analysis were combined to provide a whole picture into teacher perceptions for the inclusion of students using alternate standards into the regular education classroom. This chapter presents the results of this study.

Participants

Seven hundred forty-eight teachers from twelve public middle schools in a central Florida school district were chosen to participate in the study. The schools were chosen based on the following criteria. Each school serviced grades six through eight, did not require an application for enrollment, and was classified as a public middle school governed by the local school board. Work e-mails were obtained from the local teacher association for both association and non-association teachers. Nine of the emails were returned as not available to receive messages which left a total of seven hundred thirty-nine possible participants.

Potential participants received the first email through the Survey Monkey[™] platform with the informed consent and link to the survey on Tuesday, May 4, 2021. The researcher discovered the first email went to the junk email folder for the majority of the potential participants. An additional email, without a survey link, was sent on May 5, 2021, to potential participants using the researchers SRU email account. This email explained about the study and asked the participants to check their junk email folder for the original email. Seven participants sent a reply to the researcher to state the link could not be found in the junk email. The researcher sent the participants who requested the survey link directly to their email. This moved the returned responses from 8 to 18. A subsequent email was sent on Tuesday, May 11, 2021(using both the Survey Monkey[™] platform and the researcher's SRU email) which moved the total responses to 38. A final email with the link to the survey imbedded was sent to participants on Tuesday, May 18, 2021, using only the researcher's SRU email account (see

Table 3). At the end of the third week, 71 surveys had been returned.

Table 3

Progression of Participant Contact

Date	Method of Contact	Number of Responses
May 4, 2021	Email sent to 748 Potential Participants using Survey Monkey	
May 4, 2021	Discovered Survey Monkey email went to Junk folder for potential participants	
May 5, 2021	Sent email using SRU email without survey link	8 Responses
May 5, 2021	7 Participants emailed researcher stating the link could not be found. Researcher sent the link for the survey directly to participants	
May 10, 2021	- · ·	10 Responses
May 11, 2021	Email with Survey Links and email using SRU email with survey link	
May 17, 2021		20 Responses
May 18, 2021	Email from SRU email with link	
May 24, 2021		33 Responses
May 31, 2021		71 Total Responses from all contact

This translates into 9.6% survey return rate. Two respondents answered "no" to, "Do you consent to participate in this study?" which brought the total number of active participants to 69 (The low return response will be addressed in Chapter 5). Before measuring teacher attitude toward inclusion, it was important to determine the participants understanding of inclusion and

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS alternate standards. Participants were asked to provide definitions for *inclusion* and *alternate standards* before taking the ATTAS-mm portion of the survey.

Operational Definitions

Due to a lack of a unified operational definition for *inclusion* as it relates to education, before a study on the inclusion of students with disabilities can be conducted, the term *inclusion* must be defined (Timberlake, 2014; Bemiller, 2019).

During the questionnaire, participants were asked to describe their understanding of inclusion as it related to students with disabilities. Twenty percent of the teachers in the study (regular education, special education, and non-classroom support teachers) used inclusion synonymously with the term *Least Restrictive Environment*. Sixty-three percent of the teachers in the study described inclusion as children with disabilities participating in the regular education classroom with support and accommodations to the extent their disability allows. Ten percent of the teachers gave definitions including the following beliefs: students receiving their education in regular education classes without additional support, students who moved from a self-contained setting to a regular education setting, students who have one on one assistance and must stay in a designated area - out of the regular education atmosphere. Inclusion was also defined as, student(s) who are unable to participate in the regular education setting. Sixteen percent defined inclusion as students with disabilities being included in the regular education classes but held to different academic standards. The total percentage exceeds 100% due to teachers combining Least Restrictive Environment in their definition of inclusion, thereby putting their responses in more than one category.

Teachers were then asked to define their understanding of students using alternate standards and who participate on the Florida Standards Alternate Assessment. Sixteen percent of

66

the teachers did not provide an answer. Nineteen percent stated they did not know what alternate standards were. Thirteen percent stated students using alternate standards must be in self-contained classes (or separate classes) for the majority of the day. Thirty percent stated alternate standards were different than the regular standards but did not demonstrate an understanding of the differences. Fifty-five percent of the teachers knew alternate standards were modified due to a student's cognitive ability and demonstrated an understanding they were modified academic expectations. The total percentage exceeds 100% due to teachers combining criteria in their definition of alternate standards, thereby putting their responses in more than one category.

After participants provided their personal definition for *inclusion* and *alternate standards*, the following definitions were provided to ensure consistency in responses during the ATTAS-mm and Interview portions of the evaluation tool:

- Inclusion: For the purposes of this survey, full inclusion is defined as the integration of students identified with a cognitive impairment who access their curriculum using Alternate Standards and participate on the Alternate Assessment. Students spend 80% or more of the school day in a regular standards class setting. Students attend their core classes (math, language arts, science, social studies) in the regular education setting.
- Alternate Standards: Under federal special education law, alternate standards are available to students with cognitive impairments (formerly known as mental retardation) who do not have the ability to master grade level standards even with accommodations and supports.

The definitions were placed with the directions for the ATTAS-mm and Interview portions of the survey tool. Participants did not have access to the definitions before starting the ATTAS-mm or the Interview.

Data and Analysis

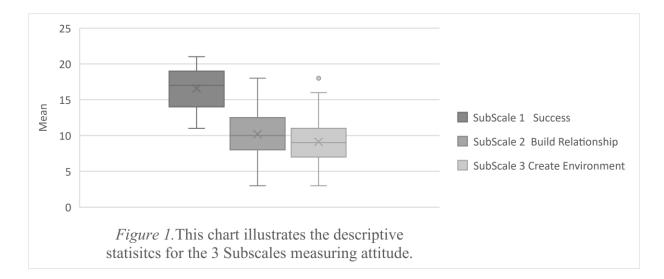
The success of inclusion relies heavily on the attitude of the teacher (Ballard & Dymond, 2017; Elshabrawy & Hassanein, 2015; Van Laarhoven et al., 2007; UNESCO, 2020). The data in the following sections are the result of descriptive statistics, ANOVA, and thematic analysis. The descriptive statistics serve to demonstrate how the factors of attitude are interrelated and where similarities and differences may exist. ANOVA was used to determine where statistical differences between factors have a direct impact on attitudes. Thematic Analysis of the qualitative data was used to determine the underlying beliefs and influences toward inclusion.

Attitude

The ATTAS-mm measures the three domains of attitude (cognitive, affective, and behavioral). Each domain is measured using a subscale of three questions each. Subscale One measures cognitive attitude (the belief a student can be successful). Subscale Two measures affective attitude (the belief the teacher can create a professional relationship with the student). Subscale Three measures the behavioral domain (belief in the ability to create a positive environment for the student to learn). Each subscale was comprised of three questions using a seven-point scale (*very strongly agree, strongly agree, agree, neither agree nor disagree, disagree, strongly disagree, or very strongly disagree*). During analysis, each response was assigned a numerical value with one being the most positive (*very strongly agree*) and seven being the most negative (*very strongly disagree*). A mean less than 12 for the subscale indicates a positive attitude in that domain while a mean greater than 12 indicates a negative attitude.

There were 53 participants who completed the ATTAS-mm portion of the study.

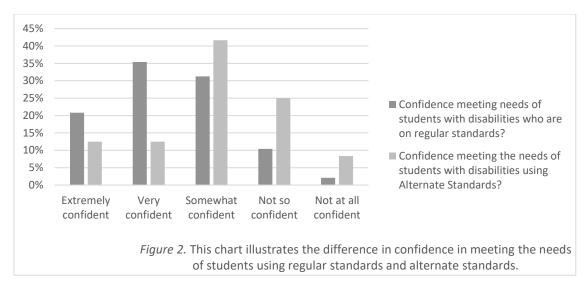
Descriptive statistics and ANOVA were used to determine if there were statistically significant differences between the subscales. Subscale 1, which measures the belief a student can be successful in class, showed a tendency toward a negative attitude (M = 16.58, SD = 3.22). Subscale 2, which measures the belief the teacher can form a relationship with the student, showed a tendency toward a positive attitude (M = 10.19, SD = 3.08). Subscale 3, which measures the belief the teacher can create a classroom of acceptance, showed a tendency toward a positive attitude (M = 9.13, SD = 3.40). The ANOVA indicated a statistically significant difference between the subscales at the p<.05 for the three conditions [F (2,156) = 82.23, p<.001]. A T-Test was used to determine which subscale was significantly different. According to the T-Test Subscale 1 (M = 16.58, SD = 3.22) was significantly more negative than Subscale 2, t (52) = 13.57 = p < .001. A T-Test also found Subscale 1 (M = 16.58, SD = 3.22) was significantly more negative than Subscale 3, t (52) = 16.91 = p < .001. There was a discrepancy in the statistic tests between Subscale 2 and Subscale 3. Using an ANOVA showed no statistically significant variance between Subscales 2 (M = 10.19, SD = 3.08) and Subscale 3 (M = 9.13, SD = 3.40) at the p<.05 level for Subscale 2 and 3 [F (1,104) = 2.81, p=.10] was evident. Using a T-Test, with a significance level of .05, there was a statistical difference t (52) = 2.59 = p = .01. Both subscales indicated a positive attitude toward building a relationship and creating an accepting setting. Figure 1 shows the descriptive statistics between the subscales.



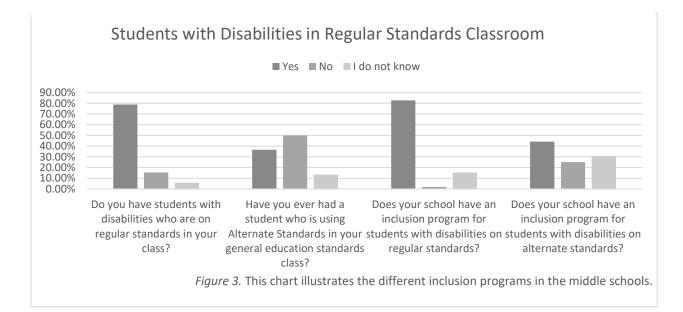
Demographics. ANOVA was used to determine if demographics affected attitude toward the inclusion of students with a cognitive impairment. Demographics studied included: Role of the teacher (regular education, special education, or other), subject taught (core, elective, or other/non-classroom), gender, having a family member or friend with a cognitive impairment, education level, years in education, number of college courses focused on disabilities, participation in professional development focused on supporting students with disabilities, confidence in meeting the needs of students with a CI, and knowledge of IDEA law. Descriptive statistics and ANOVA showed there were no statistically significant variances within demographic categories. Table 1 in Appendix G show the demographics means and standard deviations within each group.

Confidence. The ANOVA did not show a significant variance in attitude between teachers who reported a higher confidence level in supporting students using alternate standards and teachers who were less confident. Teachers reported with statistical significance more confidence in meeting the needs of students using regular standards than in meeting the needs of students using alternate standards, [F (1,94) = 9.53, p<.001] (See Figure 2). This finding leads

into the need to examine the teachers' perception for the best educational placement for a student using alternate standards.

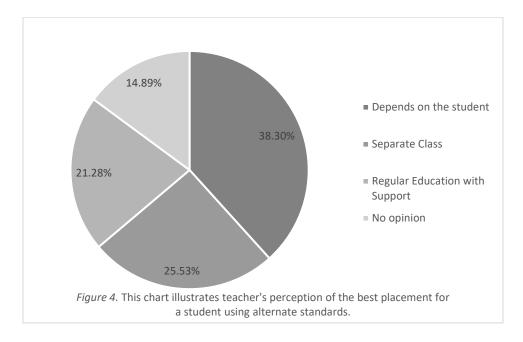


Best Placement. More teachers reported having a student with a disability using regular standards in their class than having a student using alternate standards. Teachers were also more aware of inclusion programs aligned to regular standards than alternate standards (see Figure 3). All teachers who did not know about inclusion programs for students using regular standards were regular education teachers. There were teachers in all groups (regular education, special



education, and non-classroom support) who did not know if there was an inclusion program for students using alternate standards.

Participants did not agree on the best placement for a student using alternative standards. Figure 4 illustrates the "Best Placement" for students using alternate standards as defined by the participants. Four themes became evident when analyzing the data (based on the individual, separate class setting, inclusion setting with supports, and no opinion).



The highest percentage of teachers stated the best placement depended on the individual student. Participants added qualifiers such as, "it would depend how far below grade level", "if they showed some ability or desire, then they could spend some time in general education classes", or "partial inclusion, full inclusion, hybrid, and alternate classroom should be readily available depending on the student's needs." One participant summed up the need to base placement on the individual student with this thought, "while it would be amazing to see them treated like everyone else, we need to remember everyone is different and they don't all need to be treated like everyone else."

Roughly one quarter of the participants stated the separate class setting was the best place for students using alternate assessment. The reasoning included, "separate classroom for core skills so that the student can receive the required support and instruction to ensure each student reaches their true potential." Teachers felt the separate class offered, "smaller classes, teachers who are ESE certified, and a dedicated support system."

Just over 20% of participants felt the regular education classroom would be the most appropriate. Teachers qualified this placement with the need for additional supports. Teachers stated inclusion would be appropriate, "if there is sufficient support personnel in the classroom with the students on alternative standards" and "they have a higher ability level in that area." One teacher made the following condition, "there also needs to be smaller class sizes and training for differentiation for the teachers so each student can have the opportunity to be as successful as possible." Overall, teachers were open to inclusion if there were supports in place to ensure the student was accepted and successful.

This data was collected from all participants in the study. The next section begins analyzing data from the participants who reported having a student in their class who was using alternate standards.

Students in Class. Interview questions were given to teachers who reported teaching a student using alternate standards in their regular education classroom. The goal of this portion of the study was to determine how having a student using alternate standards affected the attitude of the teacher toward inclusion. Quantitative data did not show a significant difference between a positive and negative attitude toward inclusion based on having a student using alternate standards in the classroom. The data did show teachers who provided services to students with a CI had a slightly more positive attitude in Subscale 1 and Subscale 3 (Appendix F, Table 1).

Qualitative analysis was used to determine if there were underlying themes toward including students with a CI.

Out of the nineteen participants who reported having a student using alternate standards in their classes, one respondent did not participate in the interview. Three participants completed the some of the questions. Fifteen completed the Interview. Three participants felt both students using regular standards and alternate standards were negatively impacted by participating in a mixed class. Twelve of the participants felt both groups of students benefitted from the mixed class. All participants felt it was either a positive or negative experience for both students using regular standards or alternative standards. The study also sought to gain information to determine if providing services to a student using alternative standards effected the teachers' attitude toward inclusion.

The participants were asked if having a child using alternate standards in their class had an effect on their attitude toward the inclusion of students using alternate standards. Nine of the participants stated there was no effect from having a student using alternate standards in their class (1 stated students using alternate standards should not be included, 8 stated students using alternate standards should be included). Six participants reported their outlook toward inclusion changed as a result of having a student using alternate standards in their class (2 stated they no longer felt inclusion was appropriate, 4 stated they were more receptive to including students using alternate standards). The sample size was not large enough to determine if there was a statistically significant difference between the groups of teachers and how including students with a CI affected them. Participants were also asked to describe benefits and negative effects of the inclusion class for both students using regular standards and alternate standards.

Benefits. Teachers reported some students using regular standards and alternate standards showed an increase in socialization skills and academics. Students using regular standards showed an increase in learning patience, empathy, and kindness. An increase in social skills for the students using alternate standards was reported as the most common benefit. A special education teacher reported, "They (students using alternate standards) interacted with other students and learned from them." One participant stated their student using alternate standards increased in their reading skills and, "began asking for help and advocating on (their) own more." A non-classroom teacher reported the student, "thrived being around peers. Academically, she wanted to learn more."

Both non-classroom and regular standards teachers reported students using regular standards, "were able to teach it (skills learned) to peers and learn to coexist with people different than them." Typically developed students started teaching the material to the other student which increased all students' academic levels." One regular education teacher stated a concern the students were not generalizing the skills learned to settings outside the classroom.

Negative Effects. Participants in all groups stated disruptions to the class as the most common negative effect or barrier to including students using alternate standards into the same class as peers using regular standards. Both regular education and special education teachers reported students who would have, "a melt down due to the stress of being in a crowded, loud class." Sometimes, the class would have to be removed until the student calmed down because the student using alternate standards, "was a hitter." Other distractions included, "behaviors or tics that annoy others", "shouting out randomly, clicking noises, walking around, and repeated statements." One teacher reported a student who, "hid under the table when the room got too

loud or freak out completely when the fire alarm went off." Another student, "would have a panic attack that looked and sounds like an asthma attack when they felt uncomfortable."

Other negative effects included a student feeling, "singled out when given 'easy' work as compared to other students and by having additional adult assistance." Another teacher shared their student on alternate standards, "usually takes longer to catch on or complete the work. Sometimes they get a bit frustrated." One general education teacher shared concerns over the amount of time spent helping the one student using alternate standards be successful, "could often be enough to make multiple struggling students successful."

Many of these negative effects occurred when there was not an additional support person (teacher or para-professional) in the classroom to assist the regular education teacher. Students on alternate standards require, "one on one support, direct prompting, and advocacy training." They are likely to, "fall behind in a general education class." This sentiment was repeated through several teacher inputs in all categories. This leads to question what makes a successful inclusion program.

Elements of an Inclusion Program. All participants were given the opportunity to state what made an inclusion program successful for both students using regular standards and students using alternate standards. When referencing students using regular standards, having a teacher work with students inside the regular education classroom was the most reported element for a successful program (73.91% of participants). Forty percent of participants stated students using alternate standards were included in elective classes with support from a paraprofessional. Students (using regular standards or alternate standards) needed to feel accepted and have teachers who care about them to be successful. One participant stated there was a lack of district

support and training on implementation of inclusion which made the inclusion of students using alternate standards unsuccessful.

Although the data did not support the presence of training to have a significant effect on attitude, one goal of the study was to ascertain the opportunity for training, specific to students in the special needs program. The following section examines the availability of training through college and professional development focused on students with disabilities.

Training

Ninety-four percent of the participants reported participating in some form of training focused on the special needs program. Sixty-six percent of participants reported taking at least 1 college course focused on special needs education. Topics for college courses included types of disabilities, behavioral strategies, academic strategies, and legal issues. Individual participants reported taking a course in one of the following topics: inclusion practices, technology, and Down's Syndrome. Figure 5 shows training opportunities taken by the participants.

Eighty-eight percent of teachers reported taking part in professional development opportunities focused on special education. Five regular education teachers and two special needs teachers reported not participating in professional development focused on the special needs program. The two special education teachers who did not take professional development reported taking three or more college level courses focused on special needs.

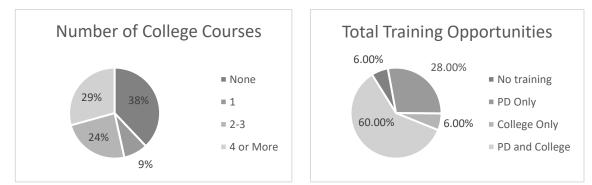
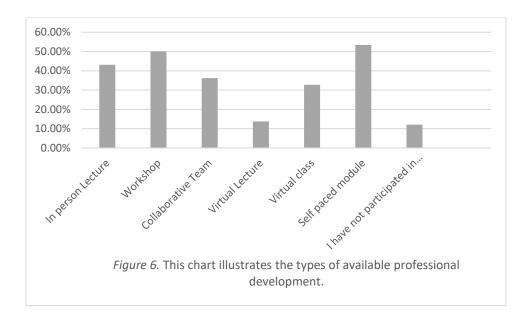


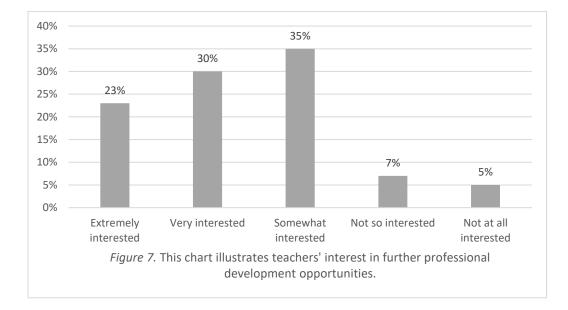
Figure 5. These charts illustrate training opportunities.

Participants were asked what type of professional development they participated in to learn about disabilities. Figure 6 provides the percentages for each type of training. Participants selected were able to select multiple types of professional development which makes the end percentage higher than 100% if all percentages are added together.

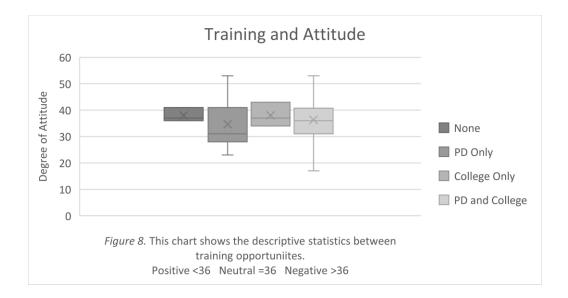


Participants were then asked what training was most effective. Professional development which allowed for collaboration and facilitated by a teacher with expertise in special needs was cited most often as the most effective form of professional development. Self-paced modules were also cited as effective because they allowed the teacher to study at their own pace. One special needs teacher stated none of the professional development was effective due to their advanced degrees and extensive experience.

Over half the participants were interested in participating in more professional development focused on special needs. Five percent were not interested in participating in more professional development. See Figure 7 for each level of interest. The level of interest was even throughout all types of teachers (regular education, special education, and non-classroom).



Findings did not demonstrate a statistical significance on the influence of training on overall attitude toward the inclusion of students with a CI to regular education classrooms. The data did show the majority of teachers participated in training focused on students with disabilities. Six percent of the participants had not participated in some form of professional development either college classes or professional development. Figure 8 shows the breakdown of attitude in each training category.



Training requires resources. The next section explores the data supporting the teachers' perspective on needed resources and supports to create effective inclusion programs.

Resources

All participants were asked to identify resources they felt were needed for a successful inclusion program. This data was gathered through a set of guided choice and open-ended questions on the Questionnaire which allowed the teachers to express their views in their own words while prompting feedback from participants who were unlikely to type long responses.

Preliminary codes identifying teacher perception of resources needed for a successful inclusion program included support from ESE teacher, training, collaboration, staff attitude/support from administration, student evaluation, fidelity of the program, and alternate lessons/assignments. These codes were evident throughout the data provided by special education, regular education, and non-classroom teachers.

Support Teacher. The need for an additional adult to provide support was one of the most common elements cited by the participants. The additional adult could be a special education teacher or a paraprofessional. Whoever worked in the class had to have knowledge of effective intervention strategies and a working relationship with the general education teacher.

One non-classroom teacher stated, "the most important need for a successful inclusion program is allocating the human resources necessary to sufficiently support the general ed teacher in the classroom. A special needs teacher shared, "(ESE) teachers that come into the regular ed class in order to help the students and teachers." Regular education teachers also stated, "additional staff to support the students in the classroom."

Training. Almost half the participants (49%) stated training was a key element for a successful inclusion program. Participants felt all teachers (special education and regular

education) would benefit from additional training. One regular education teacher stated there needs to be, "proper professional development on what inclusion looks like, staff to assist and lessons that have differentiation." A special education teacher shared training should include how to, "understand types of accommodations, when / where they are most appropriate, and how to implement them." One non-classroom teacher described a need for, "more professional development on inclusion models. Training on how to document a detailed report on a student's strengths and weaknesses and how to target them." One special education teacher shared, "As an ESE teacher we know how to work with our students, but I still find a lot of push back from the regular education teachers because they do not understand."

Collaboration. All teacher groups listed *collaboration* between regular education and special needs teachers as an important aspect of an inclusion program. Time to collaborate and participate in shared planning was a key component. One special education teacher described the need to collaborate extended to, "district level special education staff, FDLRS (Florida Diagnostic & Learning Resources System), FLDOE (Florida Department of Education), Universities, and consulting."

The teachers went beyond the need to collaborate with their colleagues and other educators. They also stated communication with parents was important as well. One regular education teacher summed up the need to communicate and have, "honest talks with all involved parties." A special needs teacher shared their thoughts on a successful program included, "parental involvement to help with extra time at home for work (and) good communication between all stakeholders."

Staff attitude. Teachers in all groups stated teacher attitude was important. One nonclassroom teacher stated there had to be, "buy in from the staff." One regular education teacher

described the need for teachers to have an "open mind." Another regular education teacher stated there should be, "consideration of personalities and styles when pairing inclusion teachers with regular education teachers." "It really depends on the two teachers collaborate with each other to create lessons and an environment where students want to learn and where students CAN learn." Educators also identified the attitude of administration was important to a successful program. One teacher stated, "having a very supportive administration as well as ESE team helps a lot."

Fidelity. Multiple regular education teachers stated it was imperative special education teachers be allowed to stay in their assigned classes. Even when the special education and regular education teachers plan together, the plan, "is lost when the inclusion teacher is pulled out to sub (in) a class." Another regular education teacher stated to have a successful inclusionary program the school would have to, "stop using inclusion teachers as subs."

For a program to be successful there must be, "supervisors making sure that they [special needs teachers] are providing the services their students are supposed to be receiving." Paraprofessionals and teachers should, "not be pulled all the time". One special education teacher shared implementing an inclusion program must, "be the focus for the school year."

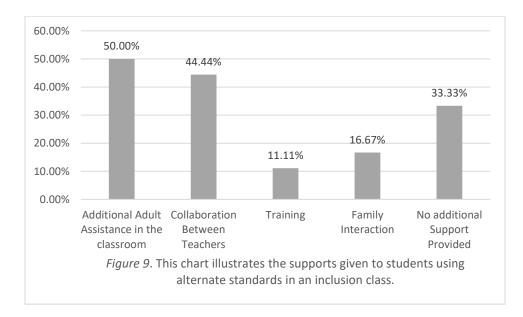
Student evaluation. Teachers were aware lessons and assignments need to be appropriate for students. To accomplish adjusting assignments, one special education teacher stated, "Dual teachers that could work together and create scaffold lessons and assignments for the alternative standard students" would be helpful.

Teachers also stated students respond to inclusion differently. "The students must be assessed to determine their adaptability to an inclusion environment." Some students do well, "because they feel 'normal' compared to their peers and a vast majority are able to make progress". There are instances when the child is not successful in an inclusion class, [for

example] one student will become, "non-verbal when they were not non-verbal in selfcontained." Further data on needed resources came from the Interview given to teachers who reported having a student using alternate standards in their regular standards class.

Resources for alternate standards. Participants who reported having a student using alternate standards in their class were asked to provide additional information on resources needed when a student is using alternate standards. Data was collected through the Interview using both guided response and open-ended questions.

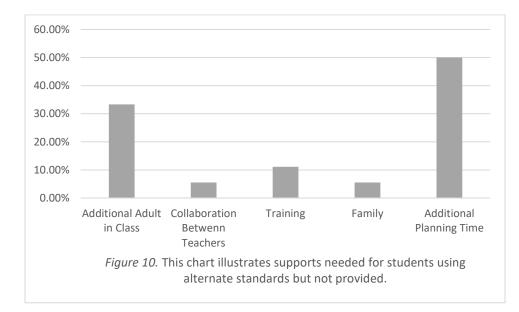
Half the participants stated the amount of needed planning time increased. More planning time was needed, "assignments needed to be modified, activities prepped with modified standards in mind, etc." Figure 9 illustrates additional supports given to teachers who reported having at least one student using alternate standards in their classroom.



One special education teacher responded they checked on the student while they were in the classroom. The student was successfully completing their work without further assistance. The student just "worked at a slower pace". Another special education teacher responded the, "student requires a lot of one-on-one support, direct prompting, and advocacy training."

Finally, participants were asked to describe supports or resources they felt were needed

for a successful inclusionary program with students using alternate standards but were not provided. Figure 10 illustrates the frequency missing resources were reported.



The most common element cited was the need for more time to modify assignments and activities. One participant specified another adult in the room was needed to assist with behavioral support for disruptive students. Disruptive behavior included, "constantly repeating phrases, making noises and various sounds." Participants also cited students walking around the room or becoming overwhelmed with the work and shutting down or hiding under tables.

Summary

Studying inclusion in an educational setting requires examining data from multiple components of an inclusionary program. Measuring the attitude toward inclusion is also complex with varying degrees of nuances. Combining both quantitative and qualitative data provided a holistic view into the teacher's attitude toward inclusion. Relationships between factors were determined using descriptive statistics and ANOVA. Where relationships show at a nonstatistically significant degree, thematic analysis provided insight based on individual participant

perceptions. Combining both types of data contributes to a deeper understanding of the teacher's role in creating an effective inclusion program for students who must access their education using alternate standards. Chapter 5 will discuss the implications of the findings, limitations of the study, and future research needed to continue to understand inclusion.

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS CHAPTER 5: FINDINGS

Chapter 5 focuses on evaluating the findings to draw conclusions concerning teacher attitudes, available training, and needed resources for an effective inclusionary program. The chapter will address the limitations of the study, explore the need for future research, and make recommendations for future educational policy concerning students using alternate standards. Finally, this chapter will briefly reflect on the research process and share insights on how to improve future studies.

Implications of the findings

This study examined the concept of including middle school students with a CI into regular education classes from the teachers' perspective. Three tools were used to collect both quantitative and qualitative data. By combining both forms of information, a comprehensive, holistic understanding of a teacher's perspective was obtained. Three questions guided the collection of data for the study. The following sections address each question individually using the data discussed in Chapter 4 to determine the attitude middle school teachers have toward including students using alternate standards into regular education core classes.

Before the study could determine the attitude of teachers toward the inclusion of students using alternate standards, the terms *inclusion* and *alternate standards* had to be defined. The data showed most teachers had a working understanding of inclusion (83%). These teachers understood inclusion was linked to Least Restrictive Environment as defined in IDEA. They also indicated their understanding that inclusion required additional accommodations and supports for students with a disability. From the findings, it can be determined the majority of teachers have some understanding of inclusion for SWD. Alternate Standards also had to be defined before attitudes could be measured.

The participant definitions for alternate standards indicate there continues to be confusion on their purpose. Over half the teachers (55%) knew alternate standards were linked to students with a CI and curriculum was modified to meet their cognitive ability. There were several participants who stated they did not know what alternate standards were (19%). Thirty percent were able to give a vague definition. Thirteen percent of the teachers stated students using these standards had to be educated in the separate class setting. These findings indicate there continues to be gap in training focused on alternate standards as it relates to inclusion.

After teachers gave their definitions for inclusion and alternate standards, they were provided with the study definition for both terms to ensure teachers were using the same operational definition when rating their attitude toward inclusion of students using alternate standards. The following section focuses on implications of the findings related to the teacher's attitude toward inclusion.

Teacher Attitude

The first question of the study pertained to examining teacher attitude toward inclusion and what influenced the attitude of the teacher.

Question 1: What are the attitudes of public-school teachers toward inclusion of students with Cognitive Impairment?

The findings in this study found traditional demographics (listed in Chapter 4) play a marginal (if any) role in the attitude toward inclusion. There were no statistically significant variances found between the demographics and a positive or negative attitude. This indicates the attitude of the teacher is independent of an individual's demographic characterization.

The ATTAS-mm measured attitude using 3 subscales. Subscale 1 (the belief a student using alternate standards can be successful in class) was statistically more negative than the other

two subscales which focused on building relationships (Subscale 2) and creating an accepting environment (Subscale 3). This supports previous findings where teachers reported feeling children with a CI may find regular education classrooms too complex and difficult (Ballard & Dymond, 2017). Teachers do however believe they can create a welcoming environment for students with a CI and can create positive relationships with them as evidenced by the more positive attitude scores in Subscale 2 and Subscale 3. NCLB states every student will be successful in a rigorous learning environment. While the participants showed a positive belief they could form appropriate relationships and create a welcoming environment, the data showed they are unsure if the student using alternative standards can be successful in the rigorous environment of the regular standards classroom.

Teachers reported students using alternate standards had higher needs and required additional support in both academics and behavior. Teachers were unsure how to modify the curriculum to meet the needs of the students. One regular education teacher talked about the "difficulty balancing the need to provide additional support and continue teaching the students using regular standards." Teachers reported students using alternate standards were too "low" academically. "Even though the student may try in class, they are not able to master the curriculum." Putting students in regular classes is, "setting them up for failure." This concern over success in the classroom was further disclosed by teachers voicing examples of students who "shut down" when the work was too hard or became "non-verbal [in the regular education classroom] when they were not non-verbal in self-contained…" Teachers also stated even with help from the special needs teacher, the student failed the class. This data leads to the conclusion teachers were not able modify the work or the environment to the degree needed to meet the

individual needs of the student using alternate standards. It appears the teachers defined success for the students using alternative standards using traditional expectations for students without CI.

These findings further indicate success must be defined for the individual student before full acceptance of SWD using alternate standards will be realized. If success is based solely on academic mastery to the depth of the regular standard, the acceptance of students on less complex standards will continue to meet with resistance. While teachers showed evidence of being aware of alternate standards, many teachers (both regular education and special needs) showed limited confidence in modifying success criteria for alternate standards.

Previous research indicates confidence in meeting the needs of students influences the attitude toward inclusion (Charley, 2015; Elshabrawy; Hassanein, 2015 & Prom, 1999). Again, the ANOVA did not show a significant variance in attitude between teachers who reported a higher confidence level in supporting students using alternate standards and teachers who were less confident. ANOVA did find there was a statistically significant variance between the confidence level meeting the needs of SWD using regular standards and SWD using alternate standards. One non-classroom teacher summed up confidence in teaching students using alternate standards stating some teachers, "don't know how to meet their needs and, at times, don't feel comfortable or know how to interact with handicapped students." Teachers were more confident working with students using regular standards as is shown in Figure 2. This supports previous findings (Bae, 2012; Cameron, & Cook, 2013; Hawke, 2013; Rojewski et al., 1991; Smith, 2000). Many factors could influence the confidence in supporting students including experience or training.

When asked about the best placement for a student using alternate standards, the largest portion of teachers stated placement should be determined based on the needs of the student. One

quarter of the participants stated the best placement would be in a separate class environment. The reasons for segregation of students using alternate standards ranged from smaller class size, specialized teachers in special needs, and instruction specifically tailored to the student's needs. The separate class setting would allow students to receive more support to help the students reach their full potential.

The majority of teachers reported not having a student using alternate standards in their classroom. Not having experience teaching students using alternate standards could have an impact the amount of confidence in meeting the students' needs. This data also supports the statistics showing only 11.1% of students with a CI are educated in the regular education setting for the majority of the day.

Teachers who reported providing services to students using alternate standards were asked to describe the benefits and negative effects of inclusion. The findings showed 80% of the teachers who had a student using alternate standards in their class felt all students received some benefit from the experience. Some teachers reported academics were higher due to increased rigor and peers working with the student using alternate standards. This supports previous findings (Ballard & Dymond, 2017; Downing & Ryndak, 2010, p.11). The largest benefit cited were skills related to socialization. Teachers found both students using regular standards and alternate standards formed relationships, increased acceptance, and contributed to both groups of students increasing their interaction. These findings support previous research (Ballard & Dymond, 2017; Ferguson, 2014; Kleinert et al., 2015; Pickard, 2008; Taylor et al., 2020). Findings from the current study indicate inclusion at school helps students develop social skills needed to interact with diverse populations.

Findings also discovered negative effects of inclusion which influenced the teacher's attitude. Students were slower to accomplish taught skills and would "shut down" when the work was too complex or became upset if they realized the work was easier than their classmates. Students on regular standards were also reported to have difficulty when they perceived their classmates as having "easier" work than they did. Teachers reported increased disruptive behavior such as increased noises, moving about the room, and repeated statements. Negative results of inclusion were reported more often if additional adult support was not available in the classroom.

Finally in exploring attitude, participants were asked to name the elements needed for a successful inclusion program for all students. The majority of participants stated additional adult assistance in the classroom. When referencing students using alternate standards, the appropriate inclusion classrooms were electives. Participants stated the most needed element was a teacher who cared about the student and a classroom where the student felt accepted.

The data found teachers continue to be less confident in meeting the needs of students using alternate standards. This confidence could stem from how success in class is defined, expectations for student growth, and available training and resources.

Available Training

Question 2: In relation to students with a disability, what professional development opportunities have been provided to teachers?

The findings of the study indicated there were multiple professional development opportunities for teachers. Ninety-four percent of teachers in the study reported participating in college courses or professional development centered on SWD. This is in contrast to Bemiller (2019) where 74% of the teachers reported a lack of training opportunities. Teachers reported

having access to training in both college courses and in professional development. There were indications training given by a professional in the special needs program was more effective than lecture. Professional development given by an expert in special needs was more effective than lecture. The most available training consisted of self-paced modules and workshops.

Fifty-four percent of teachers reported taking 2 or more college courses focused on SWD. The most represented topics were types of disabilities, behavioral strategies, academic strategies, and legal issues. Individual participants listed outlier topics to include inclusion practices, technology, and 1 participant reported taking a course focused on Down's Syndrome. Participants did not indicate they participated in topics to include collaboration or shared teaching models. Findings indicate teachers have access to general training focused on disabilities and the special needs program but specific training opportunities which go beyond the basics may be lacking.

The findings further show a continued need for training on concrete, specific strategies on the implementation of inclusion, documentation practices, and strategies to support students with disabilities. Fifty-three percent of the teachers in the study indicated they would like access to more training opportunities. Specifically, participants would like, "more professional development on inclusion models [and] training on how to document a detailed report on a student's strengths and weaknesses and how to target them." This supports previous findings of a willingness of teachers to participate in training for SWD.

Required Resources

Question 3: From the perspective of the teacher, what elements (resources, supports, training) are needed for the successful inclusion of students with a cognitive impairment into regular education core classes?

The findings identified the following essential elements for a successful inclusionary program: support from the special education teacher, training, and collaboration staff attitude/support from administration, student evaluation, fidelity of the program, and time to create alternate lessons/assignments. Further quantitative data found additional time to plan was required when there was a student using alternate standards in a regular class.

Support Teacher/Collaboration. The most cited resource by participants was to have an additional adult in the classroom to help support SWD. Participants stated the additional support was needed for students using regular standards and using alternative standards. Without adult support, they [SWD] get left too long and then get lost when one teacher is teaching 30 kids and trying to differentiate." This finding supported previous research identifying the need for the special education teacher to be in the general education classroom to provide support to students with a CI (Prom, 1999). Collaboration between teachers is needed to plan for alternate activities and modifications. For collaboration to be successful, there must be time allocated to meet. In addition to being in the classroom, the supporting adult had to have extensive knowledge of intervention strategies for the students. This finding tied in with the need for training in inclusionary practices.

Training. While the quantitative data did not support training as having a significant impact on attitude, the qualitative data supports training as a needed element for inclusionary programs. Forty-nine percent of participants cited training as a need. Qualitative data showed regular education teachers felt special education teachers needed training in inclusion. The data also showed special education teachers felt general education teachers needed more training. This finding indicates, while 94% of participants have participated in training for SWD, the training may not be adequate or focused on inclusion skills.

Stakeholder Support. When analyzing what resources and supports were required to implement a successful inclusion program, unexpected themes included administrative, district, and parental support were found. Parents need to, "help with extra time at home for work." Administration needs to increase the fidelity of the program by, "making sure that they [special education teachers] are providing the services their students are supposed to be receiving." These findings highlighted the importance of communication and collaboration with all parties involved with the student. Support should not stop at the end of the school day, the family unit had to reinforce the skills taught at school. Support at home provides the additional time needed for students.

Fidelity. Teachers were concerned with the fidelity resources provided. Some participants shared teachers were pulled out of support classrooms to substitute in other classes. When teachers were pulled to other duties the planning for supports was lost. Fifty percent of participants who reported having a student using alternate standards in their classroom stated they were not given additional time to plan. One special education teacher stated the most important element was, "consistent human resources... which ALWAYS comes down to funding." This concern was echoed by one teacher who stated, "it's how the resources are allocated that determines the success of the program, and it's no secret that resources are extremely scarce in public education." Whether the lack of resources comes from teachers not knowing how to acquire them or if there is a true lack of resources in this school system, the impact on attitude was clearly conveyed. Teacher attitude was more negative in the belief a student could be successful in the regular education classroom. When the participants were asked about the needed resources and barriers to inclusion, the lack of resources were the most negative

comments (according to the NVivo computer program). These negative leaning statements link to a lack of belief the student could be successful.

Student Evaluation. One of the most unexpected themes found in needed resources was the need to evaluate the individual student. Overall, teachers indicated students should be placed in the setting where they would be the most successful. Participants believe, students with profound disabilities, "who are unaware of their peers, their teacher or any lesson that would be going on and thus do not benefit by being in a regular classroom environment even with support." For students who do not, "manifest themselves as being significantly disabled," but access their curriculum through alternate standards; "if they can socially handle it, they should not be placed in a separate environment." This brings to focus the whole concept of the special needs program. There is not one placement appropriate for every student. Teachers realize the students must be individually placed in the best environment for them to learn. This means students must be evaluated on their social awareness, ability to interact in a larger setting, and their academic ability as well.

Staff Attitude. Findings support previous studies in the belief a teacher's attitude is deciding factor in the success of an educational program. There is a negative belief a student with a CI can be successful in the regular classroom. The teachers must have an "open mind" to overcome this perception. Students often meet the expectations of a teacher. When a teacher believes the student will fail, there is a higher likelihood for failure. Beyond "buy in from staff", regular education and special education teachers must be able to work as a team to provide support to the students. One regular education teacher summed up the importance of a positive attitude with, "it really depends on the two teachers [being able to] collaborate with each other to create lessons and an environment where students want to learn and where students CAN learn."

This statement summarizes the effect of attitude on the success of the student. Teachers must believe the student can learn to open their mind to implementing strategies to help them learn.

Students using Alternate Standards. Teachers who have experience with a student using alternate standards in the regular education class were asked to share their opinions on the success of the inclusion. Findings indicated supports were not consistently adjusted to accommodate the increased need of the student. Increased planning time was a resource needed to modify assignments and activities. Teachers consistently reported not having additional time to plan. Teachers also shared the difficulty in modifying the content of the class because, "the standards are completely different as well as the instruction. Another regular education teacher stated, "there is not always an ESE teacher in the classroom in order to help and it is just causing the students more trouble." This sentiment is repeated throughout the responses. It shows the teachers are not opposed to having the students in their class due to their disability. They need the resources to effectively support and teach the students.

It is not completely negative. Teachers have found students using alternative standards find success in their classes. One regular education teacher shared:

There have been times that the A.S. [alternate standards] kids have become my favorites. I love how many of them have no guile and are eager to learn. If the "regular" kids would have the same work ethic as some of them, they would all qualify for ivy league schools.

Another regular education teacher stated, "I have learned a lot from every student I've had." This indicates educators are receptive to students who may present themselves differently and use alternate standards fully participating in the regular education setting. For this inclusion to be

successful, the supports and appropriate resources (additional planning time, adult assistance in the classroom, collaboration, training, and family interaction) must be consistently available.

Policy Recommendations

Overall, teachers want what is best for students. The findings indicate the greatest drawback to the inclusion of SWD using alternate standards is the concern they will not be successful in the regular class setting. Teaches are concerned there will be a negative impact on all the students in the classroom due to the increased needs associated with preparing materials and teaching a student using alternate standards. School districts must analyze how to provide the resources for effective supports to be consistently available.

School districts must work with teachers and administrators to define success in terms of student mastery using alternate standards. The creation of alternate standards provides a way for SWD using alternate standards to fully participate in regular education classes. Educators must be trained in how the use of alternate standards allows for inclusion. Success must be defined within the confines of the regular education classroom but with the abilities of the individual student taken into consideration. This requires training and buy in from all stakeholders.

School resources must address the need to implement inclusionary programs with fidelity. If effective programs are to be implemented, educators and support personnel must be allowed to provide the needed supports for the students. Resources (additional adult assistance, additional time for planning, collaboration, training, and communication with all stakeholders) must be consistently available. Districts and schools must not utilize special needs personnel in other capacities such as substituting for absentee teachers.

Training and time must be provided to educators to allow for modification of course content to meet appropriate rigorous academic standards for students using alternate standards.

Teachers are concerned with the success of the student. Support in defining success and adjusting content is needed to increase confidence levels.

Limitations

Rate of Response

The Rate of Response to the survey did not reach standard response rate for a survey. According to Barunch & Holton (2008), education Response Rate was forty-nine percent with a standard deviation of 24.1. It is important to note, the lowest response rate in that study was 10%. Survey Monkey[™] was the platform used to distribute the survey to the participants. The researcher contacted an educator at one of the school sites to ensure the survey reached the participants. The survey went to some of the participants junk email folder depending on the parameters set up by the participant. The researcher then sent a follow-up email without the survey link to the participants asking them to check their junk folders for the survey. Many of the participants were not personally know to the researcher.

The second email was scheduled to go out on the following Tuesday. The researcher sent the survey link directly to the participants along with the informed consent letter. This translates to a 9.6% return rate. Out of the 71 returned surveys, 18 were not filled out completely. This may have impacted the data collected. Caution must be given when generalizing the results. Due to a low response rate, some subcategories did not have ten participants in group. Table 1 in Appendix F lists the number of participants in each group. Due to the low response rate, the findings of the survey may not generalize to the population used in the study nor other populations.

The low response rate could be attributed to the lack of incentive to complete the survey. A Russian survey found the response rate for surveys without incentives is 10% (Dillman et. al,

2014). Hendra & Hill (2019) found accepting lower response rates reduce intrusive contact with potential participants. Surveys centered on determining public opinion on specified subjects have contended with low response rates and yielded highly accurate results, (Hendra & Hill, 2019). Even with a low response rate (9.6), the results add to the knowledge of teacher's perceptions on inclusion and provide insight into areas for further study.

Time of Year. The survey was sent out at the beginning of May. This timeframe coincided with standardized testing which takes place for the entire month of May. Due to additional requirements and email communication related to testing, the survey may not have garnered responses from teachers.

Covid-19. The results of the study may have been impacted by the unprecedented times. Florida schools opened for hybrid learning at the start of the 2020/21 school year. Hybrid learning required brick and mortar teachers to plan for both virtual classes and in person classes simultaneously. Additionally, teachers were required to teach both virtual and on campus classes simultaneously. Increased absences for both teachers and students occurred due to quarantine protocols which further complicated the learning process. The general uncertainty of the school year created stressors beyond the scope of this study to mitigate. Due to the increased expectations placed on educators due to Covid-19, participants may have been less likely to give time to complete the survey.

Due to meeting restrictions, the data collection process was changed to a strictly on-line survey format with no live interaction between the participants and the researcher. This may have limited the qualitative data collected and the response rate to the survey.

Population

The population for the survey included middle school teachers in schools which did not require an application to attend. Public schools do not require an application to screen students who attend their school unlike private, magnet/choice, or charter schools. Without an application process designed to screen the enrollment of students, public middle schools may potentially have a higher proportion of students with significant disabilities receiving services. All the schools were from a single county in Florida. Results may not generalize to smaller counties in Florida or to other school districts in other states. This study should be replicated in other populations to determine if the results can be generalized.

Operational definitions

After the participant was given the opportunity to share their understanding of inclusion and alternate standards, a definition for inclusion and alternate standards was provided for the ATTAS-mm and the Interview. During the data analysis stage of the study, it became apparent to the researcher the definition for alternate standards given was vague. Participants without a working knowledge of alternate standards may not have understood how alternate standards relate to regular standards. This may have impacted the answers given during the ATTAS-mm Survey and the Interview. Future studies need to provide a clear definition for alternate standards, or any technical terminology used in the research tools.

Recommendations for Future Research

This study examined teacher attitudes in public middle schools using a mixed methods approach. Inclusion is a complex topic using both quantitative and qualitative data allows for a fuller understanding into the benefits and barriers to inclusion. Future research should continue to use a mixed methods approach to reduce bias and gain comprehensive data to improve

educational programs for students using alternate standards. The results of this study have raised more questions and avenues of research. Recommendations for further study are listed below.

- Private, Charter, and public Choice schools which required an application to attend were not part of the population. Future research to determine the attitude toward inclusion in more exclusive schools using mixed methods will provide valuable insight on inclusion of students in more exclusive school settings.
- The availability of collaboration along with training in collaboration was not explored. Collaboration training was listed as a need by the participants. It would be beneficial to study using a qualitative study how collaboration is used in the school setting and what training in collaboration is available in college and professional development opportunities.
- Teachers indicated a negative attitude toward the belief a student with a CI could be successful in the regular education setting. A Mixed Methods study focused on how success is measured in the school setting could provide insight to creating an environment where students with CI can be successful. After success is defined, research needs to occur to determine if students are more successful in the mainstream setting. If they are not successful, what changes need to be made to increase the chance of success for students with a CI.
- More research is needed measuring actual student success. After success criteria
 are defined, studies are needed to determine if a self-contained environment or
 inclusionary environment are more effective. Case studies to determine where the
 student is most likely to master and generalize skills would further our
 understanding best placement.

- A Mixed Methods study is needed to research what factors are currently used and what factors should be used to determine the best placement for a student.
 Determining the best placement can be confusing. Students should not be placed in a setting based solely on their disability or what standards they use to access their education. Objective research is needed to determine what is driving the placement of students using alternate standards.
- Evaluation of college and training programs would benefit the creation of effective courses to further the effectiveness of student instruction. This study focused on the availability of college courses and training. Determining the requirements and the effectiveness of specific programs was beyond the scope of this study.
- This study centered on teacher attitude toward the inclusion of students using alternate standards. A Mixed Methods study measuring administration, district, and family attitudes would allow the perspectives from different stakeholders to be measured. The different perspectives could then be compared to determine where perceived differences could be addressed.
- Using a mixed methods approach, an evaluation of resources and how they are accessed would further the understanding of the resources available to support students using alternate standards. This study measured the teachers' belief in the availability of resources. Determining the actual availability of resources was beyond the scope of the current study.

Reflection on the Research Process

Researching the topic was interesting and added to the researcher's overall understanding of inclusion in its many forms. Editing the information to narrow the topic for a concise study proved to be a challenge. Everything in the area of inclusion is interconnected which made it difficult to leave information out of the study and to keep the focus narrow.

Conducting the research was exciting but disappointing with the response rate. The researcher made attempts to increase response rates by limiting the time required to take the survey, using a user-friendly platform, increasing trust by identifying the relationship of the researcher to the participants, and by providing multiple opportunities to respond. To increase response rate, future studies will incorporate a more direct contact plan to increase the participation in the study. Future studies may be incentivized. Providing a small initial incentive or a larger incentive at the completion of the survey has been shown to increase the response rate (Dillman et al., 2014, p.30-31). Participants may have been concerned the survey was not sanctioned by the school district or some type of spam email. This will be addressed by providing the approval letter from the district in the initial email. Another factor in low response rate may be connected to the statement there is no direct benefit for the participant (Dillman et al., 2014). In future studies, this statement will be phrased to ask for the participants help or input to be a part of the solution to the problem being explored in the survey.

While the results of the study are valid and provided insight into the topic, the sample size was too small to generalize the findings. The sample size also impacted the ability to determine if there were statistically significant variances between some of the variables in the study. Increasing the response rate will increase the ability of the researcher to identify statistically significant relationships between factors.

Finally, the researcher works in the special education field. This shows in the use of terminology for alternate standards and alternate assessment. The researcher understands alternate standards and alternate assessment are not interchangeable. Alternate standards are based on general standards but to a less complex level. Alternate assessment is the alternate form (less complex) of the Florida standardized assessment used to measure student grade level progress. Students must access their curriculum using alternate standards in order to participate in the alternate assessment. Due to familiarity, the researcher used the terms interchangeably on some of the questions on the survey tool. This may have affected the data collected from the participants. Future studies need a more intense editing process to ensure terms are clearly defined for all participants in the study. Informal use of terms must be corrected before the study is presented.

Summary

Including students with disabilities, especially children with cognitive impairment, in the mainstream educational setting continues to be a global challenge. Research indicates a teacher's attitude is a deciding factor on the success or failure of school programs and reform. Using mixed methods to collect data, the complexities of teacher attitude as it relates to the inclusion of students with a CI into the mainstream educational setting were examined. The study measured three subscales of attitude (belief in success, belief positive relationships can be formed, and a belief an accepting classroom environment can be created). The study found teachers have a statistically more negative attitude toward the belief students with cognitive disabilities can be successful in the regular education class setting than in the belief relationship can be formed and an accepting classroom environment can be created.

Teachers showed statistically more confidence when the nature of the disability is not related to cognitive impairment. Teachers are less confident when working with students using alternative standards. There is a concern the students with a CI will not be successful due to an inability to master content. Findings indicated teachers are not confident in providing appropriate supports. Participants shared a concern over how to differentiate lessons to incorporate all levels of ability in the classroom when at least one student is significantly more impaired than their peers.

Progress has been made in meeting training needs focused on providing support to students with disabilities. Study results show an increase in training opportunities beyond what has been reported in previous studies. Ninety-four percent of the participants indicated they have access to training focused on meeting the needs of students with disabilities. Training specific to inclusion and collaboration, however, were not readily apparent. This finding indicates while opportunities for training are increasing, there continues to be a need for increased training in inclusion strategies. Finally, the majority of teachers indicated a positive interest in receiving more training with twelve percent stating they were not interested in further training. This indicates teachers are receptive to learning about working with SWD.

The belief in the success of the student may be impacted by a lack of training focused on the strategies for effective inclusion and on inconsistent resources being available to meet the advanced needs of the students. More research needs to be conducted to determine how success is defined by teachers and how does policy, training, and success criteria need to be developed to make students with a CI successful in the same educational environment as their peers.

Finally, participants were asked what resources were needed for effective inclusion. Participants stated a need for additional adult support in the classroom, additional time to plan

and collaborate, increased support from all stakeholders (administration, district personnel, and family), training, and fidelity in program implementation. Teachers shared frustration when supports were used elsewhere in the school setting. This concern was especially prevalent when participants discussed support teachers being pulled to other duties.

The study found the concept of success in the classroom was a statistically significant factor in whether the teacher's attitude is positive or negative. Teachers were concerned these students would not find success and may become overwhelmed with content in regular education classes. Training and resources are needed to help teachers develop a better understanding on how use alternate standards in the regular education classroom. Policies need to be enacted to allow teachers to set realistic success criteria based on student ability. Training in alternate standards must be given to provide guidance to teachers in using alternate standards effectively to make participation in the regular education classroom successful.

Schools are the mirror to how a society views its population. By continued segregation of students with a CI, these same students are more likely to be segregated when they reach adulthood. Changing acceptance begins in the school system. Teachers must have access to resources and training to cultivate a positive attitude toward the belief a student can be successful regardless of their disability. One regular education teacher summed up their thoughts on inclusion which serve to highlight the overall data from the study, "My attitude has always been if the resources are adequate, Alternate Standards students should always be included. If the resources are inadequate, then it is a disservice to the students to include them." This speaks to the teachers as being overall in support for inclusion with the realization effective inclusion requires resources and support.

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INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS APPENDIX A: QUESTIONNAIRE

Directions: The purpose of this survey is to obtain an accurate and valid appraisal of your perceptions of teaching students identified as having a cognitive impairment who access their curriculum on Alternate Standards and participate on the Alternate Assessment. Because there are no "right" or "wrong" answers to these items, please respond candidly.

1. What is your current role in education?

Long Term Substitute	Regular Education Teacher
Special Needs Teacher	Other (please specify)

2. What subject do you teach?

Mathematics	History (Social Studies)
Science	English Language Arts
Elective	Other (please specify)

3. What is your gender?

Male Female Non-binary

4. Do you have a family member or friend with a cognitive disability?

Yes No

5. What is the highest degree you have completed?

BachelorsMastersMasters +30 (6th year)DoctorateOther (please specify)

6. How many years of experience do you have as an educator?

0-4 5-9 10-14 15-19 20 or more

7. How many college (or higher) courses have you completed in special education?

None 1-3 4 or more courses

8. What topics focused on special education were covered in the college courses you participated in? (Check all that apply)

 Types of disabilities
 Behavior strategies
 Academic strategies

 Legal Issues
 I have not taken college courses focused on students with disabilities.

Please describe any other topics covered related to students with disabilities.

9. Have you participated in professional development (not college courses) focused on students with disabilities?

Yes No

10. What type of professional development have you participated in (not college courses) focused on students with disabilities? (Check all that apply)

In person Lecture	Workshop	Collaborative Team
Virtual Lecture	Virtual class	Self-paced module

I have not participated in professional development focused on student with disabilities.

11. What topics were covered in the professional development you participated in?

(Check all that apply)

Types of disabilities	Behavior strategies	Academic strategies
Legal Issues	I have not taken college cour	ses focused on students with
	disabilities.	

Please describe any other topics covered related to students with disabilities.

12. How interested are you in participating in professional development focused on students with disabilities.

Extremely interested	Very interested	Somewhat interested
Not so interested	Not at all interested	

13. How familiar are you with the Individuals with Disabilities Education Act (IDEA)?

Extremely familiar Very familiar Somewhat familiar

Not so familiar Not at all familiar

14. Describe your understanding of "inclusion" as it relates to students with disabilities in the educational setting.

15. Describe your understanding of a student using Alternate Standards.

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS APPENDIX B: ATTAS-MM SURVEY

This portion of the survey is focused on only on students with cognitive impairments who are on Alternate Standards. Because there are no "right" or "wrong" answers to these items, please respond candidly.

Definition of Full Inclusion: For the purposes of this survey, full inclusion is defined as the integration of students identified with a cognitive impairment who access their curriculum on Alternate Standards and participate on the Alternate Assessment. into regular classrooms for 80% or more of the school day. Students attend their core classes (math, language arts, science, social studies) in the regular education setting.

Under federal special education law, alternate standards are available to students with cognitive impairments (formerly known as mental retardation) who do not have the ability to master grade level standards even with accommodations and supports.

When answering the questions, please only answer the questions in relation to students on alternate standards.

Rate your answer using the following scale: Disagree Very Strongly, Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree, Agree Very Strongly. The rating scale will be presented to the participant as a drop-down menu in Survey MonkeyTM.

1. Most or all separate classrooms that exclusively serve students on Alternate Standards should be eliminated.

2. Students on alternate Standards should be taught in regular classes with nondisabled students because they will not require too much of the teacher's time

3. Students on Alternate Standards can be more effectively educated in regular

classrooms as opposed to special education classrooms.

4. I would like to be mentored by a teacher who models effective differentiated instruction.

5 I want to emulate teachers who know how to design appropriate academic interventions.

6. I believe including students on Alternate Standards in the regular education classrooms is effective because they can learn the social skills necessary for success.

7. I would like people to think that I can create a welcoming classroom environment for students on Alternate Standards.

8. Students on Alternate Standards can be trusted with responsibilities in the classroom.

9. All students on Alternate Standards should be educated in regular classrooms with non-handicapped peers to the fullest extent possible

APPENDIX C: PERMISSION TO USE ATTAS-MM

request

Gregory, Jess L. <gregoryj2@southernct.edu> Wed 7/29/2020 11:55 AM To: Stewman, Wendy D <wds1004@sru.edu>

5 attachments (747 KB)

ATTASmm_Instrument.pdf; ATTASmm_Demographics.pdf; ATTASmm_scoring_manual.pdf; TechnicalManualAttitudesTowardsTeachingAllStudents_ATTASmm.pdf; ATTASmmScoreSheet_YOURname.xls;

OK!

You have official permission to use the ATTAS-mm which is the improved version of the TATIS. The TATIS had a psychometric problem with the reverse scored items. Lori and I fixed that in the ATTAS-mm.

We do not charge for use of the instrument, you are welcome to use it! We do ask to be cited, and when you are done, please send us a copy of the raw data (score sheet is included) so we can see how the ATTAS-mm is working on different populations. Hey, to that end, can you also send a brief description of the sample? (where, why sort of thing)

Thanks and Happy researching! Jess

Jess Gregory, Ed.D.

Associate Professor Educational Leadership and Policy Studies Southern Connecticut State University TE-6, Room 126 501 Crescent Street New Haven, CT 06515

gregoryj2@southernct.edu 203 392 5324

"The classroom with all its limitations remains a location of possibility. In that field of possibility we have the opportunity to labor for freedom, to demand of ourselves and our comrades, an openness of mind and heart that allows us to face reality even as we collectively imagine ways to move beyond boundaries, to transgress. This is education as the practice of freedom." bell hooks, Teach to Transgress, 1994.

Signature_582890753

INCLUSION FOR STUDENTS USING ALTERNATE STANDARDS APPENDIX D: INTERVIEW QUESTIONS

Interview Questions: these questions will be activated if participants indicate they have students using Alternate Standards in their regular education class.

- Did the amount of required planning time change due to having a student on Alternate Standards included in the class? Describe any changes.
- 2. What additional supports were provided for the student on alternate standards?
- Describe any supports needed but not provided for the student on alternate standards.
- 4. Did the student on Alternate Standards benefit from inclusion in the class? If yes, please explain the benefits (Academic, Social, Independent Functioning).
- Did the typically developed students benefit from students on alternate standard inclusion in the class? If yes, please explain the benefits (Academic, Social, Independent Functioning).
- 6. Describe any negative effects from the inclusion of a student on alternate standards into the regular standards class.
- 7. Did your attitude toward including students on alternate standards in the regular class setting change after working within an inclusion class? Please explain your answer.

Please provide any other thoughts on the inclusion of students on alternative standards in the regular education core content area classroom.

APPENDIX E: ATATIS-MM SCORE CONVERSION CHARTS

Tech	ATTAS-mm Technical Data and Scoring Charts				
Jess L. Gregory Southern CT State Univer	rsity	Lori A. Noto University of Bridgeport			
Full Scale: ATTAS-mm	-	*			
Cronbach's Alpha: .833 Item Mean: 3.852 Item Standard Deviation: .7266 Scale Mean: 34.67 Scale Standard Deviation: 4.922					
Score Percentile 23 or lower 1 24 2 25 3 26 4 27 7 28 9 29 13 30 16	Score Percentile 31 23 32 30 33 39 34 45 35 55 36 60 37 69 38 76	Score Percentile 39 82 40 85 41 89 42 93 43 95 44 97 45 96 46 or higher 99			
Subscale 1 (Sum Items Believing all students o		al education classroom			
Cronbach's Alpha: .720 Item Mean: 2.958 Item Standard Deviation: .4506					
Scale Mean: 8.88 Scale Standard Deviation: 2.218 Score Percentile 4 or lower 1 5 4	Score Percentile 8 35 9 52	Score Percentile 12 92 13 97			
5 4 6 10 7 20	9 52 10 69 11 83	13 97 14 or higher 99			
Developing personal a		onships.			
Developing personal at Cronbach's Alpha: .928 Item Mean: 4.403 Item Standard Deviation: .1517 Scale Mean: 13.21		onships.			
Developing personal at Cronbach's Alpha: .928 Item Mean: 4.403 Item Standard Deviation: .1517 Scale Mean: 13.21		Score Percentile 16 89 17 95 18 98 19 or higher 99			
Developing personal at Cronbach's Alpha: .928 Item Mean: 4.403 Item Standard Deviation: .1517 Scale Mean: 13.21 Scale Standard Deviation: 2.297 Score Percentile 8 or lower 1 9 3 10 8 11 17 Subscale 3 (Sum Items	Score Percentile 12 30 13 46 14 63 15 78	Score Percentile 16 89 17 95 18 96 19 or higher 99			
Developing personal at Cronbach's Alpha: .928 Item Mean: 4.403 Item Standard Deviation: .1517 Scale Mean: 13.21 Scale Standard Deviation: 2.297 Scale Standard Deviation: 2.297 Score Percentile 3 or lower 1 10 8 11 17 Subscale 3 (Sum Items Cronbach's Alpha: .837 Item Mean: 4.194 Item Standard Deviation: .2366 Scale Mean: 12.58	Score Percentile 12 30 13 46 14 63 15 78	Score Percentile 16 89 17 95 18 96 19 or higher 99			
Developing personal at Cronbach's Alpha: .928 Item Mean: 4.403 Item Standard Deviation: .1517 Scale Mean: 13.21 Scale Standard Deviation: .2.297 <u>Scale Standard Deviation: 2.297</u> <u>Scale Standard Deviation: 1.297</u> <u>Scale Mean: 12.58</u> Scale Mean: 12.58 Scale Standard Deviation: 1.977 <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> <u>Score Percentile</u> 	Score Percentile 12 30 13 46 14 63 15 78	Score Percentile 16 89 17 95 18 96 19 or higher 99			
Developing personal at Cronbach's Alpha: .928 Item Mean: 4.403 Item Standard Deviation: .1517 Scale Mean: 13.21 Scale Mean: 13.21 Scale Standard Deviation: .1517 Scale Mean: 13.21 Scale Mean: 13.21 Scale Mean: 13.21 Scale Mean: 13.21 Score Percentile 9 3 10 8 11 17 Subscale 3 (Sum Items Cronbach's Alpha: .837 Item Mean: .4.194 Item Standard Deviation: .2366 Scale Mean: 12.58 Scale Mean: 12.58 Scale Mean: 12.58 Scale Standard Deviation: 1.977 Score Percentile 8 or lower 1 10 10 10 10 10 11 21 11 	Score Percentile 12 30 13 46 14 63 15 78 67, 8, & 9): environment for all st 12 36 15 78	Score Percentile 16 89 17 95 18 96 19 or higher 99 udents to learn. Score Percentile 16 96 17 or higher 99			
B or lower 1 9 3 10 8 11 17 Subscale 3 (Sum Items Creating an accepting of Cronbach's Alpha: 837 Item Mean: 4.194 Item Standard Deviation: .2366 Scale Mean: 12.58 Scale Standard Deviation: 1.977 Score Percentile 9 8 or lower 1 9 4 10 10 11 21	Score Percentile 12 30 13 46 14 63 15 78 57, 8, & 9): environment for all str 12 36 14 63 15 78	Score Percentile 16 89 17 95 18 98 19 or higher 99 udents to learn. Score Percentile 16 96			

APPENDIX F: INSTITUTIONAL REVIEW BOARD APPROVAL

Slippe Ur	Pry Rock niversity of Pennsylvania
TO:	Dr. Ashlea Rineer-Hershey Special Education
FROM:	Michael Holmstrup, Ph.D., Interim Chairperson Institutional Review Board (IRB)
DATE:	April 27, 2021
RE:	Protocol Approved Protocol #: 2021-075-88-A Protocol Title: Examining Teachers' Attitudes Toward the Inclusion of Students using Alternate Standards in Regular Standards Core Academic Classes
The Institu	tional Review Board (IRB) of Slippery Rock University has conducted an

The Institutional Review Board (IRB) of Slippery Rock University has conducted an administrative review of the above-referenced protocol under the "exempt" category.

You may begin your project as of April 27, 2021. Your protocol will automatically close on April 26, 2022 unless you request, in writing, to keep it open.

Please contact the IRB Office by phone at (724)738-4846 or via e-mail at irb@sru.edu should your protocol change in any way.

APPENDIX G: TABLE 1 DEMOGRAPHIC MEANS AND STANDARD DEVIATION

Demographic	Frequency (n)	Subscale 1 Success	Stan Dev	Subscale 2 Relationships	Stan Dev	Subscale 3 Environment	Stan Dev	Combined	Stan Dev
Role									
Other-Non-classroom	6	16.7	4.3	9.7	2.9	8.8	4.2	35.2	10.6
Reg Ed Teacher	29	16.3	3.1	10.6	2.8	9.5	3.2	36.5	7.4
Spec Ed Teacher	18	16.9	3.2	9.7	3.5	8.6	3.6	35.2	8.3
Subject									
Academic Core	37	16.6	3.3	10.1	3.4	9.2	3.7	35.9	8.4
Elective	6	16.0	2.7	11.2	1.5	8.7	1.9	35.8	5.0
Non-Classroom	9	16.8	3.7	9.7	2.8	8.9	3.4	35.3	8.7
Gender									
Female	42	16.7	3.3	10.3	3.1	9.3	3.6	36.3	8.2
Male	9	16.1	2.8	9.7	3.6	8.4	2.5	34.2	7.9
Family/Friend with C/I									
No	23	16.7	3.5	10.2	3.2	9.3	3.6	36.1	8.3
Yes	28	16.6	3.1	10.1	3.2	9.0	3.4	35.8	8.0
Education Level									
Bachelors	26	16.3	3.3	9.7	3.5	8.7	3.2	34.8	8.3
Masters	18	16.9	3.1	10.4	2.3	9.4	3.5	36.7	6.8
Masters +	7	17.0	3.8	11.1	3.6	10.0	4.7	38.1	10.6
Year in Education									
0-4	8	17.4	1.8	8.6	3.2	9.3	2.4	35.3	5.0
5-9	13	17.8	3.7	11.1	3.9	10.1	4.6	39.0	10.4
10-14	4	16.3	3.3	8.3	2.2	7.0	2.4	31.5	5.2
15-19	14	16.6	2.8	9.9	3.2	8.5	3.5	34.9	8.3
20+	12	15.0	3.6	11.2	1.9	9.5	3.0	35.7	7.3
Student with a CI in Clas	SS								
No	32	17.0	3.1	10.0	3.0	9.3	3.3	36.3	7.5
Yes	19	15.4	3.1	10.0	3.0	8.2	3.1	33.6	7.3
Number of College Cour	ses								
None	18	16.1	3.1	10.0	3.0	8.8	3.4	34.9	8.0
1.0	4	14.3	3.4	9.8	1.7	8.0	2.4	32.0	5.0
2-3	12	17.0	2.7	10.0	3.4	9.4	3.4	36.4	8.1
4+	17	17.5	3.6	10.5	3.5	9.5	3.9	37.6	8.8
Professional Developmen	nt								
No	6	18.3	2.2	10.3	2.9	9.3	3.0	38.0	3.3
Yes	44	16.5	3.3	10.2	3.2	9.1	3.6	36.1	8.1

ATTAS-MM

Knowledge of IDEA									
Extremely Familiar	11	15.8	3.8	10.5	3.1	7.8	3.8	34.2	8.8
Very Familiar	20	17.0	3.2	9.8	2.8	9.5	3.6	36.2	7.6
Somewhat Familiar	15	16.4	3.3	9.9	3.6	9.4	3.1	35.7	9.0
Not Familiar	4	17.0	1.8	10.8	3.6	9.0	3.4	36.8	4.8
Confidence									
Confident	13	17.2	3.7	9.8	4.1	8.5	4.5	35.5	10.8
Not Confident	16	17.2	2.9	9.8	2.4	8.9	2.6	35.9	6.0
Neutral	20	15.3	2.5	10.2	2.8	9.0	2.6	34.5	5.7