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Are school administrators and teachers' attitudes toward inclusion influence by the change process?

Barry Goley
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Are School Administrators’ and Teachers’ Attitudes toward Inclusion Influenced by the Change Process?

By

Barry Wayne Goley
B.S., Western Kentucky University, 1994
M.A., Western Kentucky University, 2004
M.A., Western Kentucky University, 2007

A Dissertation
Submitted to the Faculty of the
College of Education and Human Development
in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy

Department of Leadership, Foundations and Human Resource Education
University of Louisville
Louisville, Kentucky

May 2013
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A Dissertation Approved on

January 10, 2013

by the following Dissertation Committee:

Ric Keaster, Dissertation Director

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Ann Herd

Patti Whetstone
DEDICATION

Throughout life, regardless of our experiences and endeavors, we must persevere and realize that we hold the key to our existence and expectations. This dissertation is dedicated to eight individuals who have taught me far more about life through their eyes and words – London, Noah, Aaron, Geordan, Jase, Gage, Gavin, and Grayson. It is my hope this illustrates that little is impossible if you endure and remain steadfast in your hopes, dreams, and aspirations.
ACKNOWLEDGMENTS

Abraham Lincoln once said, “Always bear in mind that your own resolution to success is more important than any one thing.” The success I have reached thus far upon completion of this milestone cannot go without acknowledgement of several people. The completion of this dissertation was created by my mind, written by my hands, but inspired by those around me. Throughout the process, I received support from several valued people and I wish to acknowledge their contributions to this research project.

A tremendous amount of appreciation is extended to my colleagues, who continually offered support and encouragement (and patience), particularly near the end as I complained of sleep deprivation. Heartfelt thank you goes to Shannon, Annelle, Jane, Laura, and Jackie. For your words of reassurance and understanding, I wish to thank Dr. Janet Hurt, who walked this very path before me and understood my agony. To my UL/WKU cohorts – Leigh, Stephanie, and Brad – who encouraged me with their emails and messages.

To my dissertation chair, Dr. Ric Keaster, I greatly appreciate your guidance and support. When I first spoke of my study with Dr. Keaster, he was ever so willing to accept this endeavor and guide me in the direction that helped formulate and conceptualize this research study. While all new to me, because of his passion for this topic, I have truly developed a fascination for the change process. Therefore, without his guidance and continual assistance, this dissertation would not have been possible. I would like to thank my committee members – both current and former: Dr. Ginevra
Courtade, Dr. Ann Herd, and Dr. John Keedy of the University of Louisville; Dr. Sharon Spall of Western Kentucky University; and Dr. Patti Whetstone of the University of Kansas. For his great and admirable wisdom regarding statistics, I wish to thank Mr. Bob Cobb. Without your emails, phone calls, and words of reassurance, I would not have come to understand or appreciate this complex world of statistics.

Finally, I wish to not only thank for their support, but to offer my deepest apologies – my family. Each and every one of you had to endure my countless hours locked behind closed doors as I clicked away at the computer. To all my children – London, Noah, Aaron, Geordan, Jase, Gage, Gavin, and Grayson – I assure you I will once again return to being your Dad. But most of all, none of this would have been successful, or remotely possible, if it was not for the love, appreciation, and support for the one that helped make all this possible – GWG. You have stood beside me, offering just the right words of assurance (and reassurance) that I would get through this, even assuming the role of “therapist” when I just did not know if I would ever get to the end. Most importantly, you listened to me sigh as if I was “taking my last breath” . . . over and over again. Thank you for allowing me to complete my “vanity degree”. 143!
ABSTRACT

ARE SCHOOL ADMINISTRATORS' AND TEACHERS' ATTITUDES TOWARD INCLUSION INFLUENCED BY THE CHANGE PROCESS?

Barry Wayne Goley

January 10, 2013

The purpose of this research study was to examine the relationship between the change process for inclusive teaching practices and the attitudes of educators toward inclusion of students with disabilities in the general educational setting. This research study was based upon the theoretical construct of Rogers' (2003) Diffusion of Innovations, which identifies the specific process in which any innovation is introduced within a social organization. A descriptive correlational design was used to examine the quantitative data collected from teachers and administrators from school districts. Teachers and administrators completed the Opinions Relative to the Integration of Students with Disabilities (ORI; Antonak & Larrivee, 1995) and the Change Process Survey (CPS; Keaster, 2007). The ORI assessed the educators’ attitudes toward the inclusion of students with disabilities in the general classroom across four constructs. In addition, the CPS measured participants’ responses to the change process in regards to the implementation of inclusion within the schools. The sample consisted of 96 educators (83 teachers and 13 administrators) from 7 schools within a geographical
region of south central Kentucky. The data were analyzed by descriptive statistics, and inferential analysis consisting of both parametric and nonparametric methodologies: t-test for independent samples, Mann-Whitney U test, and ANOVA. The results indicated a statistically significant positive correlation between the change process constructs and the educators’ attitudes toward the inclusive innovation. However, teachers’ attitudes varied significantly as compared to administrators’ perceptions of teachers’ attitudes, as teachers indicated the need for further training on inclusion in order for the program to be successful. This research contributes to the education field by highlighting the necessity for both teacher preparation programs and school districts to infuse their programs with training on topics of special education, particularly on the inclusive teaching practices for students with disabilities. The results also point out the importance of attention to all parts of the change process when any innovation is introduced in educational settings.
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CHAPTER I
INTRODUCTION

The Individuals with Disabilities Education Improvement Act (IDEIA, 2004), aligned with No Child Left Behind Act (NCLB), emphasized improved student academic outcomes for students with disabilities (Lingo, Barton-Arwood, & Jolivette, 2011). To achieve increased student achievement, fundamental changes in the delivery model for special education were necessary (Zigmond, 2003). Thus began the quest to answer the proverbial, yet controversial, question: “Where should students with disabilities be educated?” The “where” originated from the least restrictive environment (LRE) mandate of the IDEIA that outlined a clear preference for educating students in the general education classroom (McLeskey & Waldron, 2011; Zigmond, Kloo, & Volonino, 2009).

As Zigmond et al. (2009) stated, the location where students receive the majority of their education has always been the center of debate. The education of students with disabilities, historically, referred to the placement of the students in an environment most conducive to their learning needs and abilities. Placement in the students’ LRE typically meant students were separated and segregated because of a predefined categorical placement based upon disabilities (Stainback, 2000). This placement often denoted special classes or self-contained resource rooms that isolated or removed students with disabilities from peers. Dunn (1968), however, called the placement of students with disabilities in self-contained special classes “morally and educationally wrong” (p. 5).
As the inclusion debate continued (Akom, 2011; Zigmond et al., 2009), educational research reported inclusion provided students with disabilities increased positive social interactions with non-disabled peers (Horrocks, White, & Roberts, 2008; Mastropieri & Scruggs, 2001; Peltier, 1997), decreased behavior issues (Rea, McLaughlin, & Walther-Thomas, 2002), exposure to high-quality instruction (Torgesen, 2009; Velluntino, Scanlon, Small, & Fanuele, 2006), and provided students without disabilities greater academic gains (Banerji & Dailey, 1995; Cole, Waldron, & Majd, 2004).

The instruction students with disabilities received in self-contained classrooms did not provide the students the “increased quantity and higher quality” necessary to make significant academic progress (McLeskey & Waldron, 2011, p. 52). High-quality instruction, therefore, has become the catalyst for inclusive policies and procedures in today’s schools. The increased accountability measure included in the 1997 reauthorization of IDEA required participation of students with disabilities in state-wide and district-wide assessment programs. Historically, removing students from receiving high-quality instruction (i.e., resource rooms) resulted in low expectations for student performance and learning (Koenig & Bachman, 2004). To combat this issue, therefore, students with disabilities were mandated to participate in large-scale accountabilities measures, thus requiring exposure to the general education curriculum (Zigmond et al., 2009).

While research supports inclusive practices for students with disabilities, schools continue to struggle with the transition from self-contained or resource classrooms to educating students in the general education setting. A concept understood by educators
is that a fundamental change in the delivery of quality instruction for students with disabilities must be implemented if increased academic progress is expected (Zigmond, 2003).

In order for educators to move toward this fundamental change in delivery, teachers and administration must first understand the meaning and mastery of change (Hargreaves, Earl, Moore, & Manning, 2001). Regardless of the innovation introduced, leaders must understand that change is a scientific equation, with the innovation adoption and individual attitudes toward the idea yielding favorable outcomes for the organization (Beets, Flay, Vuchinich, Acock, Li, & Allred, 2008).

The theoretical framework for this study resides on the basis of how many theorists study the adoption and development of new innovations within an organization. While educators and education leaders are learning new teaching strategies and innovations, many do not know how to implement the changes (Bryk & Schneider, 2002). When change agents introduce an innovation within their organization, the intent is for implementers of the change (e.g., teachers) to execute the innovation with fidelity (Beets et al., 2008), if they perceive the innovation to be a better practice that what is currently in place (Rogers, 2002). A common lens used by researchers to investigate the study of innovation development and adoption is referred to as Innovation Theory or Diffusion of Innovation Theory (Couros, 2003).

As defined by Rogers (2002; 2003), an innovation is an idea or practice that is perceived as new by the individuals of an organization. When the change agent (i.e., principal) introduces the innovation (i.e., inclusion) to the organization (i.e., school), the adoption of the innovation hinges on five characteristics: (1) relative advantage, or the
degree that an innovation is better than the one it supersedes; (2) *compatibility*, or the notion the innovation is consistent with current organizational values and beliefs; (3) *complexity*, or the degree to which an innovation is difficult to implement or understand; (4) *trialability* refers to the ability of an innovation to be implemented on a trial basis; and (5) *observability*, or the degree to which the innovation is visible to others (Rogers, 2002; 2003). Those innovations exhibiting greater relative advantage, compatibility, trialability, observability, and less complexity are more likely to be adopted more quickly with more fidelity (Rogers, 2002).

*Diffusion*, as defined by Rogers (2002; 2003), refers to the process by which an innovation is communicated over time through the organization. Thus, Rogers’ *Diffusion of Innovations* model demonstrates how an innovation is introduced into a social organization via communication channels. The premise behind the model is social change does occur when organizations invent, diffuse, and adopt or reject a new idea (Schleien & Miller, 2010).

The introduction and implementation of innovative teaching strategies have historically been part of public education (Thompson, 2010). When innovation is introduced, successful implementation is dependent upon the school having a systematic means of implementing a change. Schumacher (2011) adds that a change within schools only occurs when a systematic approach exists to ensure continuous improvement.

**Statement of the Problem**

Results from a study of the literature indicate that effective school leadership must be established for educational change to be supported and sustained. Inclusive practices for students with disabilities provide substantially improved student outcomes, both
academically and socially. While the research supports such practices, many school leaders fail to recognize or support the need for an inclusive education for students with disabilities. The purpose of this research was to examine the change process of principals in inclusive schools and to examine the relationship between the leaders’ perception of the change process and that of the teachers.

**Purpose of the Study**

The primary purpose of this research was to examine the relationship between the change process for inclusive teaching practices and the attitudes of educators toward inclusion of students with disabilities in the general education classroom. The study requested elementary school educators identify their perception of the change process after inclusion had been implemented within their schools and report attitudes toward inclusion. The examination of this relationship benefited this study by providing an understanding how a change implemented with fidelity affects the attitudes of educators toward the innovation being implemented.

Additionally, a secondary purpose was to examine the relationship between educators’ attitudes toward inclusion and various demographic variables. The examination of the demographic data was important to this study because it might be linked to significant differences in educator attitudes toward inclusion.

**Rationale for the Study**

The landscape of public education is constantly changing. With recent changes to the Commonwealth’s assessment accountability protocol and the implementation of common core standards in math and language arts, change has become the norm for education. Hence, principals’ roles have extended beyond just instructional leadership.
As more students with disabilities are introduced and educated in the general education setting, the need for educators to be prepared for the change must be supported. The significance of this study will contribute to the research on how the school leaders’ change implementation influences the acceptance or rejection of inclusionary practices within their schools.

While inclusion continues to be widely practiced in today’s schools (Mastropieri et al., 2005), administrators have limited awareness of how imperative it is for them to know how to implement change to gain sustainable results. The researcher proposes the data collected and presented from this study contributes to the literature supporting that effective and sustained educational change is a process. Therefore, the research from this study presents principals an understanding of how to successfully implement inclusive practices within their buildings, thus affecting the learning process of students with disabilities.

**Research Questions and Hypotheses**

One overarching research question guided the research for this study: Does the fidelity toward change during the implementation of the inclusion innovation affect educators’ attitudes toward inclusive practices for students with disabilities? It is hypothesized that if the change process is implemented with fidelity, then change implemented for inclusion will be an accepted and committed school practice for students with disabilities. This study was guided by four research questions:

1. How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?
$H_{10}$: Administrator fidelity to the constructs of the change process has no significant influence over the attitudes of the teachers.

$H_{1A}$: Administrator fidelity to the constructs of the change process has a significant influence over the attitudes of the teachers.

2. How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools?

$H_{20}$: There is no significant difference between the teachers’ or administrators’ perception of the implementation of inclusion within their schools.

$H_{2A}$: There is significant difference between the teachers’ or administrators’ perception of the implementation of inclusion within their schools.

3. Are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers’ attitudes?

$H_{30}$: The attitudes of teachers are consistent with how administrators perceive the attitudes of their teachers after implementation of inclusion.

4. How are the attitudes of the teachers toward inclusion influenced by the following demographic variables: years of experience, years implementing inclusion within the schools, number of special education courses completed during teacher education program, amount of training or professional development devoted to special education, and amount of training or professional development devoted to inclusion?

$H_{40}$: There is no significant relationship between the teachers’ attitudes toward inclusion and the demographic variables.
$H4_A$: There is a significant relationship between the teachers’ attitudes toward inclusion and the number of years’ teaching experience.

$H4_B$: There is a significant relationship between the teachers’ attitudes toward inclusion and the number of years inclusion has been implemented within their schools.

$H4_C$: There is a significant relationship between the teachers’ attitudes toward inclusion and the number of special education courses completed during the teacher preservice education program.

$H4_D$: There is a significant relationship between the teachers’ attitudes toward inclusion and the amount of training or professional development devoted to special education.

$H4_E$: There is a significant relationship between the teachers’ attitudes toward inclusion and the amount of training or professional development devoted to inclusion.

**General Methodology**

Upon permission from the Institutional Review Boards (IRB) at Western Kentucky University and the University of Louisville, the Superintendent of each school district received an email introducing the research. Upon the Superintendent’s consent and approval to conduct the research, a list of principal names and addresses was obtained from the special education directors within the regional educational cooperative. Each principal was contacted via email to introduce the study and include instructions regarding the completion of three instruments for principals and teachers. Likewise, the principals received a final email to forward to all teachers in their buildings. Within a
week of the final email, the directors of special education received the packets of survey booklets, return envelopes and instructions on completing and collecting the survey booklets. First, participants completed a brief demographic survey. Secondly, the participants completed the Change Process Survey (CPS) for either Leader or Teacher. Finally, the participants completed the Opinions Relative to the Integration of Students with Disabilities (ORI). (Appendix B)

Demographic information collected by the researcher includes a brief survey to solicit the following information: years of teaching or administrative experience; grade level taught; number of years teaching/implementing inclusion; number of special education classes taken as an undergraduate or graduate student, number of hours of training or professional development devoted to special education, and the number of hours of training or professional development devoted to inclusion.

The CPS (Keaster, 2007) addressed Research Questions 1 and 2 regarding the change process during implementation of inclusive practices in the schools. This 21-item instrument examined the change process based upon the educational change framework developed by Hord (1992). The mean score of the CPS was used to measure perception of administrators and teachers following change strategies. The relationship between the change process (adoption) of inclusive practices and educator attitudes was examined, as well as a correlational analysis between administrators’ and teachers’ perception of the change process.

The ORI, modified by Antonak and Larrivee (1995), includes 25-items that evaluate the attitudes of educators toward the integration of students with disabilities into the general education setting. The ORI was used to measure Research Questions 1, 3,
and 4. Question 1 employed the ORI and CPS to establish correlations between the educators' attitudes toward the inclusive practices within their schools and the change process as inclusion was introduced in the schools. Question 3 investigated whether discrepancy exists between the attitudes of teachers toward inclusion and the perception of the teachers' attitudes by the administrators once the teachers had implemented inclusion. Question 4 examined the relationship between the teachers' attitudes and various demographic variables that may have some effect upon educator attitudes.

To examine the correlation between the change process and educators' attitudes toward inclusion, the researcher employed the use a *t*-test for independent samples. The *t*-test compared the mean of the ORI scores of the educators with the mean scores of the CPS to determine if there is a significant difference relationship between the two groups.

**Significance of the Study**

Successful school reform relies upon the principal assuming the role as a change facilitator for their schools (Hall & Hord, 1987). Hord (1992) reports that change involves a process that requires time, energy, and resources to support the initiative; change must first occur with individuals, then institutions. Therefore, for inclusive change to be effective and sustained in schools, principals must first make a personal commitment to the initiative by understanding the expected outcomes and the overarching implications for students with disabilities. Secondly, for inclusion to be successfully implemented, principals must follow Hord’s (1992) 6-part change process framework.

This study will contribute to the body of literature regarding how positive attitudes of school personnel toward an innovation, both administrators and teachers, lead
to successful implementation of inclusive practices in their schools. Likewise, this study posits that the facilitative leadership of the principal directly impacts the level and successful of inclusion. The findings of this study can be utilized in educational leadership preparation programs to assist in developing best practices for inclusive school programs, while instructing school leaders that implementation of change requires a process.

**Limitations**

Limitations of this study which may potentially affect the ability to generalize the findings include the restriction of the population to a certain geographical region of southeastern state in the U.S. that includes primarily rural school districts. Generalizations may not be applicable to urban areas or other geographical regions of the United States. Additionally, the use of a relatively new instrument could limit the findings.

**Definition of Key Terms**

To facilitate a mutual understanding of this research, a common vocabulary of important terms is necessary.

**Fidelity**

Consistent with current research (Pascual, Escarti, Llopis, Gutierrez, Marin, & Wright, 2011; Tucker & Rheingold, 2010; Webster-Stratton, Reinke, Herman, & Newcomer, 2011), *fidelity* refers to the measure of accuracy and quality in which a program adheres to its original intentions or design. Dumas, Lynch, Laughlin, Smith, and Prinz (2001) further added that fidelity is critical to the “validity of any intervention study” (p. 39).
General Education Placement

The U.S. Department of Education’s division for children with disabilities, the Office of Special Education Programs (OSEP), defines the general or regular education setting as one where students with disabilities receive their instruction with non-disabled peers for 21% or more of the day (Zigmond et al., 2009).

Inclusion

According to Friend and Bursuck (2006), inclusion is the practice of placing students with disabilities in the general education classroom with instruction based upon student ability, not disability. The term is not defined in the IDEA, but typically refers to the integration of students with disabilities in regular classrooms (Alexander & Alexander, 2005).

Least Restrictive Environment (LRE)

Mastropieri and Scruggs (2007) provide an abridged definition of IDEA’s delineation of a student’s least restrictive environment. The researchers’ refer to LRE as the setting least removed from the general education classroom where children with disabilities receive their education.

Mainstreaming

Often the literature uses the terms mainstream or mainstreaming interchangeably with inclusion. Mainstreaming has not been universally defined, and often should not be synonymous for inclusion (“Planning for Inclusion”). For the purposes of this study, inclusion will be used when referencing students with disabilities placement in the general education setting.
**Resource Classroom**

The OSEP denotes a *resource classroom or separate classroom placement* as any setting where a student with disabilities receives instruction outside the regular education setting for 21% or more of the school day (Zigmond et al., 2009).

**Rural and Urban Populations**

The U.S. Census Bureau (2011) defines rural areas as “all territory, population, and housing units located outside of [urbanized areas] and [urbanized clusters].” The U.S. Department of Agriculture (2012) further extends this definition by stating rural areas include any open territory or settlements with fewer than 2,500 residents. Likewise, the Department notes urbanized areas are classified according to the populations: (1) metro, which includes areas or territories with 250,000 or more inhabitants; and (2) non-metro with urban population, which includes 2,500-249,000 inhabitants.

**Special Education**

According to the definition of IDEA (2004; 2006), *special education* refers to “specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability, including instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and instruction in physical education” (Assistance to States for the Education of Children with Disabilities, 2004).

**Students with Disabilities**

A child with a disability includes those who have been evaluated and found to have one of the following disabilities identified by IDEA (2004; 2006): mental retardation, hearing impairment, speech or language impairment, visual impairment, emotional disturbances, orthopedic impairment, specific learning disability, deaf-
blindness, or multiple disabilities. Eligibility requires the student to meet the criteria for one of the disability categories identified by IDEA and need special education and related services as a result of the disability (Bartlett, Weisenstein, & Etscheidt, 2002).

**Sustainability**

Fullan (2002b) contributes a plausible definition of sustainability as it relates to the change process. *Sustainability*, or often referred to as institutionalization, refers to the “likelihood an overall system can continuously regenerate itself in an ever-improving direction” (p. 9).

**Summary**

This chapter described the research problem, established the theoretical framework for the study, identified the study’s purpose and rationale for conducting the study, outlined the general methodologies employed during this study and explained the project’s significance. Within Chapter 2 a detailed review of literature outlines the theoretical framework for the study, the historical perspectives of special education, trends in placement options for students with disabilities, barriers, and attitudes toward inclusion, and the change process. Chapter 3 elaborates on the justification for the chosen methodology, a correlational research design using three data collection instruments. Chapter 4 articulates the steps taken in the data collection and analysis phase of the study. Lastly, Chapter 5 focuses on the results, conclusions, and recommendations for future research and practice regarding the process of change for implementing inclusive practices within schools.
CHAPTER II

Review of Literature

Within the world of special education, the word inclusion is likely “to engender fervent debate” (Kavale & Forness, 2000, p. 279). Since the passage of the Individuals with Disabilities Education Acts in the 1990’s, the number of students with disabilities placed in the regular educational setting has increased significantly (Henning & Mitchell, 2002; McLeskey & Waldron, 2011). While the number of inclusively educated students has risen, resistance to the inclusion of students with disabilities in the general educational setting continues to persist (Rea, McLaughlin, & Walther-Thomas, 2002; Subban & Sharma, 2005; Tilkin & Hyle, 1997).

The review of literature presented will begin with the theoretical foundation for this study, followed by an examination of the historical and theoretical background related to the study of inclusive education. In addition, this chapter discusses the current literature and special education law related to inclusion, including research related to negative implications of inclusion. This will be followed by a discussion of the regular education initiative that propelled special education toward inclusive practices. Following the historical background, the review focuses on the change process and the implementation of change within schools. Next, the attitudes of educators and administrators will be examined. Finally, the review briefly analyzes the literature about how the implementation of programs is influenced by fidelity to the change process.


**Theoretical Framework**

The implementation of inclusion is a complex process (Paliokosta & Blandford, 2010; Tilkin & Hyle, 1997). Early reports provided evidence that the conventional methods of teaching students with disabilities (i.e., resource rooms) could not continue (Will, 1986a), and exclusion from the regular setting contributed a detrimental effect on a child’s social and academic growth (Cole, Waldron, & Majd, 2004; Crossley, 2000). Inclusive educational reform continued to be a highly debated and controversial development of American education (Lopes, Monteiro, Sil, Rutherford, & Quinn, 2004; McLeskey, Hoppey, Williamson, & Rentz, 2004; McLeskey & Waldron, 2011; Peltier, 1997; Worrell, 2008).

Within education, change has become the norm as educators are inundated with new innovations (Stoll & Fink, 1996). Stoll and Fink further define schools as “fundamentally conservative institutions” where change encounters resistance in effort to maintain status quo (p. 5). Fullan (1991), however, defends educators’ purpose behind change resistance:

One of the most fundamental problems in education today is that people do not have a clear, coherent sense of meaning about what educational change is for, what it is, and how it proceeds. Thus, there is faddism, superficiality, confusion, failure of change programs, unwarranted and misdirected resistance, and misunderstood reform. (p. 4)

When new ideas enter the educational arena, school leaders must develop a change capacity for the school and prepare school leaders in becoming skilled change agents (Fullan, 1993). Taking the innovation from a proposed idea to an adopted practice is
difficult, even when the innovation provides substantiated benefits and rewards (Rogers, 2003).

To understand the relationship between the introduction of an innovation and the change process, an historical precedence or theory exists to understand such relationships. Theories, as defined by Creswell (2009), are defined as an "argument, a discussion, or a rationale . . . [that] helps to explain phenomena that occur in the world" (p. 51). The theoretical framework for this study resides in Roger's (2003) Diffusion of Innovation theory which delineates the process in which innovations move from introduction to implementation within an organization.

Rogers (2003) affirms that innovations are not instantaneous acts, but a process that develops over time through a progression of stages. The researcher purports the process, the innovation-decision process, allows change agents to implement an innovation that "passes from gaining initial knowledge of an innovation, to forming an attitude toward the innovation, to making a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision" (Rogers, 2003, p. 168).

Rogers' model of the innovation-decision process, as depicted in Figure 1, illustrates the linear method of introducing a new innovation within an organization. Within the first stage of the process, knowledge occurs when an individual gains knowledge of the innovation and begins to understand how it works and functions (Rogers, 2003). Individuals gain knowledge through one of three types. The first,
awareness-knowledge includes knowledge the innovation exists, which will prompt the individual on to the next type. Secondly, how-to knowledge consists of information on how to properly use the innovation. Lastly, principles-knowledge deals with the underlying principles on how an innovation works.

The second phase of the innovation-decision process denotes the persuasion stage. During this stage, individuals formulate a positive or negative attitude toward the innovation. For change agents, the attitude becomes a critical component in establishing the culture for change (Beets et al., 2008). Leaders of any organization noticed people are more likely to accept an innovation if the change agent possesses a positive attitude toward the change (Zimmerman, 2011).
The next step in Rogers' (2003) process, the *decision stage*, occurs when an individual makes the conscious decision to accept or reject the innovation. Once an innovation has been introduced, individuals tend to test the new idea on a trial basis. Typically, individuals do not accept or reject an innovation without first experimenting with the innovation and deciding if the idea meshes with the current culture, beliefs, and vision of the organization. Change agents may employ various techniques to provide individuals the opportunity to try the innovation, often with demonstrations to model the innovation (Rogers, 2003).

The fourth phase includes what Rogers’ (2003) denotes as the *implementation stage*, which occurs when the innovation become common practice within the organization. During this phase, the novelty of the innovation will eventually wane and the innovation becomes institutionalized as standard procedures within the organization (Rogers). Thus, at this point, the fourth stage ceases, and in some cases, it marks the end of the innovation-decision process.

Within some organizations, a final phase may occur even once the innovation has become standard practice. This phase, the *confirmation stage*, posits individuals may reverse their acceptance decision of the innovation if they encounter opposition from within the organization. Individuals will seek reinforcement (approval or disapproval) for the implemented innovation. If the innovation encounters “conflicting messages” or disequilibrium from others within the organization, the decision may be to discontinue the innovation or seek to replace it with either a new innovation or the idea the superseded the rejected innovation (Rogers, 2003).
The diffusion process of any idea, as modeled by the innovation-decision stages, occurs at varying periods of time during the entire phase. Rogers (2003) defines the *innovation-decision period* as the amount of time it takes an organization to gain knowledge of the innovation to either adopting or rejecting the idea. The rate of adoption over time tends to fit a normal S-curve model, as illustrated in Figure 2. As the innovation spreads through the social system, the beginning stage (knowledge) shows the smallest number of supporters, with the number of adopters increasing over a period of time (Rogers 2003; Rogers, Medina, Rivera, & Wiley, 2005). Therefore, as Rogers concludes, the rate of adoption is measured by the “length of time required for a certain percentage of the member of a system to adopt an innovation” (p. 23).
Figure 2. The rate of innovation adoption.

The Diffusion of Innovations model relates to the current study by delineating the process in which administrators implement inclusive practices within their schools. From the moment administrators gain knowledge of the practice, they formulate an opinion of whether the practice fits within the culture of their schools. In the case of inclusion, if the principal finds inclusive practice as a positive strategy, the decision is made to implement inclusion by providing the teachers the necessary supports and resources to make implementation successful. This propels the principals within the role as the change agent, while teachers become the implementers of inclusion. Once implementation has
been successful, inclusion becomes part of the school culture; thus, the innovation becomes common practice within the school.

**Historical Perspective**

Since the formation of the United States, the cultural and social traditions of this country have shaped the public school system. The establishment of public schools during the nineteenth century provided the fundamental right for every individual – rich or poor – to a free education. During his legislative address in 1819, Kentucky Governor Gabriel Slaughter addressed the need for all individuals to be educated. Slaughter devised a plan, including appropriate funding, that set the groundwork for a system of common schools. Governor Slaughter contended that “government depends for its perpetuity upon the virtue and wisdom of the people; virtue is the offspring of wisdom” (as cited in Alexander & Alexander, 2005, p. 26).

The education for children with disabilities, however, was slow to develop, primarily due to limited financial resources and public apathy. The legal obligation for public schools to serve all students with disabilities is relatively recent. Prior to the 1970’s, students with disabilities were either refused entry into public school or inappropriately served in the classroom (Martin, Martin, & Terman, 1996). The progress, however, for students with disabilities from pariah to inclusion established the challenges encountered throughout academia. Prior to federal or state mandates, students with disabilities, whether mild or severe, found themselves at the mercy of the school districts for acceptance in the classroom. In hopes of providing a more suitable education for students with disabilities, advocates came to view the landmark *Brown v. Board of*
Education (1954) decision to end racial segregation of public school students as the beginning of a new era toward equal educational access for students with disabilities.

The history of special education programs began during the early nineteenth century when the first school for students with disabilities was founded by Thomas Gallaudet. His institution, American Asylum for the Education of the Deaf and Dumb, began serving students with hearing impairments in 1817. By the mid-1800’s, more than 20 other facilities opened across North America. While many students with visual or hearing impairments were gaining entry into the public school system, many students with severe disabilities had a more difficult time meeting the expectations of the school systems (Alexander & Alexander, 2005). Awareness toward individuals with mental retardation began in 1845 when Dr. Amariah Brigham advocated for an institution to “train idiots” in efforts to make the individuals contributing citizens of New York (Mesibov, 1976, p. 26).

Although attempts were made to educate the vast majority of individuals with disabilities, the students with physical or cognitive impairments continued to face societal opposition. In 1893, a Massachusetts school district excluded a student from school attendance because “he was too weak-minded to derive profit from instruction” (Monserud, 2004, p. 683) and “imbecility was favorable grounds for expulsion” (Alexander & Alexander, 2005, p. 486). After several appeals in the Watson v. City of Cambridge case, the state’s Supreme Court upheld the school’s decision, citing schools had statutory discretion over who could or could not attend. The Wisconsin Supreme Court, likewise, extended the exclusion of a student suffering from a disabling form of paralysis from attending school. In this 1919 case (State ex rel. Beattie v. Board of
Education), the courts upheld the school’s decision because the nature of the student’s disability had “a depressing and nauseating effect on the teachers and school children” (Alexander & Alexander, p. 486).

Regardless whether a student was academically capable of meeting the school’s expectations, students unable to fit the “normal child” criteria could be excluded, expelled, or refused entry to a public school. Langer (1989) refers to this conceptualizing as what is normal versus deviant as “mindfulness.” As a majority of society, individuals without disabilities become accustomed to categorizing individuals to make distinctions among them; thus, society becomes rigid on these categories. Therefore, those without disabilities tend to spend time with “people like ourselves . . . [assuming] uniformities and commonalities” that when confronted with someone different, “we drop that assumption and instead look for more differences” (Langer, p. 156).

As a means to categorize individuals, special education programs in school systems arose during the early twentieth century with compulsory attendance mandates across the states. While programs addressed learning disabilities, educators and administrators continued removing students with other impairments or special needs from general classrooms, often remanding them to special classes or buildings. Monserud (2004) reported that society’s perspectives conveyed the strong message that students with disabilities, “especially cognitively disabled children, were deemed a nuisance” (p. 686) and would become more of a disruption and impede the ability for other students to learn.

Long before the introduction and passing of federal or state mandates, there has been a keen interest in the partnerships between general education and special education
teachers (Friend & Reising, 1993). The first contest of special education placements occurred with Dunn’s (1968) publication that recognized separate classes for students with disabilities proved academically less favorable. Dunn disputed the universal placement of students based upon disability, rather than the student’s needs. What Dunn recommended was “a fairly radical departure from conventional methods of diagnosing, placing, and teaching children” (p. 11).

Dunn’s “blueprint for change” constituted meeting the needs of the students based upon individualization, rather than the identification of a disability. Likewise, his controversial proposal identified the need to shift responsibility for students with disabilities to regular education teachers, thus pushing for inclusion, or “integration of students with mild disabilities with their non-handicapped peers” (MacMillan, Semmel, & Gerber, 1994, p. 470). Dunn (1968) continued by promoting a new approach to special education, where general education had the “central responsibility for the vast majority of the children with mild learning disabilities” and special education teachers “served as resource teachers in devising effective prescriptions and in tutoring such pupils” (Snell & Drake, 1994, p. 393).

Dunn’s (1968) proposal initiated the inclusive movement of “including” students with disabilities in the general education setting. Through his approach, special education teachers would no longer “take all problem children off the hands of general educators” (Dunn, 1973, p. 13), as little to no evidence existed that special classes were beneficial to students with disabilities (Dunn, 1968).

Shortly after Dunn's legislative appeal, a significant defining moment for special education occurred in 1972, when a federal district court ruled that children with mental
retardation in Pennsylvania are entitled to a free, public education. The Pennsylvania Association for Retarded Citizens (PARC) identified 13 school districts that denied the constitutional right to equal protection of the laws under the Fourteenth Amendment. The courts noted that students with severe cognitive disabilities were excluded because they were “deemed unable to benefit from education” (Hulett, 2009, p. 20). The court’s decision requiring students with mental retardation be provided an education set the precedence that “all children have a constitutional right to public education, without regard to disability” (p. 20).

The Mills v. Board of Education of District of Columbia (1971) case expanded the PARC decision to include all students. In this case, seven children with cognitive disabilities claimed they were denied a public education through exclusion. At that time, the schools denied admission and services to students who have not attained a mental age of five years. The judgment stated no child would be excluded from receiving a public education because of mental, behavioral, physical, or emotional disabilities. The court’s decision established zero reject, stating no student could be denied access to a free, appropriate public education based on the disability. The agreement of the courts outlined that “It is the Commonwealth’s obligation to place each mentally retarded child in a free, public program of education and training appropriate to the child’s capacity” (Alexander & Alexander, 2005, p. 487). Therefore, a standard of appropriateness established placement in the students’ least restrictive environment and one that was appropriate to the students’ learning abilities (Martin, Martin, & Terman, 1996).

Following these court cases in 1975, President Gerald Ford signed into law the Watershed Legislative Act which the “educational rights of the disabled have rested for
more than twenty-five years – Public Law 94-142” (Monserud, 2004, p.689). Through a raised general public awareness and the maltreatment of individuals with disabilities, these cases propelled special education onto the Congressional forefront, seeking to eliminate discrimination against individuals with disabilities. The passage of Public Law 94-142, later renamed the Education for All Handicapped Children Act (EAHCA), ensured the right of all children with disabilities to a public education. Through EAHCA, legislators established the major components of special education: a free and appropriate public education (FAPE), procedural due process, nondiscriminatory assessments, and an individual education plan (IEP).

Since the inception of EAHCA in 1975, the Act has undergone several reauthorizations and a name change in 1990 – the Individual with Disabilities Education Act (IDEA). During this time, the authorization of the IDEA supported the philosophy that children with disabilities should be educated with typically developing children in the general educational setting whenever possible. While the IDEA does not specifically define inclusion, the legislature’s language stipulates the regular classroom should be given first consideration:

... 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. (20 U.S.C. §1412(a)(5)(A))

The IDEA’s reauthorization of 1997 later shifts the burden of responsibility onto the school to provide “an explanation of the extent, if any, to which the child will not participate with non-disabled children in the regular class” (Alexander & Alexander,
2005, p. 507). While legislation established protection for students with disabilities against discrimination, schools and districts continued to deny or exclude the students from an appropriate education.

In 1993, the U.S. Court of Appeals heard motions regarding the removal of a child with Down syndrome after his successful completion of kindergarten. The student’s IEP team concluded an out-of-district, self-contained, special education class would best serve the Oberti child’s needs and be a more appropriate placement. The U.S. Court of Appeals ruled the district violated the least restrictive environment (LRE) requirement of IDEA.

The Oberti v. Board of Education of the Borough of Clementon School District (1993) established precedence for inclusion of students with severe disabilities and reaffirmed the right for these students to be educated alongside non-disabled peers (Baumgart & Giangreco, 1996). Known as the Oberti Factors, this three-part test provides guidance regarding the appropriateness of inclusion. The factors are: (1) reasonable efforts to accommodate the student in a regular classroom; (2) a comparison of benefits provided in a regular classroom with supplementary aides and services to benefits in a special education classroom; and (3) potentially negative effects of inclusion with other students in the regular classroom (Alexander & Alexander, 2005).

The preceding court cases demonstrated the complexity of determining placement for students with disabilities. As with the Oberti Factors, the courts relied upon another analysis, the Daniel R. R. test, to help resolve the issues of inappropriate placement. Alexander and Alexander (2005) state this two-part test determines whether a school is in compliance with IDEA’s inclusionary requirement. First, the court must determine
“whether education in the regular classroom, with the use of supplementary aids and services, can be achieved satisfactorily” (p.509). Secondly, if the court finds that placement outside of the regular classroom is required, the court must determine “whether the school has mainstreamed the child to the maximum extent appropriate” (p. 510). Likewise, Alexander and Alexander continue by emphasizing the need for States to address the unique needs of the child, understanding the child may benefit differently from education in a regular classroom than students without disabilities. The researchers, therefore, caution the fact a child with a disability learns differently from their peers does not justify exclusion from that environment.

As part of the Dunn’s deinstitutionalization of the handicapped during the late 1960s and early 1970s, public education continued with tremendous political, social, and economic changes into the 1980s (Lloyd & Gambatese, 1991). After the release of *A National at Risk*, the country was warned “the educational foundations of our society [were] presently being eroded by a rising tide of mediocrity” (National Commission on Excellence in Education, 1983, p. 469). The premise of the report was clear: doing the same thing will continually produce the same results.

Nearly a decade after EAHCA and Dunn’s proclamation for change, a new reform movement called for a total restructuring of all special education programs. During the 1980s, proponents for transitioning students with disabilities into the general educational classroom argued a separateness of children with disabilities from their peers inhibited their social development (McDonald, 1992) and was an infringement of their basic civil rights (D’Alonzo & Boggs, 1990). Thus, the regular education initiative (REI) advanced the educational opportunities for students with disabilities. The REI combined the once
dual system of regular and special education programs into a single system, meeting the needs of all students within one setting.

Opponents of the REI argued a child with a disability adversely affects educators’ expectations of the student’s performance, abilities, and achievement (Lipsky & Gertner, 1991). Thus, as the authors contend, schools intentionally place students with disabilities in an environment where they will be “safe” and the student will not be asked to do anything “we know he cannot do” (p. 46). During a presentation at the Wingspread Conference, Will (1986a) called for an educational reform that abolished the idea that students with disabilities could not be taught in regular education classrooms. Will noted the solution as a collaborative effort between regular and special education teachers, allowing them to “collectively contribute skills and resources to carry out individualized education plans based on individualized education needs” (p. 413). Likewise, Will (1986b) proposed a “transfer of knowledge” by forming a partnership between regular education and special education programs through a “blending of the intrinsic strengths of both systems” (p. 12).

While the mounting evidence suggested the regular classroom was an appropriate educational setting, educators and scholars shifted their attention toward the inclusion movement. The next section examines how inclusion evolved from theory to practice, to include the Individuals with Disabilities Education Act (IDEA) language.

**Trends in Placement**

Equal educational opportunities for all students, including those with disabilities, are part of our national culture (Keogh, 2007). Through judiciary procedures, students with disabilities and their parents challenged the core of the educational system,
exercising their civil rights for an equal education. Since the passage of PL 94-142 and subsequent reauthorizations (IDEA; 1994, 1997, 2007), changes in the law have been made to further advance the education for students with disabilities, particularly where students received their education.

Since the inception of EAHCA in 1975, the act has been amended several times before being renamed the Individuals with Disabilities Education Act (IDEA) during the 1990 reaffirmation. This landmark legislation established the provision that schools must address the needs and abilities to the child, while ensuring students with disabilities are educated in the least restrictive environment (Keogh, 2007). Pelosi and Holcutt (1977) stated the act assured “all handicapped children have available to them . . . a free appropriate public education which emphasizes special education and related services to meet their unique needs” (p. 3) in exchange for federal dollars. By the late 1980s, all states adopted the federal special education policy, which focused on access to ensure students with disabilities received the appropriate services. By the 1990s, the crux of special education programs transitioned from access to outcomes (Itkonen, 2007) as the focus centered on content and performance standards and increased school accountability (Hardman & Dawson, 2008).

Following the enactment of PL 94-142, special education has witnessed tremendous changes through its evolution. Leafstetd et al. (2007) reported the great advances current policies have had upon the social arena. Parental and public advocacy groups provide strong support systems for individuals with disabilities. Individuals with disabilities contribute to the social system by becoming gainfully employed, thus reducing or eliminating the burden of supported community resources. Thus, special
education has evolved from a system of “access to outcomes” with greater emphasis on accountability for schools to provide an appropriate education for all students (Leafstedt et al., p. 20).

One facet of the IDEA postulates that children with disabilities should be educated to the greatest extent possible alongside peers without disabilities in the general educational setting. As outlined in the statutes, inclusion is a placement along a continuum of services:

To the maximum extent appropriate, 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. (20 U.S.C.§ 1412(a)(5)(A))

Through the IDEA, schools and personnel must consider how to modify instruction in the regular classroom before considering placement in a more restrictive environment. This may require teachers and school personnel to acquire special training to meet the needs of a child with a disability. Included in the language of the IDEA is the provision that training be provided to school personnel in order to best serve the diverse needs of the students. Regardless of the disability, teachers and staff members would make all necessary modifications and accommodations in order for the students to be included in the classroom. Inclusion, therefore, provided equal access to the curriculum for all students, including those students with disabilities, by including the students in the least restrictive environment.
The issue of placement in the least restrictive environment; however, has become one of the most controversial and most litigated issue in special education (McLeskey & Waldron, 2011; Yell & Katsiyannis, 2004). As mandated, the general education classroom should be given first priority when considering placement for children with disabilities and their expected outcomes. As Friend and Bursuck (2006) stated, discussion of inclusive practices must consider the effect on student achievement and outcomes. Research has indicated the outcomes for students with disabilities inclusively placed in the general education classroom demonstrate greater achievement gains than those taught in resource classrooms.

In a study conducted by Rea, McLaughlin, and Walther-Thomas (2002), the researchers investigated the relationship between placement in inclusive and pullout (i.e., resource) special education classrooms and academic and behavior outcomes for students with disabilities. Using a mixed-methodology design, the researchers sampled 58 middle school students with learning disabilities from two schools in a southeastern school district (School A, n = 36; School B, n = 22). Rea et al. measured three student outcomes: academic achievement, behavior, and school attendance.

As evidenced by the students' performance on the Iowa Test of Basic Skills (ITBS), students in inclusive settings achieved higher standard scores on the language and math subsections than those students receiving pullout services. In a comparison of students' course grades in content-related subjects (i.e., language arts, math, science, and social studies), students served in inclusive settings earned significantly higher grades in all four subject areas. Rea et al. (2002) concluded students with learning disabilities served in the general educational setting achieved better outcomes on most measures than
students in resource or pullout programs. Likewise, students served in the general education classroom had fewer absences, which the researchers attributed to greater student satisfaction and increased instructional quality and social experiences.

In examining placement trends for students with disabilities, states must collect data from school districts annually during the December 1 Child Count. States must then report data collectively as mandated by Section 618 of the IDEA. The federal mandates require all states to report specific data for those children served through state Part B (ages 3-21) and Part C (ages birth through 3).

**National Trend Data**

As evidenced by the research, a students' least restrictive environment constitutes great advantages for students with disabilities. Data collection on state compliance with IDEA began in 1976, shortly after the enactment of federal mandates. With expected outcomes significantly more beneficial for students with disabilities, the number of students placed in the general education classroom has grown considerably during this time. On a national level, the placement options for students with disabilities had increasingly changed to include more students in the general educational setting (Aud et al., 2011). As Table 1 illustrates, the favored placement for students with disabilities has been those students being placed in the general education classroom 80% of more of the school day. As noted in Table 1, the National Center for Education Statistics (NCES; Aud et al., 2011) illustrates the shift toward a more inclusive placement occurred during 1994-95 when more students were served in the general education classroom 80 percent or more of the school day than in the other two placement options (i.e., 79-40%, less than
Table 1

*Percentage of Students ages 6-21 Served under IDEA by Educational Environment*

<table>
<thead>
<tr>
<th>Time in General Classroom</th>
<th>80 Percent or more</th>
<th>79 - 40 percent</th>
<th>Less than 40 percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-91</td>
<td>33.1</td>
<td>36.4</td>
<td>25.0</td>
</tr>
<tr>
<td>1994-95</td>
<td>44.8</td>
<td>28.5</td>
<td>22.4</td>
</tr>
<tr>
<td>1995-96</td>
<td>45.7</td>
<td>28.5</td>
<td>21.5</td>
</tr>
<tr>
<td>1996-97</td>
<td>46.1</td>
<td>28.3</td>
<td>21.4</td>
</tr>
<tr>
<td>1997-98</td>
<td>46.8</td>
<td>28.8</td>
<td>20.4</td>
</tr>
<tr>
<td>1998-99</td>
<td>46.0</td>
<td>29.9</td>
<td>20.0</td>
</tr>
<tr>
<td>1999-2000</td>
<td>45.9</td>
<td>29.8</td>
<td>20.3</td>
</tr>
<tr>
<td>2000-01</td>
<td>46.5</td>
<td>29.8</td>
<td>19.5</td>
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<tr>
<td>2001-02</td>
<td>48.2</td>
<td>28.5</td>
<td>19.2</td>
</tr>
<tr>
<td>2002-03</td>
<td>48.2</td>
<td>29.7</td>
<td>19.0</td>
</tr>
<tr>
<td>2003-04</td>
<td>49.9</td>
<td>27.7</td>
<td>18.5</td>
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<td>2004-05</td>
<td>51.9</td>
<td>26.5</td>
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<td>25.1</td>
<td>16.7</td>
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<tr>
<td>2006-07</td>
<td>53.7</td>
<td>23.7</td>
<td>17.6</td>
</tr>
<tr>
<td>2007-08</td>
<td>56.8</td>
<td>22.4</td>
<td>15.4</td>
</tr>
</tbody>
</table>


(40%). Beginning in 2003-04, the number of students served 80 percent or more of the day exceeded the total number of students served 79-40 percent and less than 40 percent combined.
Kentucky Trend Data

Kentucky statutes provide language specific to the placement of students with disabilities in the general educational setting. As outlined in 707 KAR 1:350, local educational agencies (LEAs) must ensure, to the maximum extent possible, that students with disabilities are educated with students who are nondisabled. Provided in the statute is a continuum of placement options beginning with the regular classroom.

In an early 1996 study by Din, the author investigated the inclusion practices within rural Kentucky schools. In the study, Din surveyed 261 rural Kentucky schools on the employment of inclusion practices within their respective districts. Din found two types of inclusion existed at that time: inclusion (i.e., based upon individual student’s needs) and full inclusion (i.e., all students with disabilities are in regular education classes).

While both practices existed, 211 (81%) schools favored inclusion; however, this varied depending upon the severity of the disability (Din, 1996). The author noted that approximately 30% of the schools included students with mild to moderate disabilities and 15% included all disabilities to some extent. The practice of inclusion during this time was revolutionary, particularly for rural schools. The author, however, noted that while the practice varied among schools, many of the schools shared common barriers: limited instructional resources, appropriate staff training, and inconsistent staff roles.

Since that time, inclusion has continued to be the favored placement option for students with disabilities. Table 2 illustrates the shift toward including students in the general classroom with typical students. Compared to the national trends, Kentucky shows a substantially greater number of students placed in the general education
classroom 80% or more of the day as compared to the national percentage of the same time period. For example, during the 2004-05 school year, 61.7% of Kentucky students received a majority of their education in the regular classroom versus 51.9% of students at the national level, or an 18.8% increase. Likewise, Kentucky percentages have consistently been 18-21% higher than the national percentages.

**Table 2**

*Percentage of Kentucky Students ages 6-21 Served under IDEA by Educational Environment*

<table>
<thead>
<tr>
<th>Time in General Classroom</th>
<th>80 Percent or more</th>
<th>79 - 40 percent</th>
<th>Less than 40 percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>61.7</td>
<td>24.3</td>
<td>11.7</td>
</tr>
<tr>
<td>2005-06</td>
<td>64.3</td>
<td>22.4</td>
<td>11.1</td>
</tr>
<tr>
<td>2006-07</td>
<td>66.8</td>
<td>19.7</td>
<td>10.3</td>
</tr>
<tr>
<td>2007-08</td>
<td>68.9</td>
<td>18.4</td>
<td>9.9</td>
</tr>
<tr>
<td>2008-09</td>
<td>69.6</td>
<td>17.5</td>
<td>9.8</td>
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<tr>
<td>2009-10</td>
<td>70.8</td>
<td>16.9</td>
<td>9.5</td>
</tr>
<tr>
<td>2010-11</td>
<td>71.3</td>
<td>16.6</td>
<td>9.1</td>
</tr>
</tbody>
</table>

In this section, the national and state data showed a growing interest in the placement of students in the general educational setting. Keogh (2007), Pelosi and Holcutt (1977), and Itkonen (2007) established supporting evidence that schools must meet the unique needs of the students by focusing on content accessibility more so than the placement. As schools continue to place greater emphasis on student outcomes, the placement for students with disabilities in the general educational setting had continued to increase both at the state and national levels. This steady increase supports Rea,
McLaughlin, and Walther-Thomas' (2002) research that students served in inclusive settings exhibit greater academic gains and progress than those served in resource classrooms. While the general education classroom benefits the students both academically and socially, barriers continue to impede schools and districts from providing this option as the least restrictive environment. The next section outlines the common barriers schools encounter as inclusion was introduced.

**Barriers to Inclusion**

The IDEA requires students with disabilities be placed in the least restrictive environment based upon student needs. Despite the controversy over where students with disabilities should receive their education, the number of students with learning disabilities has increased over the past two decades (McLeskey & Waldron, 2011). While the special education student population served in regular education classrooms has steadily risen, common barriers to a successful implementation of inclusion exist in many education arenas. Kochlar, West, and Taymans (2000) conclude that barriers to inclusion can be categorized into three classifications: attitudinal, organizational, and knowledge.

**Attitudinal Barriers**

Researchers in the field of inclusionary practices identified the need for general education teachers to foster a positive learning environment for students with disabilities (DeSimone & Parmar, 2006; Kochlar, West, & Taymans, 2000; Mastoperi & Scruggs, 2001). Worrell (2008) posits that when educators possess negative perspectives regarding inclusion and provide no support for inclusion, teachers find it difficult to
achieve a high level of success. Negative attitudes about inclusion hinder successful implementation by making the schools “likely candidates for failure” (Worrell, p. 44).

deBettencourt (1999) conducted a study that examined instructional strategies practiced by middle school general education teachers in the context of (a) the number of special education courses taken and (b) the amount of time spent collaborating with special education teachers. General educators’ attitudes toward mainstreaming of students with mild disabilities were investigated. The purpose of this study was to investigate the attitudes of general education teachers toward mainstreaming. The participants were selected from rural middle schools and included 71 general education teachers from various content areas.

deBettencourt (1999) employed a survey instrument consisting of three sections. The first section included seven basic background questions on the participants (e.g., number of years’ teaching experience, certification background, educational level). The second section included the Bender Classroom Structure Questionnaire, which consisted of 40 Likert-rating scale questions concerning the use of instructional strategies within the general education classroom. This section examined two subscales: individualized instructional strategies and metacognitive instructional strategies. The third section contained the Mainstream Attitude Survey, a 6-item Likert response scale that measured teachers’ beliefs about mainstreaming. As defined by deBettencourt, the higher the rating, the more positive the belief toward mainstreaming.

deBettencourt (1999) hypothesized that with over 20% of the special education students being serviced in a regular classroom, a more collaborative relationship between the general education and special education teachers would be present. The researchers,
however, found 50% of the general education teachers consulted less than 1 hour a week with the special education staff. The general education teachers’ average individualized instruction subscale scores ranged from 42.64 with no consulting time to 49.00 with three or more hours consulting time. General educators who had prior educational experience in special education courses responded they used different types of instructional strategies more frequently; their use of strategies increased as the number of course experiences increased.

General education teachers, however, with no prior coursework in special education had an average individualization instruction subscale of 45.4, and the general educations who had taken three or more courses had an average of 52.4. The researchers commented that general education teachers did not pursue several strategies that research found supportive of academic achievement for students with mild disabilities. With the purpose being to investigate the attitudes of general education teachers toward mainstreaming, the researchers found the majority (61%) of the general educators either disagreed with the concept of mainstreaming or did not have strong feelings concerning the issue.

The researchers noted several limitations to their study. First, the data were self-reported and could include several self-reporting inaccuracies, such as noting they employed a certain instructional strategy even though they did not. Secondly, the Bender scales of Section 2 and 3 of the survey required further validation.

The implications of this study could lend to additional training and practice of general education teachers, including more attitude and awareness training concerning students with disabilities. The researchers noted courses related to the needs of students
with disabilities and inclusion practices should be addressed, since a large number of students with mild disabilities are being served in the general educational setting.

Cook, Tankersley, and Landrum (2000) followed with an examination of the attitudes of general education teachers toward students with disabilities taught in the general education classroom. The researchers proposed that the attitudes of attachment, concern, indifference, and rejection toward students with disabilities correlated to the quality of the students' educational experiences. The purpose of this nonparametric study investigated what attitudes the teachers held toward their students in the inclusive classroom setting. The researchers hypothesized the teachers' attitudes toward their students with disabilities, rather than the concept of inclusion itself, would predict the quality of education for those students.

The participants included superintendents or directors of special education from six Ohio school districts. The district administrators nominated 10 elementary schools with the highest inclusive population, with 9 participating in the study (90% participation rate). All inclusive general education teachers in kindergarten through Grade 6 were eligible to participate, with 70 general education inclusive teachers participating during the data collection (92.1% participation rate). The researchers did not report dependent or independent variables.

The teachers nominated three students (n = 221) representing the best responses to 161 prompts reflective of the four attitudinal categories: attachment (i.e., kind, helpful); concern (i.e., worry, eager-to-please); indifference (i.e., independent, apathy); and regarding rejection (i.e., bad attitude, unkind). Data collection occurred during a faculty meeting at the end of the school year. The teachers nominated three students from their
class roster for each attitudinal category. The teachers included students with and without disabilities in their nominations and were allowed to nominate a student more than once. Four chi-square analyses were conducted to determine the percentage of inclusive students nominated for each of the attitudinal categories.

The results examined the representation of included students with disabilities in the teachers' categorical nominations. The teachers nominated 30 (13.6%) students with disabilities from the entire sample. The categories with the largest number of students with disabilities nominated were concern and rejection (30.8% and 30.9% respectively). The teachers nominated 13 (5.8%) students with disabilities in the attachment category. The findings concluded students with disabilities were underrepresented in the areas of attachment and overrepresented in the area of concern and rejection. Contrary to what the researchers predicted, however, students with disabilities were not underrepresented in the indifference category.

Further discussion by the researchers revealed that teachers become more involved with their concern students, partly due to their academic struggles rather than behavioral issues. Based upon observational data from other studies, teachers invested more of their time to concern students and allowed them additional opportunities to be successful (e.g., more praise, additional time to answer questions). Teachers, however, gave rejection students less attention for instructional interactions and more for social, attitudinal, and behavioral problems. Because of teachers' prejudice in teaching students with disabilities (i.e., viewed "difficult-to-teach"), the teachers prevented themselves from bonding with the students. This was indicative by the underrepresentation of
students with disabilities in the attachment category. These students fell outside the teachers’ level of instructional tolerance.

Although Cook et al. (2000) did not conduct observations of the teacher-student relationships, the researchers inferred the attitudes the teachers had for concern and rejection students were indicative of the quality of students’ education. The researchers concluded that with the overrepresentation of rejection students, the students did not receive a quality education due to the demands upon the teacher for classroom control and discipline issues. While concern students required more attention, the teachers devoted more instructional time because they felt the students would be successful with the assistance. The researchers concluded that the attitudes of the teachers toward students with disabilities did influence the quality of education for concern and rejection students.

Hammond and Ingalls (2003) examined the attitudes of elementary school teachers toward the inclusion model adopted by their school district. The researchers deemed the necessity of exploring the attitudes of inclusionary teachers to help understand the challenges and concerns these teachers face to implement inclusion for students with disabilities. The purpose of this study was to (1) determine if teachers were supportive of inclusionary practices, (2) examine patterns of responses that are evident in teachers’ attitudes, and (3) explore recommendations based upon the teachers’ responses and patterns of responses that could potentially address teachers’ attitudes.

Thirteen rural elementary schools from three school districts were examined, with 455 teachers randomly selected to participate in this study. Of those surveys distributed, 343 surveys were completed and returned, providing a 75% return rate. Two
questionnaires were developed to solicit information about teachers’ perspectives on inclusionary programs within their schools. Questionnaire One (Prevailing Attitudes about Inclusion; PAI) surveyed teachers’ attitudes on inclusion using a 5-point Likert scale. Questionnaire Two surveyed the level of inclusion practices occurring in the schools, using a modified 5-point Likert inclusion checklist developed by Smith et al. (1995).

Findings revealed that while a majority of schools had implemented inclusion programs at their schools, a high percentage of teachers had either negative attitudes or uncertainty toward the program. The concern of this, as noted by the researchers, would be how the negative attitudes affect the delivery of instruction or the success of the inclusion program. Since the majority of teachers surveyed did not support the program, the implementation would be a poor concept, thus demonstrating the "old" delivery system (e.g., self-contained resource rooms, pull-out instructional services) may have more merit than the new inclusion program. Additionally, the results of the survey suggested the teachers had limited commitment, varying degrees of uncertainty, and negative attitudes toward inclusion. A further critical piece of evidence revealed by the study was the teachers’ need for administrative support for the program to succeed. This suggests a potential future study on the administrations attitudes toward inclusion. One limitation of this study was the data collection of a small geographic region, disallowing generalizations to be made regarding practices at larger, urban schools. Another limitation was not making a distinction between surveys disseminated to general education or special education teachers. Finally, the researchers did not collect
biographical data on each participant (i.e., age, gender, years of experience) and examine how these variables affect the teachers’ attitudes toward inclusion.

Parasuram (2006) investigated whether variable background characteristics affected the attitudes of teachers toward students with disabilities and the concept of inclusion in the general education population. The researcher examined eight background characteristic variables: (a) age; (b) gender; (c) income status; (d) level of education; (e) years of teaching experience; (f) acquaintance with a person with a disability; (g) having a family member with a disability; and (h) frequency of contact and closeness to a person with a disability.

The research questions were whether these variables affect the attitudes of teachers toward people with disabilities and the attitudes toward inclusion of students with disabilities into regular schools. The researchers randomly selected schools to participate in this study. The randomly sampled participants included 300 teachers employed in general education schools. Two attitude scales provided the researcher data for analysis: (a) the Attitude Toward Disability Scale (ATDP; 1996); and (b) the Attitudes Towards Inclusive Education Scale (ATIES; 1992). Each scale presented a Likert response rating scale, ranging from 1 to 5 on the ATDP, and 1 to 6 on the ATIES. ANOVA analyses were conducted on each variable characteristic from each instrument score means to investigate whether the demographic data collected on the participants affected the attitudes of the teachers.

The findings revealed that several of the demographic characteristics did impact teachers’ attitudes towards students with disabilities. Analyses of the age variable found younger generations (i.e., 20-30 age group) respond more favorably than one older age
group (40.1-50 years). Moreover, the 50.1-60 aged participants showed more positive attitudes than the 40.1-50 years group. Further analyses of the data found gender to have little influence on attitudes of teachers, while teachers with higher incomes had more positive attitudes than lower earning family incomes. Participants with higher earned levels of education (Master’s degrees) have more positive attitudes than those with a high school or Bachelor’s degrees. Participants acquainted with a person with a disability were more positive than those with no acquaintances. While these variable characteristics differed in analyzing the data of general education teachers toward persons with disabilities, the only variable that affected teachers’ attitudes towards inclusion of students with disabilities in general education populations was prior acquaintance with a person with a disability.

Organizational Barriers

Kochlar, West, and Taymans (2000) identified organizational barriers that interfere with the integration of inclusion into schools. Research concludes that teacher responsibilities (Laframboise, Epanchin, Colucci, & Mocutt, 2004; Paliokosta & Blandford, 2010) and administrative support (Hu & Roberts, 2011; Smith & Leonard, 2005; Villa, Thousand, Nevin, & Liston, 2005; Worrell, 2008) are two critical organizational barriers impeding the success of inclusion. Clough and Garner (2003) further find that inclusion may not be a suitable placement for all students because of the barriers of “lack of knowledge, lack of will, lack of vision, lack of resources, and lack of morality” (p. 87).

Laframboise, Epanchin, Colucci, and Mocutt (2004) conducted a qualitative case study of three school districts to examine factors that facilitate or inhibit the work of
teachers in inclusionary settings. The participants included seven teachers and one mainstream consultant. Data collection consisted of field notes made during classroom observations, semi-structured interviews, and bi-weekly research meetings.

The findings from the research of Laframboise et al. (2004) indicated the time management responsibilities special education teachers encountered often inhibited the success of inclusion. As the study indicated, special education teachers were limited in the amount of time they had to spend providing supports in the general education classroom. Often the teachers could not provide adequate inclusionary support within the general setting because their time was divided amongst several teachers or teams. The teachers concluded that with the heavy paperwork demands, time that should be spent planning with general education teachers did not occur so special education documentation was or could be completed.

Paliokosta and Blandford (2010) expanded on the restraints of time in a qualitative study that explored the policies and practices at three inclusive schools. The authors conducted the two-year study to examine the implementation of inclusive practices, resulting in an understanding of the various constraints that impede the success of inclusion. Time constraints were presented as a serious barrier at all three schools, with teachers reporting the high ratio of students with disabilities requiring individualized instruction. One teacher reported during an interview, “I don’t . . . have enough time to differentiate work within a lesson” (p. 183).

The second organizational barrier identified was administrative support. Villa, Thousand, Nevin, and Liston (2005) found that the degree of administrative support for inclusion was “the most powerful predictor of a general educator’s positive feeling
toward inclusive practices” (p. 43). In their qualitative study, the researchers interviewed 10 general education and 10 special education teachers working in a collaborative service delivery model. The interviewer asked a series of structured questions about their inclusive practices, student and teacher outcomes and necessary steps to improve current practices. From the analysis of transcripts, six themes emerged around the idea of best practices: (a) administrative support, (b) ongoing professional development, (c) collaboration, (d) communication, (e) instructional responsiveness, and (f) authentic assessments.

Villa et al. (2005) reported that the interviewees identified the key organizational practice as being the support of the administration. The researchers concluded that through the principal’s support and leadership, teachers found the culture of the school focused on acceptance of all students and increased accountability by all school personnel, thus increasing the likelihood of successful inclusion.

In a study conducted by Smith and Leonard (2005), the researchers investigated the challenges of implementing inclusion programs within 10 public school systems at the initial stage of inclusion implementation. The researchers employed a qualitative research design that included participatory observations, semi-structure interviews, focus groups and analysis of school documents. The study attempted to gain insight into inclusion by focusing on the participants’ behaviors, roles, values, and perceptions related to the implementation of inclusion within their schools.

Through “symbolic interactive inquiry” (p. 270), the researchers investigated the working relationships of the participants through their actions, words and roles in the school. The findings of Smith and Leonard’s (2005) study concluded that educators and
administrators have conflicting interpersonal and intrapersonal values regarding the
cchange toward inclusive practices. Although these conflicts existed among the
participants, a central theme emerged from the data: successful implementation of change
initiatives are the responsibility of the principal. A reciprocal support relationship must
be demonstrated by all stakeholders. Principals who support inclusion through their
actions and beliefs will empower teachers to support the inclusive practices which
ultimately support the principal as the change initiator.

Smith and Leonard (2005) added that principals must be the facilitators of the
inclusionary practices by establishing a “collaborative vision” amongst the teachers and
staff (p. 276). Through the principal’s vision, teachers would be empowered to
collaborate amongst themselves and make decisions pertinent to the success of inclusion,
thus teachers would inherently support the school’s inclusive model.

Hu and Roberts (2011) regarded administrative support and commitment toward
the inclusive movement the “key factor in the success of innovative change in inclusion
initiatives” (p. 550). Through the author’s findings, the influence of leadership assists in
establishing the “team’s vision . . . by fostering new meanings about diversity and
building inclusive schools for diverse learners” (p. 550). The purpose of their study was
to examine the perspectives of administrators of innovative inclusive services provided
for children with disabilities.

The sample of 12 directors initially involved in a pilot inclusion project began in
2007-2008. The researchers employed a qualitative research design by interviewing the
participants regarding their views on early childhood inclusion on three predetermined
topics: (1) definition of inclusion and prior experience with inclusion, (2) the benefits and challenges of inclusion, and (3) challenges of implementation of inclusion.

The researchers concluded through their data analysis of the transcripts that the school directors supported inclusion and that inclusion provided great benefits for the students. The participants stated that while they found current practices for inclusion of Chinese students accommodating and supportive of their educational needs, the directors did believe reform was necessary for an inclusive preschool. The special education policies in China, unlike those in the United States, do not provide a free, appropriate public education for all students and typically exclude individuals with disabilities. Hu and Roberts indicated a lack of appropriate resources – training, financial, transportation, materials – hinder the implementation process. As the researchers concluded, the directors and schools wholeheartedly supported the inclusion of the students and strongly believed equal educational opportunities should be provided to preschoolers with developmental delays. The researchers found a shared commitment by administrators and teachers must be fostered for overall positive outcomes for students with disabilities. The greatest impact, as Hu and Roberts stated, results from the administrators’ positive views toward inclusion and their experiences in working with children with disabilities.

In Worrell’s (2008) in-depth analysis of previous research, the researcher identified seven “deadly school sins,” or barriers, related to inclusion practices in secondary schools. Worrell (2008) noted a commitment by all school personnel was imperative for the success of inclusion. In addition to administrative support as number four of his “sins,” the author reported other avoidable barriers: negative teacher attitudes, poor interpersonal collaboration among general education and special education teachers,
lack of knowledge regarding special education, limited instructional strategies, inappropriate assessments, and poor scheduling and planning time.

Worrell (2008) reported that while inclusion has become a more acceptable practice for students with disabilities, the initial implementation and sustainability of the practice resides with the administrative leadership. The researcher commented that principals and other administrators are the “backbone of the school . . . that empowers the faculty to achieve greatness . . . for their students” (p. 48). Likewise, the other six barriers could be avoided through the leadership and support of the administrator. The principal likewise establishes and fosters the building culture that demonstrates support for all students. The leadership team provides appropriate professional development opportunities for the staff to address lack of knowledge regarding special education and appropriate assessments or limited instructional strategies.

In a descriptive analysis study conducted by Praisner (2003), the researcher noted that while research supported the importance of principals’ attitudes, little existed on the state of these attitudes and how these attitudes influence attitudinal formation regarding inclusion. Three research questions guided Paisner’s study, with one applicable to organizational barriers: “What are the attitudes of elementary principals toward the inclusion of students with severe/profound disabilities in the general education setting?”

The sample included 750 randomly selected elementary school principals from Pennsylvania with a 6-10% special education population within the schools. The participants received the Principals and Inclusion Survey (PIS), a 28-item survey that examines the variables most related to principal attitudes, with 408 completed surveys returned (54% return rate). The variables examined related to training and prior
experience in special education, specific attitudes related to inclusion, and beliefs regarding most appropriate placements for students with disabilities.

To answer the one applicable research question pertaining to organization barriers, Praisner (2003) concluded from the data that principals favor the implementation of inclusion when presented as a “generic and unregulated” practice, and report less favorable attitudes when inclusion requires mandatory compliance and participation (p. 4). Likewise, principals with prior experience working with special education improved the participant’s positive attitudes toward inclusion. Once principals exhibit positive attitudes and beliefs regarding students with disabilities, the culture of the school becomes inclusive and placement of students in the least restrictive environment is supported. Principals, therefore, must promote the integration, acceptance and achievement of students with disabilities in inclusive classrooms (Praisner, 2003).

Knowledge Barriers

With the conditions of education constantly in a state of change, educators find they must be ready to face the challenges of meeting the needs of all students (Philpott, Furey, & Penney, 2010). Cook, Semmel, and Gerber (1999) found educators and administrators concur that general education teachers lack the necessary instructional skills to work confidently and effectively with students with disabilities in the general education setting. Often general education teachers report not knowing how to include students with disabilities, citing the teachers lacked the ability “to effectively integrate a student with disabilities into a classroom of 26 to 28 other students without (?) disabilities” (Busch, Pederson, Espin, & Weissenburger, 2001, p. 96).
For successful implementation of inclusion, general education teachers must have knowledge regarding special education. General education teachers cannot provide effective instruction within inclusive classrooms without a “solid foundation about the students’ disabilities, education needs, accommodations, modifications, and the laws” (Worrell, 2008, p. 45). Kilanowski-Press, Foote, and Rinaldo (2010) further added that educators must be provided a greater awareness of inclusive practices in order for successful implementation within the classroom.

Boyer and Bandy (1997) examined the impact of the rural experience on rural teachers’ (a) knowledge and understanding of students with disabilities, (b) perceptions of their own teaching effectiveness and job satisfaction, and (c) perceptions of the accessibility and availability of support systems within schools and districts. The researchers posed the following research question to investigate the previously mentioned areas of investigation: How do rural teachers academically, emotionally, and educationally respond to students with special needs in their classrooms?

Boyer and Bandy (1997) distributed 337 questionnaires within 178 schools of British Columbia, with a return rate of 36%. The questionnaire included an unspecified number of forced-response items that required the respondents to select the most appropriate answer from a list of choices and included items utilizing a 3-point Likert response rating. The findings indicated that many rural schools and teachers are geographically isolated from many of the types of disabilities found in the educational system, thus many teachers reported having a limited awareness of what constitutes a disability. While the rural teachers demonstrated a sense of understanding of the diversity of children with disabilities in their classrooms, many did not experience
administrative support and acknowledgement to provide developmentally appropriate supports and inclusion. The teachers noted professional development would benefit in implementation of inclusion to better balance the theory and the practicality of including students with disabilities. Boyer and Bandy (1997) found the need for both preservice and practicing teachers to identify the strengths and deficits of students as well as strategies to encourage and empower the students to be academically successful.

The teachers identified the need for supports – community, school and state stakeholders – in implementing and understanding the concepts of inclusion. Through this unification, the teachers felt it imperative to promote, utilize, and capitalize on the varied knowledge and wisdom of all the stakeholders. Boyer and Bandy’s (1997) study found growing support for inclusion of students with disabilities in the general education setting, but noted that rural communities are often far removed from the norms of the outside world.

In 2009, Gafoor and Asaraf conducted a comparative survey study on the level of education status of teachers in inclusive schools. The purpose was to examine whether a certain level of education (bachelor of education) creates a significant difference in the understanding, knowledge, and attitudes regarding inclusion practices. The researchers purported that teachers supported inclusion when they receive training and advanced education to improve their awareness, knowledge, and attitude toward inclusion.

In the researchers’ study (Gafoor & Asaraf, 2009), participants included two groups: teachers prior to receiving a B.Ed. (BB) and those after receiving B.Ed. (AB). The researchers hypothesized that a significant difference between the two groups existed
regarding (1) their knowledge and understanding of inclusion, and (2) their attitudes toward inclusive practices in the total sample and subsamples based upon gender.

Group BB included a random sample of 55 college of education students at the beginning of their B.Ed. courses. By a simple random technique, Group AB consisted of 36 students having completed the B.Ed. degree program. The researchers employed the use of two data collection methods: (1) Test of Achievement in Inclusive Education Concepts (TAIEC; Gafoor & Subba, 2008) and (2) Scale of Attitude towards Inclusive Education (SAIE; Jelas, 2000). The TAIEC included 10 multiple-choice items covering the following concepts: inclusion, curriculum strategies, and special children. The SAIE required respondents’ to answer 18 items on inclusive education practices using a 3-point Likert scale.

The findings of Gafoor and Asaraf’s (2009) study revealed that after the completion of the B.Ed. program, a small percentage (20%) of teachers continued to lack the essential knowledge to implement inclusion. The maximum scores indicated 80% of teachers attributed an increase of their knowledge level regarding inclusion to the completion of the university program. The researchers noted that Group BB entered the study with a fairly high knowledge level toward inclusion, thus the difference between the mean scores were not optimal. Therefore, both groups revealed significantly higher positive attitudes toward inclusion than was initially hypothesized. The researchers attributed this to society’s acceptance of individuals with disabilities.

Gafoor and Asaraf conclude that while the educational programs aid in fostering a greater understanding of inclusion, teachers with a strong, favorable perception of students with disabilities must continue to strengthen their understanding through
practical experiences. While teacher preparation programs provide their students with the theoretical side of inclusion, the researchers argued university students should receive an enriched preparatory program organized around school-based training.

Kozik, Cooney, Vingiguerra, Gradel, and Black (2009) examined the necessary types of knowledge teachers needed to encourage and support inclusive practices. One research question guided the researchers' investigation: "What should teachers look like, sound like, and be like when practicing inclusive adolescent education?" Using Appreciative Inquiry, Kozik et al. refers to this process as a method to guide members of an organization to "move in the direction of what they study" (p. 80). Four components of the Appreciative Inquiry model guided the research methodology: Discover, Dream, Design and Deliver.

The 35 participants who volunteered for the study included individuals from various educational arenas: higher education faculty, school district administrators, special and general education teachers, parents, advocacy group member, state department leaders, and transition consultants. Phase 1 of the data collection involved an interactive focus group to establish parameters for the study: contextual definition of secondary inclusion and the structure of successful inclusion.

Initiation of the Appreciative Inquiry began during Phase 2. During the Discover phase, participants responded to five questions regarding their interaction with students with disabilities. The Dream phase included participants sharing their stories of personal involvement developed during the Discover phase. During this phase, the group noted common themes that emerged from the personal narratives. The third phase, Design, the group created "provocative propositions" to capture the vision for inclusive education.
that emerged from the common themes. Finally, during the Deliver phase, the participants developed action plans to help implement the "provocative propositions" that were presented.

The findings of Kozik et al. (2009) suggested attributes that contribute to a successful inclusive program for schools. One common theme – knowledge of the system – ranked high with the participants. The researchers noted that the participants voiced a need to expand their level of confidence in working with students with disabilities, particularly through professional development and trainings. Kozik et al. reported attaining an understanding of the developmental levels of the students provided an understanding of the needs of the students, including instruction and curriculum adaptations for students with disabilities. Likewise, there existed a need for further professional development. Knowledge for the participants, as the researchers concluded, provided the catalyst needed to move from a theoretical perspective of inclusion to a successful inclusive program for the schools. By requiring the members to engage in Appreciative Inquiry, individuals developed a shared vision for implementing change, such as inclusion, by identifying the areas of learning needed by the organization.

Kilanowski-Press, Foote, and Rinaldo (2010) investigated the inclusive practices within general education classrooms throughout the area to ascertain the present condition of inclusive teaching. The researchers conducted a descriptive inquiry on a population of 150 randomly selected elementary, middle, and secondary school principals. Of the population, 71 educators (47% return rate) returned completed surveys. The study did not include any information regarding the survey instrument employed by the researchers.
The researchers evaluated several support variables, including professional development and teacher qualifications, in order to understand inclusion and how the characteristics benefited the programs. The findings concluded that while the teachers had an understanding of inclusion, general education teachers had limited knowledge on successful, research-based delivery models, such as co-teaching or the “joint instruction of students with and without disabilities by general and special educators in the general education classroom” (Kilanowski-Press et al., p. 54).

Kilanowski-Press et al. (2010) found that while their study had several limitations (e.g., small sample size, under representation of middle school teachers), the researchers gleaned from their findings that general education teachers often have little training on inclusive practices. While most educators were cognizant of the co-teaching model, most relied upon the use of instructional supports, such as small group and one-on-one instruction. The researchers attributed this outcome to the limited professional development or in-service preparation teachers received which adversely affects the overall quality of inclusive teaching practices in the classroom.

In the section above, Kochlar, West, and Taymans (2000) outlined knowledge, organization, and attitudes as the common barriers to successful implementation of inclusion. While inclusion has steadily increased as the preferred placement, schools continued to face opposition and reluctance toward implementing inclusion. The studies of deBettencourt (1999), Parasuram (2006), Paliokosta et al. (2010), Hu et al. (2005), and Boyer et al. (1997) are a few examples of research demonstrating how these common barriers adversely affect the introduction and implementation of inclusion. As previously discussed, other studies have demonstrated a relationship between these barriers and
educators’ overall perspective toward inclusion. The attitudes of educators toward inclusion, as discussed in the next section, has also been considered an unyielding variable in the successful implementation of inclusion.

Attitudes toward Inclusion

In 1978, Haring, Stern, and Cruickshank initiated a study of teacher attitudes toward students in exceptional education classrooms, given that research at that time regarding the attitudes of teachers was essentially lacking. The researchers concluded teachers of that time did show significant increases in acceptance and tolerance of students with certain disabilities being accepted in the general education classroom. The change was attributed to the participants’ attendance to a two-hour workshop designed to educate the participants on all areas of disabilities, thus increasing the teachers’ knowledge and understanding of students with disabilities.

The attitudes of teachers vary based on the level of education obtained by the educator. Two particular groups of teachers – preservice and veteran – exhibited varying differences in their attitudes and perceptions of students with disabilities in the general education setting. Preservice educators included individuals enrolled in a university-taught teacher education program and not yet certified to teach. Veteran teachers included those currently in the classroom with some level of teaching experience. The following sections examine the attitude differences between preservice teachers and veteran educators, and then a final section examines the attitudes of administrators (i.e., principals) regarding inclusion of students with disabilities in the general education setting.
Preservice Teacher Attitudes

Shade and Stewart (2001) examined the attitudes of general education and special education preservice teachers toward the inclusion of students with disabilities. The purpose of the study was to evaluate the teachers’ attitudes before and after the completion of an introductory course in special education. The question posed by the researchers was the following: “Can attitudes toward inclusion be positively affected through a course?” The researchers hypothesized that the completion of the course would improve the attitudes of both general education and special education preservice teachers.

A convenience sample consisted of general education major students \( (N = 122) \) enrolled in a required course, Survey of Special Education, and special education major students \( (N = 72) \) enrolled in the required course Overview of Special Education. The first researcher taught both classes during a 15-week session (30 instructional hours) for the special education students and a 2-week (30 instructional hours) intensive summer session for the general education students.

The researchers administered a 48-item inclusion inventory developed by Baker, Kapperman, and Montemurro (1981). The instrument required the participants to respond to statements designed to assess their attitudes toward special education students, inclusion, and the prospective teachers’ confidence in working with students with disabilities. Upon completion of each course, Shade and Stewart (2001) administered the same instrument as a posttest measure to the respondents. The instrument employed a 5-point Likert response rating that assessed the teachers’ responses in 8 subscales: class
placements, behavior, self-concept, other students, time and work, teacher, motivation, and parents.

The findings revealed that attitudes of prospective teachers can be changed through a single teacher education course. Shade and Stewart (2001) concluded teacher education programs for both undergraduate and graduate level students should include at least one course in teaching students with disabilities. The researchers did not discuss further research nor did they include limitations of the study.

Garriott, Miller and Snyder (2003) examined the beliefs of preservice teachers concerning inclusive education for students with mild disabilities. Since little research focused on preservice teachers' attitudes existed, the researchers intended to contribute to the field of research by investigating the teachers as they entered their preservice preparation programs. The two guiding research questions that stimulated the researchers' interest were (a) "Where do preservice teachers believe students with mild disabilities should receive their education?" and (b) "Why do they hold this belief?"

The participants included a convenience sample of 239 university students enrolled in the first course of their teacher preparation program. The participants completed a brief demographic questionnaire identifying gender, certification desired, grade classification at the university, and whether they were traditional or non-traditional students.

The researchers developed a questionnaire designed to solicit information about the participants' beliefs concerning where students with mild disabilities should receive their education. The instrument was distributed on the first day of an introductory education class required for all students. Fifty-five percent (n = 131) of the preservice
teachers agreed the students should receive their educational services in the general education classroom, while the remaining 108 believed the special education classroom would be most appropriate.

Several themes emerged from the students’ responses for choosing the general education classroom, including the following: (a) students with mild disabilities should not be isolated or ostracized (34%), (b) all students benefit from being educated together in the general educational setting (15%), (c) the students would be better prepared (7%), and (d) facilitates greater self-esteem for the students with disabilities (5%). The responses as to why the special education setting would be more appropriate included: (a) students would receive more individualized attention (35%), (b) the students would not distract others students in the classroom (23%), (c) general education teachers lacked the skills to teach these students (7%), and (d) the students with mild disabilities might be teased by the other students (4%).

The findings revealed that preservice teachers seem evenly divided among the best placement for students with mild disabilities. The responses to the open-ended question provided insight to underlying reasons about their beliefs. Those finding the general educational setting most appropriate concentrated on the feelings of the students and found both positive academic and social aspects of inclusion. Preservice teachers favoring the special education classroom focused on the individualized attention found in smaller, resource settings. These teachers also discussed the likelihood of distracting from teaching the non-disabled.

Shippen, Crites, Houchins, Ramsey, and Simon (2005) examined preservice teachers’ attitudes and perceptions toward students with disabilities in the general
education classroom. The purpose was to compare the perceptions on two dichotomous scales (i.e., hostility/receptivity and anxiety/calmness) regarding serving students with disabilities in an inclusive setting.

The participants included both preservice graduate and undergraduate students \( n = 326 \) enrolled at three major universities. All students were enrolled in an introductory special education course required of all future educators, whether enrolled in a general education or special education course of study.

Each participant completed the Preservice Inclusion Survey, consisting of one-paragraph hypothetical scenario regarding serving students with disabilities in inclusive classrooms. The scenario on students’ disabilities included hearing impairments, learning disabilities, mental retardation, behavioral disorders, or physical disabilities. Following the scenario was a list of 17 adjectives that were rated on a 5-point Likert scale delineated as negative, somewhat negative, neutral, somewhat positive, and positive feelings toward the scenario.

Data analysis yielded a two-factor structure and accounted for 45% of the variance in the participants’ responses. The first factor structure (hostility/receptivity) heavily loaded on adjective pairs such as enthusiastic/unenthusiastic, angry/not angry, and cooperative/resistant. This refers to the future teachers’ enthusiasm toward being told the teacher would have a student with a disability in his or her classroom. The results indicated that future special education teachers were slightly more receptive to having students with disabilities in their classes than were general education teachers. The second factor structure (anxiety/calmness) heavily loaded on adjective pairs such as fearless/scared, relaxed/anxious, and insecure/confident. This factor referred to the level
of tension felt by the teachers when they are told they will have a student with a disability in their classroom. As expected by the researchers, the future general education teachers had the highest level of anxiety about inclusion; however, the information presented in the course had a calming effect when compared to the other two groups. The increased level of knowledge about students in special education classes alleviated some their apprehensions about including students with disabilities in their classrooms. The researchers concluded that the less anxious the teachers feel toward inclusion, the more successful the program.

Shippen et al. (2005) did not indicate any attitudinal differences between the classification of the students (i.e., undergraduate versus graduate), while some differences were noted between teacher types (i.e., general education, special education, dually certified educators).

The results focused on the need to infuse teacher education programs with better preparation for inclusionary practices. The researchers agreed that dual training in both general education and special education might produce classroom teachers who are more capable and willing to serve students with disabilities in the general educational setting. The researchers, likewise, find colleges must address the deficits in knowledge and skills of college course work and focus on helping teacher candidates develop dispositions that enhance the education of students with disabilities in the general educational setting.

Jung (2008) investigated preservice teacher candidates' attitudes and confidence levels in working with students with disabilities. The researcher found many general education teachers question their ability to successfully teach students with disabilities and often find they lack the essential skills to meet their needs. As a result, general
education teachers make little to no accommodations for these students. The teachers, therefore, encounter such barriers because most do not find the inclusive setting appropriate and do not welcome students with disabilities into their classrooms.

Participants included 68 first-year students enrolled in an introductory special education course and 57 student teachers who completed the course at some point prior to their student teaching assignment. The course required 10 hours of field work in both resource rooms and inclusion classrooms.

The researcher used Antonak and Larrivee’s (1995) survey instrument, Opinions Relative to Integration of Students with Disabilities (ORI). The participants responded to the 25-statement questionnaire that addressed four factors: benefits of inclusion, inclusive classroom management, ability to teach students with disabilities, and special versus inclusion classrooms. The students responded to the statements using a 6-point Likert response rating scale.

Using descriptive statistics, the researcher analyzed the data to determine how the students initially perceived their abilities. Due to the low number of participants, an independent samples t-test was generated. The researcher found this approach identified raw differences, mean differences, and no effect sizes.

Findings resulted in three of the four factors deemed not statistically significant when comparing first-year and student teachers’ data. Factor 4 (special versus inclusive classrooms) was statistically significant, indicating a more favorable attitude toward inclusion during professional preparation prior to student teaching. Following student teaching, however, the teachers exhibited a decline in the favorability of attitudes toward inclusion. The researcher noted that teachers were willing to teach in inclusive
classrooms if the severity of the disability did not inhibit the student’s learning or the learning of others. The student teachers’ attitudes toward inclusion reflected a lack of confidence in their instructional skills and the support received from colleagues.

Burton and Pace (2009) examined the attitudes of three cohorts of general education teachers toward teaching mathematics to students with disabilities. In this descriptive case study, the cohorts participated in focused instructional experiences developed for teaching special education in mainstreamed classrooms. The researchers framed this study around one research question: “After participation in a focused instructional experience and a structured field experience, what are the changes, if any, in preservice teachers’ attitudes and beliefs about teaching mathematics to students with special needs?”

The sample consisted of three different cohorts selected each year from elementary general education students. Year 1, the sample consisted of 13 preservice teachers; the Year 2 sample consisted of 8 preservice teachers; and Year 3 cohort consisted of 5 preservice teacher (N = 26). The participants were second-semester junior students enrolled in a mathematics methods course at one university.

Burton and Pace (2009) developed a 20-item survey used as a pretest and posttest. This survey examined the attitudes and beliefs regarding four constructs: (a) attitude toward students with disabilities, (b) self-efficacy about teaching students with disabilities, (c) attitude regarding teaching mathematics, and (d) self-efficacy about teaching mathematics. The survey employed a 5-point Likert rating scale.

During the semester methods course, the respondents followed an outline of teaching modules that addressed (1) the Content and Process Standards identified by the
National Council of Teachers of Mathematics and (2) strategies pertinent to teaching students with disabilities. The modules provided performance desensitization in working within mathematics and applying special education strategies for lesson planning. The survey pretest was given to each student before the first study module was presented, and the participants completed the same survey as a posttest after completion of the study modules. The participants were instructed to tutor a student with a disability for 20-hours, while maintaining a journal of their experiences. Documented in the journal were the strategies the teachers used, the outcomes of those strategies, and their reflections of the experience in working with a student with a disability.

The pre- and posttest means were calculated by survey item. The results from the Year 1 participants indicated a negative attitude toward students with disabilities (pretest: 3.55; posttest: 3.55). Self-efficacy results were more favorable on both the pretest/posttest (1.97/1.97), indicating the teachers believed they are capable of teaching students with disabilities. Year 2 cohort participants revealed consistent negative views regarding students with disabilities on both the pretest and posttest (3.1 and 3.43, respectively). The teachers' self-efficacy mean score showed minimal change from 2.7 on the pretest to 2.65 on the posttest. As reported by Burton and Pace (2009), the instructional strategies presented in the course did not change the potential teachers' perceptions of teaching students with disabilities.

The Year 3 cohort students completed the same survey, but qualitative data (i.e., journals) were analyzed for patterns or trends. The attitudes of this cohort indicated a change toward teaching math to students with disabilities. Likewise, there was a change in the teachers' confidence level, reporting the teachers' had a more favorable experience
teaching these students. The Year 3 mean scores for the survey were not presented. Burton and Pace (2009) did, however, present the means from three survey items of the pretest and posttest: providing accommodations (2.3/1.8), participants’ interest teaching mathematics to students with disabilities (2.0/1.5), and knowledge of instructional strategies for teaching math (2.3/2.0). The decrease in the mean scores reflected an increased level of confidence for each of the three items.

The findings of the study revealed that little difference was made in teacher attitudes during the first two cohorts. The use of self-reports during Year 3 suggested a trend toward increased self-efficacy and confidence working with students with disabilities.

Oh, Rizzo, So, Chung, Park, and Lei (2010) investigated preservice teacher-related variables associated with favorable beliefs, attitudes, social norms, perceived control, and intentions toward teaching a student identified with Attention-Deficit Hyperactivity Disorder (ADHD) in general physical education classes. The teacher-related variables are those factors associated with teaching students with disabilities, including gender, perceived competence, experience in teaching students with disabilities, and academic preparation in special education. These variables were found to affect the teachers’ attitudes toward students with disabilities.

The researchers grounded their research in Theory of Planned Behavior (TpB; Ajzen, 2002). This model illustrates how behaviors are motivated by an individual’s attitude toward the behavior, the social norms of the behavior, and the individual’s ability to perform the behavior. These factors combined reflect the individual’s readiness to
execute the behavior and the final outcome, the actual behavior performed. This study examined how the teacher variables predicted the components of the TpB model.

A convenience sample of 213 preservice students participated in this study. These students were enrolled in comprehensive teacher education programs in China (n = 60), Korea (n = 111), and the United States (n = 42). The sample included 96 females and 117 males with a mean age of 23.5.

Each participant completed the Physical Educators’ Intention Toward Teaching Individuals with Disabilities II Preservice Survey (PEITID-II-PS). This survey employed was designed for use on preservice teachers to assess the constructs of the TpB. The instrument includes 35 items employing a 7-point Likert rating scale.

The researchers requested the participants read a vignette about a 9-year old student identified with ADHD in a general physical education class. Following the passage, the participants completed the PEITID-II-PS items.

Descriptive statistics were employed to analyze the demographic data on the participants and the TpB measures. Prior to regression analyses, one-way ANOVA’s were conducted to examine gender differences. Finally, forced entry multiple regression analyses were employed to assess relationships between the attributes and the TpB model.

The results of the ANOVA analysis indicated gender had a significant effect on the number of years in teaching students with disabilities. Females had a significantly higher level of experience in teaching students with disabilities than did males. The analyses found no differences between males and females regarding age, amount of coursework in special education, and competency in teaching students with disabilities.
The findings indicated no significant differences between gender on age or number of special education courses. Preservice teachers with prior experience working with students with disabilities did rate themselves more competent to teach these students. The findings indicated that teachers with perceived lower competency tend to have less favorable attitudes toward teaching students with disabilities.

The implications of this study suggest the need for teacher education programs to incorporate more experiences in working with students with disabilities. Field experiences working with students with disabilities should be included to increase teachers’ competency levels. A second implication is that behavioral beliefs are predicted by teacher variables (prior teaching experience, age, and previous special education coursework).

As evidenced by the research, attitudes of preservice teachers indicate a need for university education programs to include courses in special education or student disabilities (Shippen, Crites, Houchins, Ramsey, & Simon, 2005). Turner (2003) posits teacher preparation programs must infuse the content with instructional practices to meet the needs of diverse learners. Turner proposed teachers, particularly elementary level, obtain a dual certification – certified in both elementary or early childhood and special education.

Generally, preservice and novice teachers struggle with fairness or the “notion of equality of benefits and the assumption of equal treatment” for all students (Berry, 2008, p. 1150). As Garriott, Miller, and Snyder (2003) found, preservice teachers enter the preparatory undergraduate programs with prescriptive ideas about good teaching based
upon their own personal experiences and histories. Thus, the authors conclude teachers harbor the belief inclusion is unfair to typical students.

While the research suggests preservice teachers exhibit negative assumptions that inclusive education is a “policy doomed to fail” (Jordan, Schwartz, & McGhie-Richmond, 2009, p. 535), this apprehension is likewise shared by experienced or veteran teachers. The following section outlines prior research on the attitudes regarding inclusion practices within general education classrooms of experienced educators.

**Veteran Educator Attitudes**

Beginning teachers can attribute their beliefs and attitudes toward inclusion to a lack of knowledge or preparation in working within inclusive environments (Jung, 2008). Veteran or experienced teachers typically include those educators working in the field for a particular length of time. During such time, teachers have established themselves professionally and developed a routine for teaching (Meister, 2010) which contributes to greater teacher efficacy (Walker & Slear, 2011). Veteran teachers include those with three or more years of classroom experience (Berkson, 2005; Kelly, Brandes & Orlowski, 2003; Thomas, 2007; Washington, 2003)

In 2008, Santoli, Sachs, Romey, and McClurg conducted a quantitative study to examine the attitudes of middle school teachers toward the facilitation of successful inclusion. The participants included 56 middle school educators, with the majority (64%) holding a regular education certificate. The remaining 36% of the sample included special education teachers, paraprofessionals, and administrators.

The researchers administered a modified attitudinal survey developed by Luseno (2001). The instrument included two sections. Part 1 surveyed the personal opinions and
confidence level regarding the teaching of students with disabilities in the general education setting. Part 2 required the participants to identify the amount of training received in teaching students with disabilities and the frequency of collaboration with general or special education teachers.

Santoli, Sachs, Romey, and McClurg (2008) found during their investigation that while experienced general education teachers demonstrated the willingness to accept students with disabilities, most did not believe the students would master the content. While the teachers supported the students’ inclusion, teachers continue to foster lower expectations for the students. From the research, lowered expectations resulted from the following prominent themes: lack of appropriate instructional strategies, limited professional knowledge or expertise, and increased student needs.

Agbenyega (2007) examined teachers’ concerns and attitude toward inclusive education of students with disabilities in Ghana. A 20-item Attitudes Toward Inclusion in Africa Scale (ATIAS; 2005) was completed by 100 teachers from five “Inclusive Project” schools and five Non-Project co-educational basic schools in three different localities.

By employing a mixed-design approach, Agbenyega (2007) compared the two different teacher groups’ concerns and attitude toward inclusive education. The author used the self-designed ATIAS instrument, with a computed Alpha coefficient of 0.84 for the total scale. Following the survey, Agbenyega interviewed the teachers by asking three questions: 1) What were their concerns regarding the use of inclusive practices? 2) What amount of inclusive experience did each teacher have? and 3) What support services and resources were available for promoting inclusive education?
Analysis of the responses indicated four factors: Behavioral Issues, Student Needs, Resource Issues, and Professional Competency. The teachers believed that regular schools were not places for students with disabilities, particularly those with sensory impairments. The teachers, likewise, found that policymakers imposed inclusive education upon the schools, mandating students with disabilities be included in the general education setting.

Agbenyega (2007) found the beliefs, negative attitudes, and concerns expressed by teachers in this study could be explained due to a lack of professional preparedness, available resources, lack of sufficient orientation, and lack of specialist assistance. Professional knowledge (both initial and successive training), material, and human resources were found to enhance teachers’ positive attitudes and their willingness to embrace inclusion and make it work.

The findings further supported how attitudes of the teachers affect their acceptance and commitment toward implementing inclusion. Agbenyega (2007) further commented to change attitudes meant facilitating effective inclusive education support through the development of standardized inclusive policies for all schools. Such policies should address the specific problems for Ghana schools, such as large class sizes and a limited availability of resources.

In 1995, Bender, Vail, and Scott conducted a two-fold study investigating the types of instructional strategies offered in mainstream classrooms and the attitudes of general education teachers toward their own efficacy and mainstreaming. The researchers proposed that by identifying correlations between teachers’ background or
class variations and mainstreaming attitudes, methods could be examined that facilitated change in more positive teacher attitudes.

Three Georgia school districts, with a total of 11 schools, were selected based upon recommendations from the state Department of Education. The directors of special education for these districts provided the sample pool of general education teachers in Grades 1 through 8. The researchers collected the data during faculty meetings, resulting in 127 participating teachers.

The teachers were asked to complete a questionnaire that included questions related to background, educational experience, race, gender, and certification. To ascertain mainstreaming attitudes, a 6-question, Likert scale survey was developed to assess teachers' specific attitudes toward mainstreaming. Using the Teacher Effectiveness Scale (Gibson & Dembo, 1984), the teachers completed the 16-items using a Likert rating scale to measure personal teaching efficacy and limited teaching efficacy. Finally, the researchers proposed teachers complete the Bender Classroom Structure Questionnaire (BCSQ; 1990) to assess the teachers' utilization of instructional strategies that facilitated mainstreaming. This 40-item, Likert rating scale allowed teachers to self-report on research-based strategies used in their teachers' inclusive classroom settings.

The results revealed that over one-third (36%) of the respondents did not support or were opposed to inclusive education, indicating a lack of support as the primary reason for their discontent. A large percentage of teachers, however, utilized numerous instructional practices in their classrooms, in attempts to enhance the success of students with disabilities in their classes. The practices varied from typical assignment
modifications to more alternative measures, such as peer tutors (72% of the teachers) to frequent use of metacognitive principles (70%).

The findings suggested that teacher attitudes correlated to both personal teaching efficacy and limited teaching efficacy. Mainstreaming attitudes correlated positively with the number of special education courses completed by the teachers. Teachers, therefore, with more course work had attitudes that were more positive. Personal teaching efficacy correlated, however, negatively with the other subscales, such as class size.

Bender, Vail, and Scott (1995) noted a number of limitations in the study. The dependent variables were based upon self-reports from the teachers and potentially involved bias. The researchers, likewise, expressed concern regarding the experimental nature of the measurements used. Validity studies had not been conducted on either the mainstreaming attitude scale or the BCSQ.

In Robinson’s (2002) case study, the researcher investigated the practices and beliefs of experienced high school science teachers who taught students with disabilities in inclusion classrooms. The intent of Robinson was to expand upon the research of inclusion by identifying best teaching practices for these learners. The researcher identified the need to examine adaptations that take place with students with disabilities in the general educational setting science class. Robinson found that success of inclusion would be determined by the practices and beliefs of the general education science teachers who often teach in inclusion classrooms with both students with disabilities and their non-disabled peers.
The participants of this qualitative study included four high school science teachers in a New York State Regents science course, one from each secondary grade (9-12) and one from each science content area (earth space, biology, chemistry, and physics). Robinson (2002) selected each teacher from a list provided by the state department of those teachers involved in helping draft the standards-based curricular and assessment documents and served as regional science mentors for educational reform in New York. None of the teachers had any formal special education training or prior coursework, and all taught in inclusive classrooms.

The researcher conducted interviews with the four participants, employing a semi-structured and emergent approach based on an interview guide. The initial interview focused on the general question, “How are students with disabilities prepared to successfully complete the Regents-level course requirements in science?” The question delved into three categories: planning, instruction, and assessment. The researcher encouraged the participants to explore issues and concerns as they pertained to the inclusion of students with disabilities and best practices in teaching these students.

Robinson (2002) conducted classroom observations of the teachers, noting both verbal and nonverbal interactions between the teachers and their students. The researcher particularly noted the patterns of student responses to teacher probes and the students’ questions during whole class discussion. The observations focused on both the cognitive and social roles of the students with disabilities in small group learning activities.

The teachers shared the belief that students with disabilities were capable of learning in the inclusive educational setting. The teachers agreed they were instrumental in teaching science for all students in their classes, and that the success of the student is
greatly dependent upon the attitude of the teacher. The teachers shared the same philosophical belief that all students are capable of learning, but teachers cannot expect all students to learn at the same level. The teachers must identify and employ teaching strategies that meet the needs of their students. The teachers voiced concern that the students cannot be placed into this setting without considering their needs. The success of the program is dependent upon collaboration between the science teacher and the special education teachers. Through collaboration, the science teachers learn the needs of their students, while learning how to best modify and adapt their instruction to accommodate the learning and emotional needs of all students.

Robinson (2002) noted one limitation of the study. Given the small sample of participants, it would be problematic to generalize the results to other inclusion classroom contexts. The researcher commented the study should not inspire generalization, but for teachers to reflect upon their own teaching and to promote an awareness of their own pedagogical practices and beliefs regarding inclusion.

Kosko and Wilkins (2009) investigated the relationship among teachers’ years of experience teaching students with disabilities, the amount of professional development (PD) received the past three years, and the teachers’ self-perceived ability to adapt instruction for students with disabilities. The researchers posed a research question that guided this study: Does the amount of training and experience relate to general education teachers’ self-perceived skill in adapting instruction for students with IEPs?

The random sample was selected from data collected during 1999-2000 from the U.S. Department of Education via the Study of Personnel Needs in Special Education.
From the total number of respondents to this study, a final count of 1,126 (14%) general education teachers were selected to participate.

The participants were interviewed and asked four questions or statements: (1) rate their level of self-perceived perception to adapt instruction for students with IEPs, (2) had they received preservice preparation in adapting instruction, (3) number of hours of PD received in the past three years, and (4) number of years the participant had taught students with IEPs. Statement 1 was assessed using a 4-point Likert rating scale (1 = not at all, 4 = great extent). Question 2 required either a yes (1) or no (0) response. For Statement 3, the participants selected the amount of hours of PD received: none, less than 8 hours or 8 hours or more. Statement 4 was self-reported statement included as a continuous variable.

Using correlation and multiple regression techniques, the data were analyzed to examine the relationship among the amount of PD, preservice preparation, number of years teaching students with IEPs, and teachers’ self-perceived skill level in adapting instruction. With the regression model, teachers’ ability to adapt instruction was regressed on PD and teaching experience.

The results revealed teachers’ were a slightly more than moderately comfortable adapting instruction for students with IEPs ($M = 3.25, SD = 0.91$). A weak statistical correlation ($r = .25, p < .01$) was found between preservice preparation and teachers’ perceived ability to adapt instruction. The amount of PD was found to be statistically significant and positively related to teachers’ perceived ability to adapt instruction. The teaching experience was found to be statistically significant and positively related to teachers’ self-perceived ability to adapt instruction.
This study investigated the relationships among the variables, with the results indicating that the more hours of PD teachers obtain increases their ability to adapt instruction for students with IEPs. The researchers stated that while any amount of PD increases a teacher’s ability to be a more effective teacher, larger amounts (i.e., over 8 hours of PD) double the effects of teacher effectiveness.

As “front-line professionals,” general and special education teachers assume the role of implementing inclusive practices within their schools (Irvin, Lupart, Loreman, & McGhie-Richmond, 2010, p. 71). The school administrator, however, plays the critical role in facilitating inclusive practices, while providing the necessary resources to support the teachers. In the next section, an examination of administrator attitudes illustrates how important their perceptions toward inclusion are to the success of inclusive practices.

Administrator Attitudes

The practice of inclusion has been part of the educational system for quite some time (Ryan, 2010), but not without its challenges (Roach & Salisbury, 2006). King (2000) reports that challenges take time to resolve, particularly in order to elicit a new change in student results. Central to the success of school change is the role of the principal (Barnett & Monda-Amaya, 1998; Bartlett, Weisenstein, & Etscheidt, 2002; Fullan, 2002a; Fullan 2002b; Hall & Hord, 1987; Stoll & Fink, 1996).

School leaders regularly embrace a plethora of school reforms designed to improve the learning environments of today’s schools. Included on the list of school reform series, school leaders have been challenged with the inclusion issue, attempting to find the best placement for students with disabilities with the limited availability of resources. For a school to be inclusive, the school administrator must maintain a clear
vision, foster among staff the understanding of inclusion, and provide enrichment opportunities for teachers and staff to implement inclusive practices (Friend & Bursuck, 2006). School leaders, likewise, play a crucial part in the successful implementation of inclusion by conveying a message of acceptance to the staff (Horrocks, White, & Roberts, 2008). Irvine, Lupart, Loreman, and McGhie-Richmond (2010) found principals in support of inclusion provide the staff the necessary supports (e.g., planning time, training, instructional resources) needed to make the program successful, thus their support appears to be a “significant determining factor in creating effective inclusive settings” (p. 72).

In their 2010 study, Irvine et al. investigated the inclusive experiences of principals in a rural Canadian school district where inclusion has been the practicing norm for over a decade. The authors employed a mixed-methods analysis. Quantitative methods required the sample of 16 principals to complete a modified, online version of the Diversity, Differentiated Instruction and Development Survey, which included 64 items rated on a 5-point Likert scale. The researchers sampled four principals as the focus of the qualitative data collection in efforts to elicit an understanding of their leaders’ experiences regarding inclusion. The principals participated in an open-ended, semi-structured interview.

Through the Irvine et al. (2010) analysis, the researchers concluded the principals viewed inclusion as more than being about placement, but included the practice of individualization and providing support for all students. The practices of the schools included student-centered methods designed to meet the needs of all students. This approach, as the authors concluded, meant diversity is not viewed as a “deficit inherent in
students,” but rather part of the “norm” (p. 84). The role of the principals, as noted by the researchers, is being a supportive, mentoring leader and empowering all teachers and staff to accept diversity, not exclude it.

The beliefs and attitudes possessed by principals toward special education are critical in implementing inclusion within the schools (Garrison-Wade, Sobel, & Fulmer, 2007). Research in the field of special education has identified common factors indicative to the success of inclusion.

In a mixed-methods study, Garrison-Wade et al. (2007) examined the preparation of recent graduates of one university’s Administrative Leadership and Policy Studies (ALPS) to lead inclusive school practices and what specific skills were necessary to have inclusive leadership. For the quantitative portion of the study, the researchers randomly selected 99 graduates and students from various administrative leadership programs throughout Colorado. The participants for the qualitative portion included 25 students completing their MA in the special education program.

Garrison-Wade et al. (2007) collected data through two activities: (1) an online survey and (2) focus groups methods. The survey consisted of 19 items: four demographic statements, four open-ended questions and eleven 6-point Likert scale questions. The survey assessed the participants’ perspectives on the ALPS’ effectiveness in selecting courses that supported inclusive leadership within the principal licensure program. The focus groups provided the researchers data on (a) the benefits and disadvantages of serving diverse populations of students, (b) effective strategies for struggling students with disabilities, and (c) recommendations for principals that improve inclusive strategies.
The researchers reported principals must have knowledge of differentiated instruction to support learning for all students, thus they must be supportive of professional development for their staff in promoting differentiated instruction. Principals must identify and seek available resources that encourages and supports inclusive practices (Garrison-Wade et al., 2007). The researchers concluded that for principals to implement inclusive practices for the success of all students, principal preparation programs must prepare administrators who “understand the complexities of varied systems and alternative teaching strategies . . . to ensure students success” (p. 128).

In a 1997 study conducted by Guzman, the researcher examined behaviors common among principals of schools identified as successful in the implementation of inclusion. The multiple case study design included selection of six elementary schools from within three urban Colorado districts. The researcher interviewed the principals of the selected schools on their leadership factors that supported inclusion for their schools. Guzman asked structured questions of all principals, following up with an informal interview with staff and parents of each school to clarify principal data.

The researcher reviewed school documents to triangulate the data and further verification of the findings. Included in the documents were redacted student IEP’s, newsletters, staff meeting agendas, and other administrative handouts and memos. Guzman analyzed the data noting specific patterns and themes, focusing on relationships between the variables. The documents further supported the findings or refuted the emerging themes.
Guzman (1997) identified seven principal characteristics common for successful inclusive practices, including the ability to (a) establish open communication among staff, (b) be actively involved in the IEP development process, (c) be personally involved with parents of students with disabilities, (d) collaboratively develop common inclusive philosophies, (e) articulate clear discipline policies for students with disabilities, (f) participate in professional development focused on inclusive programs, and (g) be proficient in data collection and problem solving.

Salisbury and McGregor (2002) conducted a multi-site case study of five principals from three states. The researchers purposely selected the sites based upon demographic differences, such as socioeconomic makeup of students, rural versus urban, and special education population. The common trait among all schools was their commitment to inclusive practices for students with disabilities.

The researchers used several data collection methods. First, the Organizational Climate Description Questionnaire for Elementary Schools (OCDQ-RE; Hoy, Tarter, & Kottkamp, 1991) assessed each schools’ instructional and administrative climate. The 42-item survey employed a 6-point Likert scale to measure the participants’ level of agreement or disagreement with each item.

The second survey, Criteria for School Restructuring (Newmann & Wehlage, 1996), utilized 38 items to evaluate principals’ perceptions of the school’s capacity to change. The principals rated each item using a 6-point Likert scale. Finally, the researchers conducted semi-structured interviews on each school’s reform initiatives and willingness to change to more inclusive practices.
Salisbury and McGregor (2002) found principals shared common leader traits attributed to the success of inclusive practices. The researchers found principals (a) shared decision making with the entire staff, (b) led by exemplary practices, (c) instituted core values around inclusion and shared this culture throughout the school, and (d) promoted learning communities for staff development and growth (p. 269).

Finally, in a review of the literature, DiPaola, Tschannen-Moran, and Walther-Thomas (2004) extended the effective traits to include (a) promotion of an inclusive school culture, (b) instructional leadership, (c) modeling collaborative leadership, (d) managing and administering organizational processes, and (e) building and fostering positive relations with staff, families, and the community (p. 3).

These factors share one common element – the importance of the school leader in establishing and maintaining an ongoing focus on school improvement to support all learners, including students with disabilities. This focus on school improvement includes establishing a supportive culture of diversity (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Riehl, 2008) that makes inclusion “the essential framework for instruction and learning” within the district (Irvine, Lupart, Loreman, & McGhie-Richmond, 2010, p. 84).

In this section, the attitudes of both preservice and veteran teachers and administrators toward students with disabilities were reviewed. Since the early study of Haring, Stern and Cruickshank (1978) that introduced research on the attitudes of educators, varying attitudinal differences existed among the three subpopulations of educators. As previously discussed, however, competency of both groups of teachers relied upon knowledge awareness, while administrators promoted a positive acceptance
of inclusion. The research of Shade and Stewart (2001), Oh et al., and Shippen et al. (2005) expanded the need for teacher preparation programs to provide training and preparatory coursework on inclusion. In addition, Burton and Pace (2009) demonstrated the relationship between teachers' attitudes and continued working experience with individuals with disabilities. In the examination of veteran teachers, Santoli et al. (2008), Agbenyega (2007), and Kosko et al. (2009) favored inclusion; however, positive attitudes were contingent upon inclusive or special education professional development.

The attitudes of administrators, as reviewed by Irvine et al. (2010) and Garrison-Wade et al. (2007) supported the need for principals to provide teachers with appropriate training. In addition to the need for knowledge awareness, Salisbury et al. (2002) and DiPaola et al. (2004) concluded how instrumental administrators are toward fostering a positive school culture that embraced inclusion as a preferred teaching environment. The following section investigates how inclusion transitions from theory to practice as administration examines the change process within the school. Through the change process, facilitators are confronted with a new idea (i.e., an innovation). As the change agents, the facilitators evaluate the probable outcome of the innovation within the organization.

**Process of Change**

As Fullan (1993) posits, change is inevitable, forcing itself on us at every turn. Change is a process, rather than an event, that requires time, energy and resources for sustainability (Hord, 1992), yet change does not come easily (Quinn, Spreitzer, & Brown, 2000). Through this challenging process, as Hord concludes, change necessitates growth.
in feelings. Change, therefore, can only be accomplished by mobilizing individuals within an organization to make adjustments to their feelings and attitudes (Quinn et al.).

In Patterson's (2003) study on organizational change, the author purports four levels of organizational change: culture, pocket, compliance, and event. As seen in Figure 3, the levels of organizational change are arranged into four concentric circles. Central to organizational change is cultural change, which produces greater, long-term change within the organization. As Patterson states, cultural change occurs only when the individuals examine their “fundamental organizational beliefs and change their practices to fit their revised beliefs” (p. 3). Once cultural change has been altered, the remaining outer levels of change will ultimately be altered.

To evoke cultural change within any organization, leaders must first establish themselves as effective leaders. The former methods of “managing and organizing and leading” are no longer effective (Wallin, 2010, p. 5). As Hall and Hord (2001) posit, change is a “process through which people and organizations move as they gradually come to understand, and become skilled and competent in the use of new ways” (pp. 4-5).
For change to be effective, therefore, leaders must look at the organization as a system, examining not parts within the organization but the system as a whole. Therefore, to change the culture of an organization, leaders must change the ways in which things are done (Fullan, 2001).

**Change Process in Public Education**

Change is part of life, and educational reform is "replete with change" (Thompson, 2010, p. 270). Thompson (2010) commented that public education is forever changing, which contributes to the lack of support for school reform by educators.

Figure 3: Levels of organizational change. Adapted from *Coming even cleaner about organizational change* (p.2), by J. L. Patterson, 2003, Lanham, MD: Scarecrow Press. Copyright 2007 by J. L. Patterson.
Therefore, it comes to no surprise that school reform or change is confronted by resistance (Schumacher, 2011). While public education constantly undergoes change through the implementation of new strategies and techniques, educators resist due to numerous failed attempts and the lack of sustainability (Schumacher). School leaders and teachers are inundated with new innovations and techniques (Stoll & Fink, 1996), particularly in the times of increased accountability (Schumacher, 2011).

One of the greatest educational reform efforts initiated by states centers on assessments and accountability measurements (Hargreaves et al., 2001). As of January 2012, 45 states, including Kentucky, and the District of Columbia moved to adopt common core standards (CCS) in mathematics and language arts (Kober & Rentner, 2012). This fundamental shift in how states assess student progress represents a total reformation on how teachers design curriculum and teach students. As Hargreaves et al. stated, a change in state accountability measurements denotes a "paradigm shift" in how educators view learning, schools, and teaching (p. 50), all while addressing the "entire infrastructure for change, including curriculum resources, coalitions and alignments of agencies and policies, professional development" (p. 158).

In Kober and Rentner's (2012) recent analysis of states implementation process of the common core standards, state departments identified critical issues in the researcher's survey. The annual policy document provides information on the participating states' current policies and strategies encountered during the implementation of the CCS. Of the 46 states (including the District of Columbia) currently implementing CCS, 38 participated in the survey. The participants completing the surveys included the deputy state superintendents of education or their designees.
According to the researchers, the participants’ findings generalize to the perspectives and views of all 46 states that had adopted the CCS in both content areas. The researchers concluded from the data that the CCS represented a more rigorous, high-level learning in language arts, while requiring teachers to revise curriculum materials and resources. While teachers are expected to implement extensive classroom changes to meet the demands of the CCS, state- and district-level changes must be implemented to facilitate the transition to the new standards. State departments recognized the need to develop long-range planning that included assessment and curriculum policies to align with the CCS.

Kobe and Rentner (2012) assessed states’ perspectives of possible implementation challenges, requiring the participating states to identify these challenges as either a major or minor challenge during the first year of implementation (i.e., 2010-2011) challenges states encountered while implementing CCS. The greatest challenges included the availability of adequate resources necessary to implement the CCS and the lack of quality professional development.

The adoption of the CCS represents a considerable change at all levels from state departments to the classroom (Porter, McMaken, Hwang, & Yang, 2011). While the CCS embodies substantial changes, educators understand these changes result in a common vision for all students: to raise the achievement level of students comparable to the best education systems in the world (Conley, 2011). Educators realize implementing extensive school reform, such as with CCS, involves both intellectual work and emotional work of change (Hargreaves et al. 2001).
**Intellectual work of change.** Intellectual work of change requires teachers to become engaged learners in the change process. Hargreaves et al. comment that making changes in teaching requires teachers to acquire new learning. The first step of new learning involves understanding the need to change beyond the basic social and political perspective. Teachers must understand from a *philosophical* perspective, which includes an alignment with the teacher’s personal educational values. This requires teachers to interpret the students’ needs, areas of strength, and where the learning gaps exist.

Hargreaves et al. (2001) stated once teachers understand the need for change, they must decide to make the change. Successful implementation of education change resides in the teachers’ willful commitment to actually implement the change, as “forced” implementation results in failed effort (p. 128). Once the changes align with teachers’ own personal educational beliefs and values, teachers embrace the change with a “critical and political process of inclusion, empowerment, and fulfillment of education’s social mission” (p. 131).

Finally, teachers must develop the capacity to change, which requires them to acquire new skills, knowledge, and practices. This final step of intellectual work of change allows teachers to participate in enrichment opportunities to develop their own professional learning. Educators may participate in professional development to consult with colleagues to “undertake joint planning, pool expertise and resources and explore ways of integrating” practice into plausible teaching strategies (p. 132).

**Emotional work of change.** Aside from teachers investing in the intellectual mastery of change, educational change requires teachers to understand the emotional practice and relationships within their profession (Hargreaves et al., 2001). This includes
relationships with their students, the student's parents, and colleagues. Emotional practice "activates, colors and expresses people's feelings and the feelings of those with whom they interact" (p. 137). The emotional practice of change affects the school structure and pedagogy.

As teachers interact with their students and foster relationships, the teaching framework is shaped and defined. School structure, as defined by Hargreaves, includes those elements that affect teachers the greatest, such as the choice of curriculum, teacher assignments, content areas taught, and unit lessons. Teachers identify a need to interact with others, whether with students or colleagues, as this type of relationship allows people to come together with common interests to develop deep, sustained relationships.

Another aspect of emotional practice reported by Hargreaves includes the impact emotions have on pedagogy. The emotional needs of teachers, and ultimately students, drive the instruction and instructional practices within the classroom. Students' emotions fueled what and how teachers educated the students. Teachers employ strategies and techniques that instill excitement and enthusiasm in the classroom, while combatting boredom and mundane learning. For teachers, emotional work of change means teachers must rid their pedagogy of familiar practices or routines in effort to incorporate new strategies that engages students emotionally and academically (p. 153).

Educational reform or change, whether addressing the intellectual or emotional aspects, requires a concentrated effort of the system administrators and school leaders to provide a supportive environment for change to successfully occur. School leaders are the cornerstone of educational change. Häll and Hord (1987) referred to the school leaders as the "change agent" (p. 31) responsible for the investigating and adopting the
change. Fullan (2002b) noted that as changes implemented through large scale school reform efforts continued, the greater the need for effective school leadership. The following section examines the role of the principal as the change leader within the school.

**Principal as the Change Agent**

Principals are important contributors to the effectiveness in schools (Rice, 2010). The role of principals, however, has evolved over the years from a manager of teachers to instructional leaders. Fullan (2002a) noted that instructional leadership does not go far enough in conceptualizing the principals’ responsibility in creating schools of the future. Fullan reports school leaders must create a “fundamental transformation in the learning culture of schools” (2002a, p. 17) and become the “leader in a culture of change” (2002b, p. 1). Zimmerman (2011) notes, however, before principals undertake the process of changing school culture, they must determine their readiness for change.

To prepare for changes to the school culture, principals must become a change agent. Trybus (2011) reports there are critical steps to becoming an effective leader. First, leaders know the organization by understanding why the change is necessary. Likewise, knowing the organization implies knowing the people (e.g., teachers, staff, and students). An effective principal envisions the change and formulates steps needed to make the change feasible within the school (Senge, 1990). Senge refers to this visionary forethought as the creation of *mental models*, or “assumptions, generalizations, and thoughts . . . that influence how we understand the world and how we take action” (p. 11). Once a principal has formulated a mental model of how the change will affect the
organization, the principal begins to create a shared vision among others within the school.

Within any organization, including schools, when there is shared vision, people excel not because they are told to do so, but because they want to (Senge, 1990). Therefore, effective leadership requires knowing how others within the school will react (Trybus, 2011). Teachers and staff likely embrace the shared vision if the principal possess a positive attitude toward the change. Research supports the conclusion that people accept change when the leaders possess a positive attitude toward the change (DiPola, Tschannen-Moran, & Walther-Thomas, 2004; Hu & Roberts, 2011; Kavale & Forness, 2000; Zimmerman, 2011).

Finally, Trybus (2011) writes that effective leaders learn and understand the process of change. Knowing what needs to change is half the battle; effective leaders must be cognizant of how to move from theory to practice. Fullan (2007) further adds the change process requires the principal to design a process that establishes planning, implementation, and monitoring.

Principal Facilitation of the Inclusive Change

Garrison-Wade, Sobel, and Fulmer (2007) report the greatest challenge for principals involve creating and nurturing an inclusive educational culture that supports learning for all students. As advocates for all students, principals must establish a process that creates an inclusive future while empowering the staff to commit to that future (Thousand & Villa, 1994). Advocacy, particularly in regards to inclusive education, helps to eliminate resistance to inclusive ideas and practices (Ryan, 2006) and aid in a successful change in teachers’ knowledge and practices in the classroom (Hord,
Therefore, the success of inclusive practices resides within the administrative leadership within the school.

For schools to accept inclusive practices, the school leadership must redefine their roles within the school. Solomon, Schaps, Watson, and Battistich (1992) identified four key roles necessary for principals to support and implement inclusion: (a) being supportive for teachers, (b) foster caring relationships with staff and students, (c) develop a school-wide discipline program that reflects insight into students and their problems, and (d) provide necessary resources for students and teachers while providing support for the school.

Crockett (2002) identified five responsibilities of supportive inclusive principals: (a) becoming moral leaders by advocating for universal educational access, (b) attending to the unique learning needs and student individuality, (c) informed leadership by adhering to public policies that support special education, (d) appropriate supervision and evaluation of the inclusive educational programs, and (e) effective communication and negotiation with others to advocate for students with disabilities and their families.

Finally, Villa et al. (2005) delineated five administrative roles necessary to foster inclusive practices: (a) establish a shared vision for inclusive teaching, (b) increase teachers' skills and abilities through on-going professional development, (c) provide resources (e.g., planning time, training, inclusive forums) to facilitate the change toward inclusive education, (d) provide human and teaching resources, and (e) establish community participation to promote public awareness and acceptance of inclusive education.
While the roles of the principal share common attributes as outlined by the research, the role of the principal as a change facilitator and supporter of inclusive practices remain simple. Principals must establish the vision for the change, provide effective communication to all participants, allocate appropriate resources to sustain inclusion, and act as a buffer between the school and the community. The next section outlines how the principal becomes the facilitative leader, which is imperative for the improvement toward inclusive practices.

**Facilitative School Leadership by Hord**

Principals are key to educational change in schools (Hall & Hord, 1987). Through administrative support, inclusive education must include policies and procedures to provide equal access for all students (Baumgart & Giangreco, 1996). The development of those policies requires the principal, and ultimately the school, to transform the theory of inclusion into practice. School leaders pioneer a facilitative leadership that initiates the change process.

Facilitative leadership is the “behaviors that enhance the collective ability of a school to adapt, solve problems, and improve performance” (Conley & Goldman, 1994, p. 4) in order to provide “policies and practices to meet the needs of all children” (Hord, 1992, p. 2). Based upon the analysis of school change studies, Hord (1992) developed a six-component framework to structure the actions of principals in implementing change. Hord’s framework includes the following (p. 31):

- Creating an atmosphere and culture for change
- Developing and communicating the vision
- Planning and providing resources
- Providing training and development
- Monitoring and checking progress
- Continuing to give assistance

While Hord’s recommendations are for any change, the focus that follows is primarily on moving toward more inclusive practices.

**Creating an atmosphere and culture for change.** Initially, change agents foster an environment that helps develop a positive attitude toward change by communicating the need for change. Schools cannot operate or successfully function as closed systems (Conley & Goldman, 1994). Hord (1992) communicates that principals provide opportunities for staff and leaders to openly discuss ideas for change, while acknowledging that risks are expected and supported. Mistakes are learning opportunities.

**Developing and communicating the vision.** Stoll and Fink (1996) define vision as the collection of common values and beliefs shared by a group of people. Hord (1992) expands this definition to include “mental pictures of what the school . . . might look like in a changed and improved state” (p. 34). Success necessitates a shared vision for any organization by providing focus and energy for learning (Fullan, 1993). Fullan (2001) further adds that school visions act as a *strange attractor*, or the “experiences or forces that attract energies and commitment of employees” (p. 115).

Hord (1992) states a carefully crafted vision involves all stakeholders, including staff, parents, and community leaders. Effective facilitative leaders encourage all to share in the vision development, thus having ownership and accountability in the change process for all members. Once the school realizes the need for change and participants
have developed the vision, all are able to talk about the vision for the school and believe the “vision reflects their own interests” (p. 35).

**Planning and providing resources.** Planning evolves through the interaction with teachers and leaders on what does and does not work with inclusive vision. The planning process includes opportunities for the school staff and leaders to discuss and provide input concerning the implementation of inclusion, while developing the guidelines to make inclusion a sustainable change. Hord (1992), however, cautions that schools should not engage in a “blueprinting” approach to planning, but focus on carrying out the shared vision.

A primary responsibility for principals concerns the appropriation of resources, which includes not only financial budgeting, but time, personnel, supplies, materials, equipment and assistance (Hord, 1992). Facilitative principals procure necessary resources for their schools through community involvement and interaction (Conley & Goldman, 1994). Hall and Hord (1987) further contend the successful leadership depends upon the principal’s ability to make best use of the available discretionary time and resources.

**Providing training and development.** Professional development and training provide learning opportunities for school personnel (Fullan, 2002b; Fullan, Cuttress, & Kilcher, 2005) and a necessary component of the process of change (Hall & Hord, 2001; Hord, 1992). Collaborative learning includes all members of the school staff (Hord, 1992) and promotes “joint responsibility and implementation of a compelling vision” (Hirsh & Hord, 2010, p. 12). Professional learning need not be limited to attending trainings and conferences outside of the school. As Fullan (2002a; 2002b) reports,
learning in context, or within the setting where one works, provides the greatest benefit because it provides direct learning opportunities and improves the social context of the school. The social context provides “shared and collective knowledge and commitments” by granting opportunities to learn from colleagues, utilization of good strategies, and fostering best practice techniques (Fullan, p. 11).

**Monitoring and checking progress.** All school improvement efforts will encounter problems throughout its implementation (Hord, 1992). Yet, facilitative leaders engage in proactive and continuous monitoring of the change. Knowing the intended outcomes of inclusion for the school, principals and teachers establish benchmarks to ensure appropriate progress is being attained (Hirsh & Hord, 2010). Fullan, Cuttress, and Kilcher (2005) recommend gathering and disaggregating student data to develop action plans in order to make improvements or maintain current progress.

**Continuing to give assistance.** Through close monitoring of the inclusionary practices, facilitative leaders take note of concerns or issues in order to provide additional assistance. Continually providing assistance ensures the sustainability of the change process. Assistance may evoke additional professional development or training, modeling new strategies or practices, or providing further resources (Hord, 1992). Likewise, continued assistance includes positive reinforcement to leaders and the teachers to further facilitate the implementation progress (Hall & Hord, 2011).

In this section, the process of change was reviewed, which Patterson (2003), Hall et al. (2001), and Fullan (1993) identified the central element of any change was the establishment of cultural change. The study of Hargreaves et al. (2001) further added that commitment to change was plausible once the culture and capacity for change had
been nurtured within the school. Grounded within the early research of Hord (1992) framework for change, principals become the leaders in establishing the change culture, thus institutionalizing inclusive education as an established, practice in their schools. While principals and school leaders are instrumental in the implementation of inclusive practices, a greater encumbrance lies within the principals’ ability to sustain inclusion as a common practice in their schools. In the next section, factors consistently supported by the research for sustainability of change efforts are examined.

**Sustainability of Change in Public Education**

While change seems inventible (Stoll & Fink, 1997), one of the greatest challenges to educational change is sustaining the change over time to elicit intended outcomes (Taylor, 2006). Fullan (1991) contends that leaders must convey the expected outcomes of the change process in effort to contribute to the readiness and acceptance within the organization. While previously mentioned research (Hord, 1992; Schumacher, 2011; Worrell, 2008) referenced critical factors responsible for innovation sustainability, further literature reported that while many notable changes in special education reform exists, little is known regarding the extent to which innovations are sustained and what specific factors influence their sustainability (Datnow, 2005; Florian, 2000; Sindelar, Shearer, Yendol-Hoppey, & Liebert, 2006). One facet known, however, is reform sustainability does not come easily (Datnow, 2005). Therefore, the success or failure of a school’s reform can be measured by whether or not the reform was accepted, effective and sustained as the school’s common practices (Main, 2009).

Sustainability of educational programs (i.e., institutionalizing them) depends heavily upon the guidance and visionary practices of a school principal. Fullan (2002b)
outlines four necessary components for the sustainability of large school reform: (1) leadership and the (social) environment; (2) learning in context; (3) leaders at many levels and leadership succession; and (4) the development of the teaching profession (p. 9).

The first of Fullan’s (2002b) factors centered on the idea of equitable education by “closing the achievement gap” between diverse populations of students (e.g., high and low performing students) and uniform development of all schools within a system. Fullan believes leaders who take little consideration in fostering the social and moral environment and internal development of the school programs and future implementation process will falter and deteriorate.

Secondly, Fullan (2002b) recommends that to promote sustainability, leaders must engage in contextual learning. This process requires principals to serve on intervisitation study groups that examine the real problems and the respective solutions as they evolve in their own districts (p. 11). The inverse, out of context learning, simply refers to principals attending workshops or conferences, which involves no applied learning. Therefore, Fullan relates learning in context to sustainability because it provides leaders a catalyst for continuous improvement by providing opportunities to learn from their colleagues, retention of best practices, and continued monitoring of performance.

Fullan (2002b) noted that sustainability of school reform and changes resides with all members of the school, including teachers and staff. The daily operations of the school continually provide and strengthen the leadership qualities of all individuals. Leadership, as Fullan states, is a shared responsibility, and organizational success is not
attributed to the principal alone. The longevity of school change continues to be nurtured on a daily basis.

Finally, Fullan (2002b) concludes the teaching profession lacks high quality teachers. As the growing demand for teachers continues, principals sacrifice high quality by providing incentives to attract teachers. The concern, as noted by Fullan, contributes to the destructive cycle – poor quality teachers ultimately form the pool for principal candidates. Fullan (2002b) states this cycle can only change when the “conditions of work are conducive to continuous development” (p. 13).

While the principal is instrumental as the change agent to implement innovations, sustainability efforts of those innovations require educators – teachers and administrator – to commit to the change process (Fullan, 2005). Likewise, further studies suggested other factors promote the sustainability of educational changes, including leadership (Sindelar, Shearer, Yendol-Hoppey, & Liebert, 2006; Thompson, 2010), district and state policies (Datnow, 2005; Sindelar et al.), financial resources (Datnow), and previous experiences with change (Datnow).

In a study conducted by Datnow (2005), the researcher examined the sustainability of comprehensive school reform (CSR), or whole-school reform, models initiated at the district and state level. Two research questions guided the research for this qualitative study: (1) Why do reforms sustain in some schools and not in others? and (2) How do changing state and district contexts influence reform sustainability in schools? The author defined contexts as those elements (e.g., resources, incentives, factions) that support change and foster the institutionalization or sustainability of the
innovation. The two contextual factors to which Datnow refers included the district and the state.

The participants for the study consisted of a California urban school district implementing one or more of 6 CSR models \( n = 13 \). The researcher requested districts nominate schools noted for their exemplary implementation of their school reform initiatives. Datnow conducted numerous interviews with school and district staff, union representatives, parents, and students. To triangulate the data, Datnow analyzed the school improvement plans written for each school. The researcher transcribed and coded the data, identifying themes that emerged from the data. The researcher consulted additional resources and literature on reform sustainability as themes emerged from the data.

From within the District context, administration introduced their own initiative, the Comprehensive Reading Plan (CRP), designed to have all students reading at grade level by the end of second grade. While other reforms were ongoing (e.g., Reading Mastery Direct Instruction, Success for All), the district provided little support to schools not implementing their own program (i.e., CRP). The State context included changes to accountability and standards imposed upon all school districts within the State. Likewise, districts received state funding to implement the school improvement efforts initiated by the State.

The researcher noted through his data analysis, four different themes to sustainability of school reform emerged (p. 136):

1. New demands were accepted with an efficacious attitude and continued with the reforms.
2. Reforms were placed on the "back burner" so new district and state policies were implemented.

3. Eliminating all reforms initiatives because of the district or state demands.

4. Using the district and state contexts to abandon less favorable initiatives.

Datnow (2005) concluded, initially, schools must be attuned to district and state contexts in an effort to sustain reform initiatives - new or ongoing - within the school. To facilitate the sustainability of new programs, as noted within Datnow's study, an alignment with state and district reforms procedures must exist. Adapting to the current culture of the school aided in the longevity within the schools. Secondly, the researcher noted that reform requires resources, particularly financial resources. Those changes sustained in the schools were allocated a substantial resource base, reinforcing the notion that programs thoughtfully planned include necessary financial resources set aside to sustain the program. As Datnow concluded, the changing contexts within the state and district affected the sustainability of comprehensive school reform efforts in schools differently. The likelihood of sustaining new programs depended upon the school's change process and the staff's past experiences with change and school reform. Datnow (2005) noted, teachers become frustrated with the "endless cycle of reforms, [thus they] become increasingly skeptical" over time (p. 148).

While Datnow's study identified how district and state initiatives and reform changes can negatively impede the implementation of a school's educational changes, Sindelar, Shearer, Yendol-Hoppey, and Liebert (2006) examined the sustainability of inclusive school reform policies within one school over a four-year period. The researcher's noted several factors that impact the sustainability of school changes: (1)
district and state policies; (2) principal leadership; and (3) school culture, which includes the establishment of a shared vision through open communication with all staff.

The purpose of this qualitative study was to identify factors affecting the sustainability of inclusive reform practices at one school. The participants included interviews with 111 staff members, including administrators and teachers. Using a ethnographic case study methodology, the researchers utilized constant comparative data analysis of the interview data. Throughout the data analysis, four distinct themes emerged: changes in leadership, teacher turnover rate, state and district policy changes, and limited financial resources.

Variability exists in how school leadership impacts school reform changes. Crucial to the sustainability of initiatives depends heavily upon “the principals' affinity for and commitment to an established school-wide reform agenda” (Sindelar et al., 2006, p. 329). Changing leadership may result in new principals not fully supporting change initiatives, thus communicating to staff a lack of commitment and support for inclusive practices. Without administrative support, the programs will wane until extinguished.

New teachers without knowledge of inclusion resulted in a “diluted faculty commitment” to the inclusion reform (p. 329). Teacher turnover greatly impacts the sustainability of reform projects particularly when exiting teachers were deemed the implementers of the reform efforts. Veteran teachers are often referred to as the enforcers of the change process, or the individuals responsible for establishing and promoting inclusive procedures within the school. As time evolved, many enforcers left the school, with new teachers having limited experience or knowledge of inclusion.
Changes in the state and district policy included assessment reform and accountability measures for all schools within the state. New state and district initiatives did not align with the vision established by the inclusion reform, thus teachers were forced to make changes to their instructional practices. Likewise, changes in the assessment required teachers to place more emphasis on improving their performance outcomes on the state assessments. As the researchers noted, the teachers felt pressured to meet the high accountability standards, but lacked necessary resources to meet all students' needs. Likewise, supports for inclusion education were limited, including scheduling for co-teaching models and training on diverse student needs.

The researchers (Sindelar et al., 2006) reported that as a result of the three assertions on why inclusion was not sustained, a final theme came about as a concluding factor. A lack of necessary financial resources limited the school's ability to continue sustaining the inclusive program. A greater focus on assessments and meeting accountability measurements became the school's primary focus. Sindelar et al. concluded that several other factors were imperative for sustaining inclusion, or any other school change: strong leadership, adequate training and knowledge, and adequate resources.

Thompson (2010), likewise, attributed the complexity of sustaining change to two factors: (1) leadership that acts as the change agent; and (2) an organization that supports change. As the change agent, leaders must be attuned to the progress of change, while understanding change often encounters the implementation dip. Fullan (2001) refers to the implementation dip as "a dip in performance and confidence as one encounters an innovation that requires new skills and new understandings" (p. 40). Effective principals
realize and acknowledge the resistance to change encountered within the school, attributing the resistance to either a fear of change itself or a lack of knowledge to actually carry out the change (Fullan). Principals cognizant of the school’s reluctance toward change, works and communicates with the staff to build relationships and foster open dialogue to work through the challenges.

Secondly, Thompson notes that teachers become complacent within their roles, often preferring “to stay within their own comfort zone” (p. 279). When individuals encounter change, people instinctively attempt to revert to what they are most comfortable. Schlechty (2001) provides an explanation as to why individuals behave in this manner:

Systemic change interrupts habitual ways to doing things. When habits are interrupted, confusion and uncertainty are the result. In times of uncertainty, people tend to revert to habitual ways of doing things and to seek out leaders who value these ways above the ways of the new order. (p. 279)

Individuals want to continue doing things in a manner with which they are most comfortable. Therefore, school leaders must foster an environment in which change is accepted, most often by communicating their support to staff. When teachers witness the principal’s support toward the change process, the teachers become empowered and more accepting of the change (DiPaola, Maschannen-Moran, & Walther-Thomas, 2004).

Change is a fact of life, and schools are no less prone to change than any other organization. The concern, however, focuses not only on how to successfully implement change, but how to implement and sustain best practices. The research outlines various contributing factors to the sustainability of innovative educational programs and
practices, including an understanding of state and local procedures (Datnow, 2005), allocation of appropriate financial resources (Datnow; Florian, 2000; Grimes, Kurns, & Tilley, 2006; Sindelar et al., 2006), and leadership supportive of change (Schumacher, 2011; Sindelar et al.; Thompson, 2010).

**Conclusion**

The inclusion of students with disabilities in the regular education setting provides the students enriched learning and improved student outcomes (Cole, Waldron, & Majd, 2004; McLeskey, Hoppey, Williamson, & Rentz, 2004; McLeskey & Waldron, 2011). While the debate regarding the inclusion of students in the general education classroom persists, inclusion “is not a fad that is going to go away” (Peltier, 1997, p. 234). As evidenced by the national and state trends on placement, more schools have adopted the regular classroom as the preferred placement option. Instrumental in the success of the inclusive program lies with the schools’ primary leader – the principal. The principal establishes the school’s acceptance of inclusion through his or her communicated commitment to the practice (Praisner, 2003; Zimmerman, 2011), thus establishing a culture for change (Fullan, 2002a, 2000b). Effective principals are those that promote change through practice that are collaborative, intentional, and supportive (Salisbury & McGregor, 2002). The process for change, therefore, must be a collective process involving all stakeholders – teachers, staff, students, and parents. Through a shared vision that guides the change process toward inclusive practices, school leaders foster a transformation of the entire school culture.

Results from the literature, by and large, indicate that effective school leadership must be established for educational change to be supported and sustained. Inclusive
practices for students with disabilities provide substantiated improved student outcomes, both academically and socially. While the vast majority of research supports such practices, many school leaders fail to recognize or support the need for an inclusive education for students with disabilities. The purpose of this research was to examine the change process of principals implementing inclusion and to examine the relationship between the leaders' perception of the change process and that of the teachers.
CHAPTER III
METHODOLOGY

This chapter describes the methodology used to conduct this descriptive correlational study and includes information about the population, instruments, procedure, data management, and analysis.

The study was designed to answer the following four questions:

1. How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?

2. How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools?

3. As measured by the ORI, are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers' attitudes?

4. How do various demographic variables influence attitudes of teachers toward inclusion?

Population

The population for this study included elementary school principals, general education teachers, and special education teachers with inclusive practices currently in place in their schools. Kentucky has 684 elementary schools in 174 school districts, including both rural and urban demographics (Kentucky Department of Education, 2011). The Kentucky Department of Education (KDE) has divided the Commonwealth into eight regions, each with an educational cooperative to provide regional technical
assistance and support, research, training, and professional development to those districts residing with each region. The educational cooperatives work with all schools to provide their member districts comprehensive educational services and programs for the schools. The educational cooperatives provide services for all educational initiatives and programs, including special education. To provide more directed special education services, the Kentucky Special Education Cooperative Network, as directed by KDE, provides services through the 11 cooperatives to serve a smaller number of districts than delineated by the education cooperatives.

Located in South Central Kentucky, the regional educational cooperative serves 35 school districts in 26 counties. Special education services for this region are provided by a regional special education cooperative, which consists of 17 school districts and 76 elementary schools, kindergarten through Grade 8. Since inconsistency with school composition existed, “elementary schools” included kindergarten through Grade 8 regardless whether they were identified as an elementary, middle, or intermediate school. According to the special education cooperative director (Pam Coe, personal communication, February 24, 2012), the population includes 59 elementary principals, 2,145 teachers, and 33,209 students (3,846 special education students, 11.6% population). Of these statistics, all elementary schools currently implement inclusive practices to some degree. These schools and their respective principals and teachers made up the convenience sample. As defined by Mertens (2005), a convenience sample includes participants chosen because of their availability to the researcher. Populations should include those individuals to which generalizations of results are intended (Ozdemir, St. Louis, & Topbas, 2011), but generalizations beyond the selected population pool should
not be attempted (Mertens). Creswell (2003), therefore, purports a convenience sampling method is appropriate for naturally formed groups.

**Instrumentation and Survey Methodology**

Three self-administered instruments were utilized to collect cross-sectional data: (1) a demographic questionnaire developed by the researcher; (2) the Opinions Relative to the Integration of Students with Disabilities (ORI); and (3) the Change Process Survey (CPS). The format for the surveys included a conventional paper-and-pencil design (see Appendices A-C for survey instruments). The three surveys were formatted into a large booklet design (8-1/2” by 11”) to consolidate the instruments for ease of handling and collecting from the participants (Dillman, Smyth, & Christian, 2009). Additionally, the surveys were color-coded based upon the participate group: white for teachers and blue for administrators. Both approaches to size and color have reported far greater survey response rates (Beebe, Stoner, Anders, & Williams, 2007).

Dillman et al. (2009) support the use of “interesting and informative” front cover pages in essence to appeal to respondents. The front page should include an appropriate and appealing title that describes the surveyor’s purpose, provide identification of the surveyor, and encourage participation of the respondents (Dillman et al.). Likewise, the back cover should thank respondents and provide opportunity for respondents to add further comments regarding the study.

While surveys generally tend to have low response rates, typically between 34.6% and 39.6% (Cook, Heath, & Thompson, 2000), the use of surveys provides an effective and efficient means of data collection (Dillman, Smyth, & Christian, 2009; Greenlaw & Brown-Welty, 2009). Surveys allow researchers to gather data from a subset of the
population on topics (e.g., attitudes, beliefs, opinions, knowledge) that would otherwise be difficult assessing through other methods (Bennett et al., 2011). Groves (2011) adds that the self-report survey provides insight into naturally occurring behaviors of a population, such as individual thoughts and attitudes.

While growing popularity over the use of Internet-based survey methods continually increases (Alessi & Martin, 2010), the use of traditional survey methodologies (i.e., paper and pencil survey) proved more beneficial for this study. In a comparison of Internet and traditional survey designs, Truell and Goss (2002) reported surveys returned via postal mail had a higher response rate than Web-based surveys (57% compared to 46%), with the postal mail surveys yielding a higher percentage of usable data (i.e., completed surveys with no blank responses).

Diment and Garrett-Jones (2007), in a study examining the response rates of various professionals, reported the importance of investigating the mode of preference favored by the professionals being assessed. Referred to as the *professional culture*, Diment and Garrett-Jones conclude the work environment or work ethics of various professionals have tremendous impact on the response rates for traditional or Internet surveys. Yetter and Capaccioli (2010) found little research examining survey methodologies preferred with primary and secondary education personnel, but concluded most educators were more likely to respond to traditional survey methods versus the use of the Internet.

While Internet surveys provide quicker administration and data collection with less costs (Couper, Kapteyn, Schonlau, & Winter, 2007; Greenlaw & Brown-Welty, 2009), converting traditional surveys to an online mode potentially results in lower
response rates (Eaton et al., 2011). Converting a paper-and-pencil survey to an online format may result in a more complex design, which potentially may reduce the response rate of the participants (Mertler, 2003).

**Demographic questionnaire.** Participants completed a brief questionnaire that assessed non-identifiable information based upon their current position in the school: (a) teacher survey; or (b) administrator survey. The researcher-designed instrument assessed the following participant information: years of teaching or administrative experience; grade level taught; number of years teaching/implementing inclusion; number of special education classes taken as an undergraduate or graduate student; number of hours of training or professional development devoted to special education; and the number of hours of training or professional development devoted to inclusion (see Appendix A). Demographic information provides researchers participant data to establish generalizability.

**Opinions Relative to the Integration of Students with Disabilities (ORI).** Antonak and Larrivee (1995) developed the ORI based upon a revised version of the Opinions Relative to Mainstreaming (ORM) scale developed by Larrivee and Cook (1979) as a large scale study on teachers’ attitudes toward mainstreaming students with disabilities in the general educational setting. The ORI contains 25 positively and negatively worded statement opinions rated on a 6-point Likert scale (see Appendix B), ranging from -3 (I disagree very much) to +3 (I agree very much). Thirteen statements yield a positive response and 12 statements produce a negative response. Scores on the ORI range from 0 to 150, with a higher score representing a more positive attitude toward inclusion of students with disabilities.
Antonak and Larrivee (1995) conducted an interactive principal-axis factor analysis on the ORI. The researchers assigned an item to certain factors when the loading exceeded 0.37. The ORI measures four factors: benefits of integration (27% variance), integrated classroom management (7% variance), perceived ability to teach students with disabilities (4% variance), and special versus integrated general education (3% variance).

Research with this instrument shows acceptable reliability and validity (Antonak & Larrivee, 1995; Avramidis & Norwich, 2002; Dupoux, Hammond, Ingalls, & Wolman, 2006; Dupoux, Wolman, & Estrada, 2005; Jobe, Rust, & Brissie, 1996; Jung, 2008). Antonak and Larrivee (1995) examined the reliability of the ORI using Cronbach’s alpha and the Spearman-Brown statistics. The researchers reported the Cronbach’s coefficient alpha as 0.88, with the Spearman-Brown corrected split-half reliability as 0.82, with a standard error of measurement at 5.98.

Antonak and Larrivee (1995) examined the validity of the ORI using a hierarchical multiple-regression analysis by relating the scores to respondents’ demographic data and experiential variables (e.g., profession, relationship) to scores on the Scale of Attitudes Toward Disabled Persons (SADP). The researchers reported that validity of the ORI was found in the analyses of the relationships of scores with demographic and experiential variables. The ORI scores were significantly related in the predicted directions to scores globally measuring individuals’ attitudes toward people with disabilities, but the scores were not related to respondents’ sex, age, ethnicity, or educational attainment.

**Change Process Survey.** School leaders foster the culture within their schools, primarily influenced by their attitudes, behaviors, and beliefs (Zimmerman, 2011).
Education change and reform begins with the principal. While principals may initiate change because of district or state mandates, the principal’s attitudes toward the change influences how effectively others accept and initiate the change (Zimmerman).

To answer Research Questions 1, 3, and 4 regarding the change process in implementing inclusive practices in their schools, the participants completed the CPS (Keaster, 2007). The survey responses provide the researcher an understanding of the change process within administrators’ schools to implement inclusive practices and procedures (Keaster, Melville, & Miller, 1999). This instrument included 21-items employing a 5-point Likert scale (see Appendix C). The CPS score was analyzed by calculating the mean score for each item. Lower mean scores indicate less fidelity toward the change process, while higher numbers represent a more positive fidelity toward change.

The constructs of the CPS are aligned with Hord’s (1992) six-part framework for change implementation within an organization: creating an atmosphere and culture for change, developing and communicating the vision, planning and providing resources, providing training and development, monitoring and checking progress, and continuing to give assistance. The CPS received approval by Hord (Abell, 2009) and the individuals at Southwest Educational Development Laboratory (SEDL) in Austin, Texas as an instrument suitable to assess the change process (Keaster et al.). Abell reported an internal reliability of 0.94. Keaster, Chang and Russell (2011) reported a 0.93 for the overall reliability coefficient for the CPS.
Procedure

Once approval was received from the Universities’ Human Subjects Review Board, the superintendents and directors of education for each district within the population received a letter outlining the research process to seek their approval to commence with the study. Upon their approval, each director of special education supplied the researcher with names of schools with inclusive practices currently employed for students with disabilities. The researcher constructed an email for the directors of special education to forward to the sampled schools outlining the study with instructions on forwarding the email to elementary principals within their district. Dillman (1991) and Dillman, Smyth, and Christian (2009) posit notifying potential participants via a prenotice letter increases the response rate to mail surveys by 3 to 6 percentage points. The prenotice email outlined the research study by providing information on the voluntary participation of the principal and teachers in the study, the purpose of the study, and the fact that all personal data and identifiable information would be anonymous and remain confidential (see Appendix D for the survey booklet implied consent). Additionally, before the participants began the survey, each individual signed the informed consent, acknowledging their right to withdraw from participation at any time.

Once the principals have granted approval to implement the study at their schools, the director of special education notified the researcher a total count of schools participating in their districts, the number of administrative personnel (e.g., principals and assistant principals), and the number of certified staff. The researcher pre-packaged the survey booklets for each participating school into a sealed manila envelope with a code
delineating the school (e.g. SC-1, SC-2, SC-3, etc.). Likewise, each survey booklet included an ordinal code that corresponded with the school code to track any missing survey booklets (e.g., SC-1-1, SC-1-2, SC-1-3, etc.). The school codes and their respective school names were kept in a secure location by the researcher in order to protect the identity and confidentiality of the participants.

The district’s director of special education received the packet containing the appropriate number of sealed packets for each participating school. Included in each school’s packet was an envelope to collect the completed surveys by the principal or his or her designee. The cover of the survey booklets outlined the purpose of the study, procedures utilized to collect data, any potential risks, benefits of the study, confidentiality, the participant’s right to withdraw from the study at any time, and contact information of the researcher. After agreeing with the informed consent, participants initiated the three-part survey. Part 1 solicited the participant’s demographic information. Part 2 contained the 21-item CPS. Finally, Part 3 concluded with the 25-item ORI survey.

Principals received instructions to collect the survey booklets within five days and seal the completed surveys within the included manila envelope and sign the seal. The principals returned the school packets to the director of special education.

**Data Management and Analysis**

Upon receipt of the survey, the researcher sorted the survey booklets into numerical order, making note of missing survey instruments and incomplete surveys. The responses to the open-ended demographic questions were summarized into a number of different categories based upon the participants’ responses. These categories were
identified upon reviewing the range of responses received from the respondents and identifying common themes that emerged from the data. Each response category was assigned a number.

Frequency statistics were performed for the demographic information relating to years of teaching experience, grade level taught, number of inclusive teaching years, and the amount of professional development in special education and inclusion. Descriptive statistics were employed to calculate the means, standard deviation, and ranges of the demographic information. These statistics were reported for the total sample and disaggregated for selected sub-groups (e.g., teacher, administrative, training/professional development, years’ teaching experience).

One overarching research question guided the research for this study: Does the fidelity toward change during the implementation of the inclusion innovation affect educators’ attitudes toward inclusive practices for students with disabilities? It is hypothesized that if the change process is implemented with fidelity, then change implemented for inclusion will be an accepted and committed school practice for students with disabilities. This study relies upon a correlational research design which investigates the relationship between the fidelity to change and educator attitudes. Correlational research design examines the relationships that exist among variables to develop predictions based upon the understanding of the relationships (Johnson & Christensen, 2000). Mertens (2005) further adds that correlational research focuses on estimating the “magnitude of the relationship between two variables” (p. 146).

Creswell (2009) defines independent variables as those attributes that most likely influence or affect particular outcomes, while dependent variables include those attributes
that are the outcomes or results of the influence of the independent variables. In this two-part correlational study, Part A includes the change process constructs, as measured by the CPS, as the independent variable, with the dependent variable being the attitudes of the educators, as measured by the ORI. For Part B, for Research Question 3, the dependent variables included the attitudes of the teachers, with the independent variable as inclusion. The independent variables for Research Question 4 included the demographic constructs, with the dependent variable being the attitudes of the educators.

**Correlational Study Part A**

*Question 1:* How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?

*Question 2:* How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools?

The CPS (Keaster, 2007) was used to answer Questions 1 and 2. As previously discussed, the constructs of the CPS were aligned with Hord’s (1992) six-part framework for facilitating change: *creating a change culture, developing a vision, resource management, training and professional development, monitoring progress,* and *continued assistance.* The reliability for the CPS was established using Cronbach’s alpha analysis for the sample.

To examine the educators’ perceptions of the change process for implementing inclusive practices for the schools, the mean score for the CPS was calculated for each subgroup of the population (i.e., administrators and teachers). To answer Research Question 1, standard multiple regression analysis examined the amount of influence the six constructs of the change process (i.e., independent variables) have on the attitudes of
the teachers toward inclusion (i.e., dependent variable) for each subpopulation. Multiple regression analysis provides an explanation of a dependent variable based upon the values of one or more independent variables (Johnson & Christensen, 2000). Multiple regression explores the interrelationship among a set of variables (Pallant, 2010) by explaining the amount of variance all of the predictor variables explain (Mertens, 2005).

To answer Research Question 2, a \textit{t}-test for independent samples was used to examine the two subpopulations independently. The purpose of a \textit{t}-test for independent samples is to examine whether any differences between the means of two groups is statistically significant (Johnson & Christensen, 2000).

\textbf{Correlational Study Part B}

\textit{Question 3:} As measured by the ORI, are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers' attitudes?

\textit{Question 4:} How do various demographic variables influence attitudes of teachers toward inclusion?

Research Question 3 required completion of the ORI by teachers and principals. The principals’ booklets noted their responses were answered based upon their \textit{perception} of what they had of their teachers’ attitudes after the implementation of inclusion. As the change agents responsible for initiating the change process, the purpose of this analysis was to examine the attitudinal relationship between the principals and the teachers (i.e., implementers of inclusion). To answer Research Question 3, a \textit{t}-test for independent samples was employed to examine whether any significant difference existed between the teachers’ attitudes toward inclusion and the principals’ perception of the teachers’ attitudes.
It is hypothesized that the demographic variables (i.e., independent variables) will have a direct relationship on the attitudes (i.e., dependent variable) of the educators, particularly as it pertains to the amount of training or professional development teachers received in special education topics or inclusion. Prior research (Herner-Patnode, 2009; Kilanowski-Press, Foote, & Rinaldo, 2010; Male, 2011; O’Gorman & Drudy, 2010; Philpott, Furey, & Penney, 2010; Simon & Black, 2011; Smith & Leonard, 2006) supports the need for teachers to remain current on meaningful and effective inclusive and special education practices provided through training or professional development opportunities. The other variables hypothesized to affect educators’ attitudes include teaching experience (Avramidis, Bayliss, & Burden, 2000; Jobe, Rust, & Brissie, 1996; Subban & Sharma, 2005), grade level taught (Bender, Vail, & Scott, 1995; Buell, Hallam, Gamel-McCormick, & Scheer, 1999; Larrivee & Cook, 1979), teaching certification (Mastropieri & Scruggs, 2001; van Hover & Yeager, 2003), and prior inclusive experience (Meng, 2008).

The ORI was scored using the parameters established by Antonak and Larrivee (1995). Scoring for the survey following the researcher’s guidelines:

1. The 12 negatively worded items (2, 4, 6, 8, 9, 11, 12, 14, 18, 20, 23, 24) were positively scored by reversing the sign of the response, either from (- to +), or from (+ to -).

2. The 25 item responses were summed.

3. A constant of 75 was added to the total to eliminate negative scores.

4. Omitted or unmarked responses received a score of 0.
Antonak and Larrivee suggested four orthogonal factors account for the variation in the ORI item responses, as indicated in Table 3. The scores for the factors were determined by summing the positively scored item responses.

**Table 3**

*The Four Orthogonal Factors and Item Numbers*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor Title</th>
<th>Score Range</th>
<th>Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Benefits of integration</td>
<td>0 to 48</td>
<td>3, 7, 11, 14, 17, 20, 21, 24</td>
</tr>
<tr>
<td>II</td>
<td>Integrated classroom management</td>
<td>0 to 60</td>
<td>1, 4, 6, 9, 12, 15, 16, 18, 22, 25</td>
</tr>
<tr>
<td>III</td>
<td>Perceived ability to teach students with disabilities</td>
<td>0 to 18</td>
<td>2, 10, 19</td>
</tr>
<tr>
<td>IV</td>
<td>Special versus integrated general education</td>
<td>0 to 24</td>
<td>5, 8, 13, 23</td>
</tr>
</tbody>
</table>


To answer Research Question 4, descriptive statistics were used to describe the sample in terms of demographic variables including number of years teaching experience, the number of years inclusion has been implemented in the schools, the number of special education courses completed, the amount of training or professional development devoted to special education, and the amount of training or professional development devoted to inclusion. Bi-variate Pearson $r$ correlational statistics were used to examine the relationship between various demographic data and teachers' attitudes as measured on the ORI.
CHAPTER IV

RESULTS

The research for this correlational study served two purposes. The primary purpose of this research was to examine the relationship between the change process for inclusive teaching practices and the attitudes of educators toward inclusion of students with disabilities in the general education classroom. The study requested elementary school educators identify their perception of the change process after inclusion had been implemented within their schools and report attitudes toward inclusion. The examination of this relationship benefited this study by providing an understanding how a change implemented with fidelity affects the attitudes of educators toward the innovation being implemented. Additionally, a secondary purpose was to examine the relationship between educators’ attitudes toward inclusion and various demographic variables.

Research Questions

One overarching research question guided the research for this study: Does the fidelity to the change process during the implementation of the inclusion innovation affect educators’ attitudes toward inclusive practices for students with disabilities? It is hypothesized that if the change process is implemented with fidelity, then change implemented for inclusion will be an accepted and committed school practice for students with disabilities. This study was guided by four research questions:

1. How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?
$H1_0$: Administrator fidelity to the constructs of the change process has no significant influence over the attitudes of the teachers.

$H1_A$: Administrator fidelity to the constructs of the change process has a significant influence over the attitudes of the teachers.

2. How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools?

$H2_0$: There is no significant difference between the teachers’ or administrators’ perception of the implementation of inclusion within their schools.

$H2_A$: There is significant difference between the teachers’ or administrators’ perception of the implementation of inclusion within their schools.

3. Are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers’ attitudes?

$H3_0$: The attitudes of teachers are consistent with how administrators perceive the attitudes of their teachers after implementation of inclusion.

4. How are the attitudes of the teachers toward inclusion influenced by the following demographic variables: years of experience, years implementing inclusion within the schools, number of special education courses completed during teacher education program, amount of training or professional development devoted to special education, and amount of training or professional development devoted to inclusion?

$H4_0$: There is no significant relationship between the teachers’ attitudes toward inclusion and the demographic variables.

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H4A: There is a significant relationship between the teachers' attitudes toward inclusion and the number of years' teaching experience.

H4B: There is a significant relationship between the teachers' attitudes toward inclusion and the number of years inclusion has been implemented within their schools.

H4C: There is a significant relationship between the teachers' attitudes toward inclusion and the number of special education courses completed during the teacher preservice education program.

H4D: There is a significant relationship between the teachers' attitudes toward inclusion and the amount of training or professional development devoted to special education.

H4E: There is a significant relationship between the teachers' attitudes toward inclusion and the amount of training or professional development devoted to inclusion.

The findings reported in this chapter will be grouped into the subsequent sections. In the first section, the demographic data provide a descriptive analysis of the population and sample participating in the study. Included in this section is a brief description of the schools that participated in this research. A review of the four research questions that guided this study follows. Finally, in the subsequent sections the statistical findings and answers to the research questions are presented.
Descriptive Statistics

School Demographics

The following section provides background information pertaining to the 7 schools participating in this study. These schools represent 5 districts within the Green River Regional Educational Cooperative (GRREC). Prior to July 2012, the cooperative consisted of 17 school districts, which included 59 elementary schools. Upon restructuring by the Kentucky Department of Education during July 2012, one educational cooperative (River Region) was dissolved and consolidated into GRREC and several other neighboring districts from Northern Kentucky cooperative joined alliances with GRREC. After the consolidation, GRREC currently consists of 35 school districts, which encompasses 162 elementary schools spread across 26 counties in Central Kentucky. GRREC serves predominately non-urban school districts, with 98 schools (60%) having 500 or fewer enrolled students. The following section provides a descriptive analysis of the participants.

Participants

Through the Green River Regional Educational Cooperative (GRREC), the regional director provided a list of directors of special education names and contact information. Thirty-five directors were contacted via email to request participation in this study. Of the 35 school districts, 5 districts replied with interest in participating. These districts represented 8 schools, with a population consisting of 288 teachers and 23 administrators. Of the 311 surveys distributed to the schools, 96 participants returned completed surveys (31% return rate). The sample included 83 teachers (86%) and 13 administrators (14%).
The participating schools were all rural elementary schools, with school populations of 700 or fewer students. Table 4 provides specific information regarding the participating schools, including the certified staff population and representative sampling of the school. School D provided the greatest return rate, with 22 educators (59%) participating in the survey. This school serves approximately 526 students in grades kindergarten through eighth. Each school identified at minimum three administrators within the building: one principal, one assistant or vice-principal, and one guidance counselor. Each school provided a response from one of these administrators, with no schools returning completed surveys from all identified building administrators.
Table 4

School Demographic Data

<table>
<thead>
<tr>
<th>School</th>
<th>Staff Population(^a)</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N)</td>
<td>(n)</td>
</tr>
<tr>
<td>School A</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>School B</td>
<td>47</td>
<td>18</td>
</tr>
<tr>
<td>School C</td>
<td>37</td>
<td>15</td>
</tr>
<tr>
<td>School D</td>
<td>37</td>
<td>22</td>
</tr>
<tr>
<td>School E</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>School F</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>School G</td>
<td>42</td>
<td>12</td>
</tr>
</tbody>
</table>

\(^a\)Includes certified staff only, including teachers and administrators.
Demographic Survey

The closed-ended questions pertaining to the demographic data were analyzed and coded to provide ease in conducting the data analysis. The researcher identified common themes from the range of responses submitted by the participants and coded these themes into categories. Each of the response categories for the following open-ended questions was assigned an ordinal number (1, 2, 3, etc.): years of teaching experience (0-5, 6-10, 11-15, 16-20, 21-25, 26-30, and more than 30), area of certification (elementary education, middle grades, special education, content-specific, and other), years of inclusive classroom teaching (0-3, 4-6, 7-9, 10-12, 13-15, 16-18, 19-21, and 22 or more), special education coursework (0-2, 3-4, 5-6, 7-8, 9-10, 11-12, 13-14, and 15 or more), professional development devoted exclusively to special education (0-5, 6-10, 11-15, 16-20, 21-25, 26-30, and more than 30), and professional development devoted to inclusion (0-5, 6-10, 11-15, 16-20, 21-25, 26-30, and more than 30).

Frequency distributions were conducted to provide an understanding of the sample and the participants' characteristics. Table 5 provides information on the participants' years of experience and area of certification. The greatest percentage of participants fell in experience range of 0-5 years (24.1%) for teachers and 16-20 years (38.5%) for administrators. Of all the participants that responded, the majority of teachers and administrators had an elementary education certification (n = 51, 53.1%), with 20.8% certified as special education teachers. Moreover, of both teachers and administrators, 22 (22.9%) had a special education certification.
Table 5

*Educational Experience and Certification of Participants (N = 96)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Teacher</th>
<th></th>
<th>Administrator</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Years of experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>20</td>
<td>24.1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6-10 years</td>
<td>16</td>
<td>19.3</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>11-15 years</td>
<td>18</td>
<td>21.7</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>16-20 years</td>
<td>11</td>
<td>13.3</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>21-25 years</td>
<td>15</td>
<td>18.1</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>26-30 years</td>
<td>2</td>
<td>2.4</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>31 or more years</td>
<td>1</td>
<td>1.2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Area of certification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary education</td>
<td>47</td>
<td>56.6</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>Middle grades</td>
<td>5</td>
<td>6.0</td>
<td>7</td>
<td>53.8</td>
</tr>
<tr>
<td>Special education</td>
<td>20</td>
<td>24.1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Content-specific(^a)</td>
<td>11</td>
<td>13.3</td>
<td>2</td>
<td>15.4</td>
</tr>
</tbody>
</table>

\(^a\)Content-specific refers to certification in a particular discipline (e.g., math, science)
Other demographic data shown in Table 6 included 20.5% of all teachers had 0-3 years of teaching experience within inclusive classroom settings. The majority of teachers (56%) had 10 or fewer years of teaching experience.

In regards to the amount of coursework completed in special education, 65.1% of those responding had two or fewer classes pertaining to special education, with 19.3% of teachers having 15 or greater number of courses. Coincidentally, 24.1% of teachers have a special education certification, which is a difference of four teachers with a special education certification that did not report having completed 15 or more special education courses.

In regards to professional development or training, the participants responded having minimal amount of training or professional development developed to special education and inclusion (0-5 hours), with the educators reporting 65.1% and 69.9% respectfully. Likewise, administrators responded having minimal training (i.e., 0-5 hours) in special education or inclusion, reporting 76.9% and 69.2% respectfully. In terms of training for the sample, collectively the participants have limited preparation in regards to special education (M = 1.93, SD = 1.76) and inclusion (M = 1.75, SD = 1.51).
Table 6

*Demographic Data Special Education Background*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Teacher ($n = 83$)</th>
<th>Administrator ($n = 13$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>Inclusive classroom experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-3 years</td>
<td>17</td>
<td>20.5</td>
</tr>
<tr>
<td>4-6 years</td>
<td>17</td>
<td>20.5</td>
</tr>
<tr>
<td>7-9 years</td>
<td>13</td>
<td>15.7</td>
</tr>
<tr>
<td>10-12 years</td>
<td>8</td>
<td>9.6</td>
</tr>
<tr>
<td>13-15 years</td>
<td>8</td>
<td>9.6</td>
</tr>
<tr>
<td>16-18 years</td>
<td>5</td>
<td>6.0</td>
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<tr>
<td>19-21 years</td>
<td>5</td>
<td>6.0</td>
</tr>
<tr>
<td>22 or more years</td>
<td>10</td>
<td>12.0</td>
</tr>
<tr>
<td>Special education courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 courses</td>
<td>54</td>
<td>65.1</td>
</tr>
<tr>
<td>3-4 courses</td>
<td>13</td>
<td>15.7</td>
</tr>
<tr>
<td>5-6 courses</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7-8 courses</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9-10 courses</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11-12 courses</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13-14 courses</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15 or more courses</td>
<td>16</td>
<td>19.3</td>
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</table>

132
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Teacher (n = 83)</th>
<th>Administrator (n = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Special education PD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 hours</td>
<td>54</td>
<td>65.1</td>
</tr>
<tr>
<td>6-10 hours</td>
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<td>19.3</td>
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<tr>
<td>11-15 hours</td>
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<td>1.2</td>
</tr>
<tr>
<td>16-20 hours</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>20-25 hours</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>26-30 hours</td>
<td>2</td>
<td>2.4</td>
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<tr>
<td>30 or more hours</td>
<td>6</td>
<td>7.2</td>
</tr>
<tr>
<td>Inclusion PD</td>
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<td></td>
</tr>
<tr>
<td>0-5 hours</td>
<td>58</td>
<td>69.9</td>
</tr>
<tr>
<td>6-10 hours</td>
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<tr>
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<td>1.2</td>
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<td>4</td>
<td>4.8</td>
</tr>
<tr>
<td>26-30 hours</td>
<td>-</td>
<td>-</td>
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<tr>
<td>30 or more hours</td>
<td>3</td>
<td>3.6</td>
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</tbody>
</table>
Change Data

This study investigated the relationship between the fidelity to change and educator attitudes. In this two-part correlational study, the first part included the six constructs of the change process as the independent variable, with the dependent variable being the attitudes of the educators. Research Question 2 examined the relationship between perception of teacher and administrators' (independent or categorical variable) of the change process (dependent or continuous variable). For the second part, Research Question 3 explored the relationship between the attitudes of the teachers (dependent variables) and the inclusive teaching practices (independent variable). The independent variables for Research Question 4 included the demographic constructs, with the dependent variable being the attitudes of the educators.

The data for the analysis were obtained by reviewing the responses to the questions on two surveys: the Change Process Survey (CPS) and the Opinions Relative to the Integration of Students with Disabilities (ORI). The design of the CPS was a Likert-type scale of 1-5 coding in responses: (1) strongly disagree; (2) disagree; (3) undecided; (4) agree; (5) strongly agree. A “not applicable” response was included for questions 2 through 8 in the event teachers were hired after implementation of inclusion in their schools.

The CPS responses were aligned to the following six areas related to Hord’s (1992) framework for facilitating change: creating a change culture (Items 1, 2 and 3); developing a vision (Items 4, 5, 6 and 7); resource management (Items 8, 9, 10 and 11); training and professional development (Items 12, 13 and 14); monitoring progress (Items 15 and 16); and continued assistance (Items 17, 18, 19 and 20). Question 21 allows the
participants to respond to the overall effectiveness of inclusion toward the organization’s effectiveness.

The scores were averaged across the 21 items, $M = 70.85$, $SD = 13.92$, range = 59. The reliability coefficient as measured by Cronbach’s alpha was .928 for the present study. The mean for each item for the total population ranged from 2.45 to 4.26. In examining the subpopulations, the mean for the items responded by administrators ranged from 2.58 to 4.38; for teachers, the mean for the items ranged from 2.36 to 4.36. The lowest mean scores of all participants corresponded to Items 12 and 14, with scores of 2.36 and 2.91 respectively. The most favorable response for the total population and teachers was Item 1, which examined the idea that the principals support improvement efforts for the organization. The most favorable response for administrators was Item 6 that stated principals provided guidelines on inclusion to the staff prior to the implementation of inclusive practices. The overall mean for the CPS was 3.21 ($SD = 0.76$). This supports that participants have a neutral to somewhat favorable perception regarding the implementation of inclusive change strategies. Table 7 provides information regarding the mean and standard deviation of each item for the total sample and both subpopulations, while Table 8 provides the means and standard deviations of the 6-constructs for the total sample and both subpopulations.
Table 7

*CPS Mean Scores for Total Population (N = 96) and Sub-populations*

<table>
<thead>
<tr>
<th>CPS Item</th>
<th>All Participants</th>
<th>Teachers (n = 83)</th>
<th>Administrators (n = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>CPS #1</td>
<td>4.26</td>
<td>.79</td>
<td>4.36</td>
</tr>
<tr>
<td>CPS #2</td>
<td>4.08</td>
<td>.67</td>
<td>4.12</td>
</tr>
<tr>
<td>CPS #3</td>
<td>3.84</td>
<td>1.01</td>
<td>3.83</td>
</tr>
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<td>CPS #4</td>
<td>3.32</td>
<td>1.24</td>
<td>3.23</td>
</tr>
<tr>
<td>CPS #5</td>
<td>3.71</td>
<td>1.24</td>
<td>3.62</td>
</tr>
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<td>CPS #6</td>
<td>3.61</td>
<td>1.02</td>
<td>3.49</td>
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<td>CPS #7</td>
<td>3.25</td>
<td>1.07</td>
<td>3.11</td>
</tr>
<tr>
<td>CPS #8</td>
<td>3.31</td>
<td>1.24</td>
<td>3.20</td>
</tr>
<tr>
<td>CPS #9</td>
<td>3.04</td>
<td>1.15</td>
<td>2.94</td>
</tr>
<tr>
<td>CPS #10</td>
<td>3.34</td>
<td>1.17</td>
<td>3.27</td>
</tr>
<tr>
<td>CPS #11</td>
<td>3.02</td>
<td>1.24</td>
<td>2.89</td>
</tr>
<tr>
<td>CPS #12</td>
<td>2.45</td>
<td>1.18</td>
<td>2.36</td>
</tr>
<tr>
<td>CPS #13</td>
<td>3.04</td>
<td>1.12</td>
<td>2.98</td>
</tr>
<tr>
<td>CPS #14</td>
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</tr>
<tr>
<td>CPS #15</td>
<td>3.20</td>
<td>1.06</td>
<td>3.10</td>
</tr>
</tbody>
</table>
Table 7 (continued).

<table>
<thead>
<tr>
<th>CPS Item</th>
<th>All Participants</th>
<th>Teachers (n = 83)</th>
<th>Administrators (n = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>CPS #16</td>
<td>3.34</td>
<td>1.07</td>
<td>3.23</td>
</tr>
<tr>
<td>CPS #17</td>
<td>3.15</td>
<td>1.03</td>
<td>3.11</td>
</tr>
<tr>
<td>CPS #18</td>
<td>3.32</td>
<td>1.12</td>
<td>3.25</td>
</tr>
<tr>
<td>CPS #19</td>
<td>3.39</td>
<td>1.11</td>
<td>3.31</td>
</tr>
<tr>
<td>CPS #20</td>
<td>3.30</td>
<td>1.17</td>
<td>3.21</td>
</tr>
<tr>
<td>CPS #21</td>
<td>3.67</td>
<td>1.16</td>
<td>3.65</td>
</tr>
<tr>
<td>Total Scale</td>
<td>3.21</td>
<td>.76</td>
<td>3.15</td>
</tr>
</tbody>
</table>
Table 8

Constructs of the CPS by Total Sample (N = 96) and Subpopulations

<table>
<thead>
<tr>
<th>Construct</th>
<th>All Participants</th>
<th>Teachers (n = 83)</th>
<th>Administrators (n = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating a change culture</td>
<td>M 3.70 SD .90</td>
<td>M 3.73 SD .93</td>
<td>M 3.51 SD .52</td>
</tr>
<tr>
<td>Developing a vision</td>
<td>M 3.24 SD 1.06</td>
<td>M 3.13 SD 1.05</td>
<td>M 3.96 SD .85</td>
</tr>
<tr>
<td>Resource management</td>
<td>M 3.14 SD 1.03</td>
<td>M 3.05 SD .98</td>
<td>M 3.65 SD 1.24</td>
</tr>
<tr>
<td>Training and professional development</td>
<td>M 2.70 SD .97</td>
<td>M 2.68 SD .91</td>
<td>M 2.82 SD 1.31</td>
</tr>
<tr>
<td>Monitoring progress</td>
<td>M 3.20 SD 1.07</td>
<td>M 3.13 SD .96</td>
<td>M 3.69 SD 1.53</td>
</tr>
<tr>
<td>Continued assistance</td>
<td>M 3.15 SD 1.17</td>
<td>M 3.10 SD 1.12</td>
<td>M 3.46 SD 1.47</td>
</tr>
</tbody>
</table>
The design of the ORI was a 6-point Likert scale allowing participants to respond as follows: (-3) I disagree very much; (-2) I disagree pretty much; (-1) I disagree a little; (+1) I agree a little; (+2) I agree pretty much; and (+3) I agree very much. An analysis of the mean and standard deviation was conducted for the total sample ($M = 94.18, SD = 21.32$). An independent-samples $t$-test was conducted to compare the ORI scores (i.e., the outcome variable) for teachers and administrators. A $t$-test analysis is most appropriate when the objective of the analysis is to compare the mean of a continuous outcome variable between two independent groups. Moreover, the results provide assistance in assessing the probability that the two sets of scores (administrators versus teachers) originate from the same population. The independent portion of the test’s description refers to the fact that the groups are considered independent if a member of one group cannot possibly be in the other group (i.e., teachers versus administrators).

There was no significant difference in scores for teachers ($M = 92.76, SD = 20.31$) and administrators ($M = 103.23, SD = 26.02; t(94) = 1.66, p = .10$, two-tailed). The magnitude of the differences in the means (mean difference = 10.47, 95% CI: -2.04 to 22.98) was large (eta squared = .17). These results, as shown in Table 9, support that there was no significant differences in the perceptions of all participants in regards to how they viewed students with disabilities and their inclusion in the general education classroom.

The administrators and teachers perceptions were within approximately 10 points; however, because of the large discrepancy between the two groups ($n = 13$ for administrators versus $n = 83$ for teachers), further analysis using the Mann-Whitney test was conducted. The purpose of this non-parametric alternative to the $t$-test provides a
comparison of median scores of two independent groups on a continuous measure rather than means. The results for this test revealed no significant difference in the ORI scores of administrators ($Md = 114.0, n = 13$) and teachers ($Md = 93.0, n = 83$), $U = 333.5, z = -2.21, p = .03, r = .23$. Using Cohen’s (1988) criteria of effect size, an $r = .23$ is considered a slightly weak effect, indicating that with a more representative sample from both groups, the ORI scores could result in a significant difference.

Table 9

**ORI Total Scores between Teachers and Administrators**

<table>
<thead>
<tr>
<th></th>
<th>$n$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>13</td>
<td>98.57</td>
<td>33.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>83</td>
<td>96.40</td>
<td>20.04</td>
<td>1.66</td>
<td>.10</td>
</tr>
<tr>
<td>Total Population</td>
<td>96</td>
<td>96.71</td>
<td>22.03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the following sections, data analysis and reporting for each research question is presented. Each null hypothesis will be reported and results will follow. Each null hypothesis was tested at the .05 level of significance. Hypotheses 1 were developed using the 6-constructs scores from the teachers’ CPS surveys and the total ORI survey scores. Hypothesis 2 focused on the CPS survey results of both teachers and administrators. Hypotheses 3 and 4 relied upon the ORI surveys.

**Research Question 1**

Standard multiple regression analysis was conducted to analyze the responses for Research Question 1: *How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?* The null
hypothesis for RQ 1 states that administrators’ fidelity to the constructs of the change process will have no significant influence over the attitudes of the teachers. RQ 1 will be explored using the CPS score to report the teachers’ perception of the change process and the ORI score to report the teachers’ attitudes toward inclusion.

First, correlational statistics were used to examine the relationship between the teachers’ attitudes toward inclusion and the teachers’ perception of the implementation of inclusion through the change process model. Pearson product moment correctional coefficient (Pearson’s r) was used to examine the relationship between the overall CPS score and the total ORI score for teachers. A statistically significant positive correlation, albeit medium, was noted (r = .437, n = 83, p < .01). Cohen (1988) suggests the following guidelines for interpreting the strength of the relationship: r = .10 as a small effect size; r = .30 as a medium effect size; and r = .50 as a large effect size.

Secondly, the correlation between each construct and teachers’ attitudes toward inclusion as measured by the score on the ORI was examined. Standard multiple regression analysis examined the relationship of the six constructs of the change process, or the independent variables, to teachers’ attitudes toward inclusion, or the dependent variables. There was a statistically significant positive correlation between the teachers’ attitudes and each of the six constructs of the CPS. The strongest relationship was between the attitudes and the construct continuing assistance (r = .423, p < .01). The weakest relationship reported was between the teachers’ attitudes and the construct resource management (r = .215, p = .051). As noted in Table 10, statistically significant correlations were noted between each construct and the ORI score. These findings
support that teachers’ attitudes increase as administrators’ continuance in supporting and adhering to the change process constructs increases.

Table 10

*Correlations between Teacher Attitudes as Measured by the ORI and the CPS Constructs*

<table>
<thead>
<tr>
<th>Construct</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating a change culture</td>
<td>.323*</td>
</tr>
<tr>
<td>Developing a vision</td>
<td>.357*</td>
</tr>
<tr>
<td>Resource management</td>
<td>.215</td>
</tr>
<tr>
<td>Training and professional development</td>
<td>.277</td>
</tr>
<tr>
<td>Monitoring progress</td>
<td>.343*</td>
</tr>
<tr>
<td>Continued assistance</td>
<td>.423*</td>
</tr>
</tbody>
</table>

*p < .01

Standard multiple regression was conducted to evaluate how well the change process constructs predicted attitudes toward inclusion. The predictors were the six change process constructs, while the criterion variable was teachers’ overall ORI scores. The linear combination of strength measures were significantly related to the attitude scores, $F(6, 76) = 4.87, p < .001$. The sample multiple correlation coefficient was .527, indicating that approximately 28% of the variance of the ORI scores in the sample can be accounted for by the linear combination of the change process constructs. Table 11 provides a summary of the multiple regression analysis performed on the change process constructs and their influence on teachers’ attitudes. From this analysis, the largest beta coefficient was *continued assistance*, $b = .28, t(82) = 4.23, p < .001$, which supports that administrators’ provision of continued support and assistance makes the largest unique
contribution to teachers' attitudes toward inclusion. Likewise, the sixth construct reinforces the concept that change can be effective for schools if the leaders continue to provide the necessary elements to sustain the inclusion process for students.

Table 11

*Multiple Regression Analysis for the CPS Scores and Teachers' ORI Scores*

<table>
<thead>
<tr>
<th>Construct</th>
<th>R Square</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating a change culture</td>
<td>.28</td>
<td>.19</td>
<td>1.71</td>
<td>.091</td>
</tr>
<tr>
<td>Developing a vision</td>
<td>.20</td>
<td>1.74</td>
<td>.086</td>
<td></td>
</tr>
<tr>
<td>Resource management</td>
<td>-.10</td>
<td>-.69</td>
<td>.493</td>
<td></td>
</tr>
<tr>
<td>Training and professional development</td>
<td>.03</td>
<td>.17</td>
<td>.870</td>
<td></td>
</tr>
<tr>
<td>Monitoring progress</td>
<td>.12</td>
<td>.99</td>
<td>.324</td>
<td></td>
</tr>
<tr>
<td>Continued assistance</td>
<td>.28</td>
<td>1.57</td>
<td>.120</td>
<td></td>
</tr>
</tbody>
</table>

Finally, a multiple hierarchical regression analysis was performed for two reasons: (a) to examine the unique contribution of *continued assistance* in the explanation of teacher attitudes toward inclusion; and (b) to examine the impact of each change process construct on the implementation of school system change. Multiple hierarchical regression reveals how well independent variables predict the dependent variable, while controlling for all the other independent variables in the regression equation.

For the first analysis, the last construct (i.e., *continued assistance*) was loaded as Model 1, with the first five constructs loaded as Model 2. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. The construct *continued assistance* explained
17.9% \((R \text{ squared} = .179)\). After entry of the remaining five constructs at Model 2, the total variance explained by the model as a whole was 27.8%, \((R^2 = .278)\). The change in \(R^2\) was .099, and the variable did not make a statistically significant prediction to the teacher attitudes dependent variable \((p = .076)\). The results are displayed in Table 12.

### Table 12

*Summary of Hierarchical Multiple Regression Analysis*

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>(R^2)</th>
<th>(\Delta R^2)</th>
<th>Significant F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continued assistance</td>
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<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Creating a change culture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing a vision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training and professional development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring progress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continued assistance</td>
<td>.278</td>
<td>.099</td>
<td>.076</td>
</tr>
</tbody>
</table>

Secondly, multiple hierarchical regression was conducted in order to examine the influence each change process constructs on teacher attitudes. The first block consisted only of *continued assistance*. Using reverse entry, each block added one subsequent construct (e.g., second block added *continued assistance* and *monitoring progress*), with the sixth block consisting of all six change process constructs. Because of the strong relationship between teachers' attitudes and *continued assistance*, a reverse entry was employed. As mentioned earlier, the overall the regression model was significant, \(F(6, 76) = 4.87, p < .001\). By examining the blocks, Steps 1, 2, and 5 resulted in significant change in the amount of variance explained. This suggests that *continued assistance*,
monitoring progress, and developing a vision assume more importance than the other three change process constructs. The results of the analyses are shown in Table 13.
Table 13

*Hierarchical Regression Analysis Predicting Teacher Attitudes from Change Constructs*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
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<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td>Continued assistance</td>
<td>7.67</td>
<td>1.82</td>
<td>.42</td>
<td>.18</td>
<td>--</td>
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<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Continued assistance</td>
<td>6.07</td>
<td>2.08</td>
<td>.34</td>
<td>.20</td>
<td>.02</td>
</tr>
<tr>
<td>Monitoring progress</td>
<td>3.75</td>
<td>2.42</td>
<td>.18</td>
<td>.20</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Continued assistance</td>
<td>7.12</td>
<td>3.10</td>
<td>.39</td>
<td>.31</td>
<td>.01</td>
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<td>Monitoring progress</td>
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<td>2.46</td>
<td>.17</td>
<td>.25</td>
<td>.00</td>
</tr>
<tr>
<td>Training and professional development</td>
<td>-1.58</td>
<td>3.47</td>
<td>-.07</td>
<td>.21</td>
<td>.01</td>
</tr>
<tr>
<td>Resource management</td>
<td>.83</td>
<td>2.77</td>
<td>.04</td>
<td>.21</td>
<td>.00</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Continued assistance</td>
<td>6.91</td>
<td>3.20</td>
<td>.38</td>
<td>.31</td>
<td>.01</td>
</tr>
<tr>
<td>Monitoring progress</td>
<td>3.74</td>
<td>2.52</td>
<td>.18</td>
<td>.25</td>
<td>.03</td>
</tr>
<tr>
<td>Training and professional development</td>
<td>-1.99</td>
<td>3.75</td>
<td>-.09</td>
<td>.25</td>
<td>.04</td>
</tr>
<tr>
<td>Resource management</td>
<td>.83</td>
<td>2.77</td>
<td>.04</td>
<td>.21</td>
<td>.00</td>
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<tr>
<td><strong>Step 5</strong></td>
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<tr>
<td>Continued assistance</td>
<td>5.62</td>
<td>3.18</td>
<td>.31</td>
<td>.31</td>
<td>.01</td>
</tr>
<tr>
<td>Monitoring progress</td>
<td>3.65</td>
<td>2.46</td>
<td>.17</td>
<td>.25</td>
<td>.03</td>
</tr>
<tr>
<td>Training and professional development</td>
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<td>3.69</td>
<td>-.06</td>
<td>.25</td>
<td>.03</td>
</tr>
<tr>
<td>Resource management</td>
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<td>2.88</td>
<td>-.06</td>
<td>.25</td>
<td>.03</td>
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<tr>
<td>Developing a vision</td>
<td>4.77</td>
<td>2.23</td>
<td>.25</td>
<td>.25</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Step 6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continued assistance</td>
<td>4.98</td>
<td>3.17</td>
<td>.28</td>
<td>.28</td>
<td>.03</td>
</tr>
<tr>
<td>Monitoring progress</td>
<td>2.51</td>
<td>2.52</td>
<td>.12</td>
<td>.28</td>
<td>.03</td>
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<tr>
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<td>3.80</td>
<td>.03</td>
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<tr>
<td>Resource management</td>
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<td>2.88</td>
<td>-.10</td>
<td>.28</td>
<td>.03</td>
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<tr>
<td>Developing a vision</td>
<td>3.93</td>
<td>2.56</td>
<td>.20</td>
<td>.28</td>
<td>.03</td>
</tr>
<tr>
<td>Creating a change culture</td>
<td>4.10</td>
<td>2.40</td>
<td>.19</td>
<td>.28</td>
<td>.03</td>
</tr>
</tbody>
</table>

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Research Question 2

A t-test for independent samples was employed to answer Research Question 2: *How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools?* The null hypothesis for RQ 2 states there will be no significant difference between the teachers’ or administrators’ perception of the implementation of inclusion within their schools as measured by the CPS of both groups.

First, the two groups were analyzed to see if the variance of the scores for the two groups was the same. The results of the Levene’s test for equality of variance validated the two groups were equal ($p = .623$), so equal variances was assumed. There was, therefore, no significant difference in scores for teachers ($M = 3.15, SD = .71$) and administrators ($M = 3.53, SD = .98; t(94) = 1.70, p = .09$, two-tailed). The magnitude of the difference in the means (mean difference = .38, 95% CI: -0.06 to .82) was large (eta squared = 0.17).

Since administrators are responsible for facilitating the change process and teachers are the implementers of change, this analysis was designed to explore whether any differences existed between the means of two groups (i.e., teachers and administrators). The analysis was conducted for the entire population ($N = 96$). Initially, an analysis was to be conducted for each of the 7 schools by comparing the administrators’ perceptions of the change process to that of the teachers. Due to the low sample sizes for each school, this analysis could not be performed with reliable results.

An independent-samples $t$-test was initially selected to compare the CPS scores for administrators and teachers. By comparing the difference of the means of these two
groups with their standard deviation and sample size, \( t \)-tests determine the probability that the difference is not due to random chance. However, given the small sample size for administrators \( (n = 13) \), and some schools only had 1 administrator to participate, there was concern regarding the distribution of scores failing to achieve normality. Therefore, to confirm if normal distribution existed for the groups, an analysis of the data would determine if it is reasonable to assume if data from both subpopulations were of normal distribution. Due to the low sample size, normal distribution cannot be presumed and must be determined if the data do represent a normal distribution for each subpopulation. The null hypothesis is the distribution of the data in the sample conforms to a normal distribution.

By first conducting a Shapiro-Wilk test for normality, the analysis results and Q-Q Plot revealed that the CPS scores are normally distributed for teachers for the sample (Figure 3). Normal distribution, however, was not evident for the administrators (Figure 4), which may be attributed to the low number of administrators participating \( (n = 13) \). To further address the normality of the distribution, the Kolmogorov-Smirnov test was conducted, which confirmed the distribution was considered normal for teachers, but not for administrators. Therefore, the researcher failed to accept the null hypothesis that the distribution of scores for each subpopulation was normally distributed.

Since the sample size for administrators is small and the data do not follow the normal distribution, use of the independent sample \( t \)-test would fail to provide reliable results. Therefore a non-parametric test must be employed.

The Mann-Whitney U test was used to test differences between the two independent groups on a continuous measure for the total population. The Mann-
Whitney is a non-parametric alternative to the independent-sample $t$-test, which compares medians of the two groups, rather than the means. In comparing the administrators ($n = 13$) and teachers ($n = 83$), the Mann-Whitney U Test revealed significant differences in the CPS scores of administrators ($Md = 3.90, n = 13$) and teachers ($Md = 3.24, n = 83$), $U = 300.50, z = -2.561, p = .01, r = .26$. The analysis revealed there was a significant difference in CPS scores for administrators and teachers for the total sample. Therefore, the null hypothesis for RQ 2 was rejected.
Figure 3

Normal Q-Q Plot for CPS Scores and Teachers
Research Question 3

Research Question 3 employs the results of the ORI to answer: *Are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers’ attitudes?* Since administrators were to respond according to how they thought their teachers would respond to the ORI, this analysis was designed to explore whether any differences existed between the means of two groups (i.e., teachers and administrators). To examine any suspected differences, a *t*-test for independent samples was utilized to examine whether any significant difference existed between the teachers’
attitudes toward inclusion and the principals’ perception of the teachers’ attitudes. The null hypothesis for RQ 3 states the attitudes of teachers will be consistent with how administrators perceive the attitudes of their teachers after the implementation of inclusion.

Once again, a Shapiro-Wilk test for normality was conducted which revealed that the ORI scores were normally distributed. A $t$-test was used to explore if the attitudes regarding the inclusion of students with disabilities were different between the administrator and teacher groups. It was stated in $H3_A$ that the teachers’ attitudes toward inclusion would be significantly more positive than as perceived by their administrators. Likewise, $H3_B$ hypothesized the attitudes of teachers would be significantly more negative than as perceived by their administrators.

Results indicated that the difference was not significant in ORI scores for administrators ($M = 103.23, SD = 26.02$) and teachers ($M = 92.76, SD = 20.31; t (94) = 1.66, p = .41$, two tailed). Since no significant difference between the teachers’ ORI scores and administrators’ perception of the teachers’ ORI score was noted, the null hypothesis for RQ 3 was rejected. Based upon the Antonak and Larrivee’s (1995) scoring matrix, the possible range on the ORI measures was 0 to 150, where higher scores indicate a more favorable attitude toward inclusion. The obtained range for the administrator group was 50-125 and the range for the teacher group was 38-134. The mean score obtained using the original sample ($N = 96$) was 96.71 with an $SD$ of 22.03 and a range from 38-134. The comparison of the mean scores revealed the administrators’ perception of the teachers’ attitudes toward inclusion is more favorable than what the teachers actually reported. Therefore, alternative hypothesis $B$ is accepted,
finding the teachers have a less favorable (i.e., more negative) attitude toward inclusion than what is perceived by the administrators.

The attitudes harbored toward individuals with disabilities represent a complex and multidimensional facet of educators. Positive attitudes characterize a successful inclusive program that supports and values the diversity within the classroom, while negative attitudes represent lower expectations and an inferior quality of instruction (Antonak & Larrivee, 1995). Because of the wavering degree of complexity in individual's attitudes, the ORI survey included four orthogonal factors of varying score ranges: benefits of integration (score range 0-48), integrated classroom management (score range 0-60), perceived ability to teach students with disabilities (score range 0-18), and special versus integrated general education (score range 0-24). Antonak and Larrivee (1995) report the higher scores reflect a more positive attitude for the factor.

The participants responded to the ORI survey based upon the role each portrayed in the school: (a) teachers responded based upon their experiences teaching in the inclusive classroom as the change facilitators of inclusion; and (b) administrators responded how they perceived the teachers to respond to inclusive practices in the schools. Examining the two groups of educators reveals that the mean of the administrators is higher than the teachers for all four factors. Collectively, the ORI mean scores for the total sample ($N = 96$) revealed benefits of integration, $M = 36.88, SD = 7.41$; integrated classroom management, $M = 36.23, SD = 10.16$; perceived ability to teach students with disabilities, $M = 8.59, SD = 3.84$; and special versus integrated general education, $M = 12.48, SD = 4.22$. 
Table 14 provides a representation of the ORI mean scores for teachers and administrators. From the results reported, the ORI scores for administrators was slightly greater than for the teachers, indicating the principals perceive teachers to have more positive attitudes toward inclusion than what the teachers actually reported. As the data indicates, however, the scores for both groups are considerably low for Factors II, III, and IV. Factor I, which a maximum score of 48, reports a mean score of 36.78 for teachers and 37.46 for administrators ($Md = 39.00$). Based upon the graphical representation, the distribution for Factor I represent a negative skew, which indicates relatively fewer number of lower scores (see Figure 5).

Table 14

Means with Confidence Intervals (CIs) and Standard Deviations of Teachers and Administrators for the ORI's Four Orthogonal Factors

<table>
<thead>
<tr>
<th></th>
<th>Teachers$^a$</th>
<th>Administrators$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$ ($SD$)</td>
<td>95% CI</td>
</tr>
<tr>
<td>Factor I</td>
<td>36.78 (.79)</td>
<td>[35.22, 38.35]</td>
</tr>
<tr>
<td>Factor II</td>
<td>35.08 (1.09)</td>
<td>[32.92, 37.25]</td>
</tr>
<tr>
<td>Factor III</td>
<td>8.46 (.42)</td>
<td>[7.63, 9.29]</td>
</tr>
<tr>
<td>Factor IV</td>
<td>12.43 (.44)</td>
<td>[11.57, 13.30]</td>
</tr>
</tbody>
</table>

$^a n = 83$. $^b n = 13$
An independent samples *t*-test compared the mean scores of both groups for the ORI factors. The Levene’s Test for Equality of Variances reported the variances between the two groups are not significantly different for the factors. Analysis of the data revealed no significant difference in the ORI scores for teachers and administrators for Factors I, III, and IV, reporting \( t(94) = .31, p = .76 \); \( t(94) = .88, p = .38 \); and \( t(94) = .27, p = .79 \), respectively. There was a significant effect, however, for Factor II (*integrated classroom management*), \( t(94) = 2.90, p = .005 \). Factor II assesses concerns educators have regarding the behavior of students with disabilities in the general classroom, including appropriate classroom management procedures. The results, therefore, indicate
principals perceive teachers to have a more positive outlook on the behavior of students with disabilities in the classroom.

**Research Question 4**

Correlational statistics were used to examine the relationship between various demographic data and teacher attitudes as measured on the ORI. Spearman’s rank order correlation coefficient (Spearman’s $r$) was used to examine the correlation between the teachers’ overall ORI score and the variables of years of teaching experience, number of years inclusion had been implemented, the number of special education courses completed, the amount of training or professional development devoted to special education, and the amount of training or professional development devoted to inclusion.

One-way between-groups analysis of variance (ANOVA) was conducted to compare the impact of teacher experience on teacher ORI scores. All data for the independent variables, except certification, were collapsed to reduce the number of categorical variables and eliminate the possibility of groups having only 1 data using the following scale: 1=0-9, 2=10-19 and 3=20 or more.

An analysis of variance (ANOVA) was conducted to examine the ORI mean score in relation to the variables of years of teaching experience, the number of years inclusion had been implemented, the number of special education courses completed, the amount of training or professional development devoted to special education, and the amount of training or professional development devoted to inclusion. A one-way between-groups ANOVA was employed since each independent variable included three or more levels or groupings. This type of analysis provides explanation as to whether there are significant differences in the mean scores on the dependent variable across all the groupings of the
independent variable. Likewise, post-hoc tests were included to find out where the
difference existed.

A statistically significant difference was noted only for years of experience
teaching, \( F(2, 80) = 3.74, p < .05 \). A Tukey’s HSD post-hoc test was performed to
compare each of these variables. The results revealed that for teaching experience the
ORI total score was significantly different between the experience groups with less than
10 years of teaching experience and greater than 20 years of teaching experience. The
means for the group with less than 10 years teaching experience was 87.83 and the mean
for the group with greater than 20 years of teaching experience was 103.33. This
indicates that teachers with more experience in the classroom have a more favorable
attitude toward students with disabilities being included in the general classroom setting.
The results of an ANOVA conducted on the data for Research Question 4 are presented
in Table 15.
Table 15

One-Way Analysis of Variance for the Effects of Teaching Experience, Inclusion Experience, Special Education Coursework, Professional Development (PD) for Special Education, and Professional Development (PD) for Inclusion on Teacher ORI Scores

<table>
<thead>
<tr>
<th>Variable and source</th>
<th>SS</th>
<th>MS</th>
<th>F(2, 80)</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>2891.97</td>
<td>1445.99</td>
<td>3.74</td>
<td>.03</td>
<td>.09</td>
</tr>
<tr>
<td>Within</td>
<td>30921.21</td>
<td>385.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>150.07</td>
<td>75.04</td>
<td>.18</td>
<td>.88</td>
<td>.00</td>
</tr>
<tr>
<td>Within</td>
<td>33663.11</td>
<td>420.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special education courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>1334.94</td>
<td>667.47</td>
<td>1.64</td>
<td>.20</td>
<td>.04</td>
</tr>
<tr>
<td>Within</td>
<td>32478.24</td>
<td>405.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD for special education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>1574.48</td>
<td>787.24</td>
<td>1.95</td>
<td>.15</td>
<td>.05</td>
</tr>
<tr>
<td>Within</td>
<td>32238.70</td>
<td>402.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD for inclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>388.81</td>
<td>194.40</td>
<td>.465</td>
<td>.63</td>
<td>.01</td>
</tr>
<tr>
<td>Within</td>
<td>33424.37</td>
<td>417.81</td>
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</tbody>
</table>
Summary of Findings

The purpose of this study was two-fold to help answer the four research questions posed by the researcher. First, the study examined the change process as inclusion was introduced within schools and the impact the process had upon teacher attitudes toward the inclusion of students with disabilities. Attitudinal and perceptual data collected from teachers and administrators included the Opinions Relative to the Integration of Students with Disabilities (ORI) survey and the Change Process Survey (CPS).

Secondly, this study examined the relationship between teacher attitudes toward inclusion and various teacher variables. A participant demographic questionnaire relied upon teachers’ responses to teaching experience, number of special education courses completed, and the amount of professional development or training related to special education and inclusion.

Table 16 summarizes the statistical analysis employed and the results for each of the four research questions.
Table 16

Summary of Findings

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Statistical Test</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?</td>
<td>a. Teacher total ORI and CPS scores: Pearson’s r</td>
<td>$r = .437, n = 83, p &lt; .01$</td>
</tr>
</tbody>
</table>
| | b. Teacher ORI score and each construct of CPS: Pearson’s r | Construct 1: $r = .323, p < .001$  
Construct 2: $r = .357, p < .001$  
Construct 3: $r = .215, p = .051$  
Construct 4: $r = .277, p = .011$  
Construct 5: $r = .343, p < .001$  
Construct 6: $r = .423, p < .001$ |
| | | Statistically significant positive correlations were noted between each construct and the ORI score. |
| 2. How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools? | Mann-Whitney U test | $Md = 3.90, n = 13$) for administrators  
$Md = 3.24, n = 83$) for teachers |
<p>| | | $U = 300.50, z = -2.561, p = .01, r = .26.$ |
| | | The analysis revealed there was a significant difference in CPS scores for administrators and teachers for the total sample. |
| | | The null hypothesis is rejected. |</p>
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Statistical Test</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers’ attitudes?</td>
<td>( t )-test for Independent Samples</td>
<td>( M = 103.23, SD = 26.02 ) for administrators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( M = 92.76, SD = 20.31 ) for teachers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( t(94) = 1.66, p = .41 ), two tailed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Difference was not significant in ORI scores for administrators and teachers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{The null hypothesis is rejected; alternative hypothesis B is accepted.}</td>
</tr>
<tr>
<td>4. How do various demographic variables influence attitudes of teachers toward inclusion?</td>
<td>Analysis of variance (ANOVA)</td>
<td>Teaching experience: ( F(2, 80) = 3.74, p = .03, \eta^2 = .09 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inclusion experience: ( F(2, 80) = .18, p = .88, \eta^2 = .00 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Special education courses: ( F(2, 80) = 1.64, p = .20, \eta^2 = .04 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PD for special education: ( F(2, 80) = 1.95, p = 1.95, \eta^2 = .05 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PD for inclusion: ( F(2, 80) = .465, p = .63, \eta^2 = .01 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>\textit{Failed to reject the null hypothesis for the teaching experience variable}</td>
</tr>
</tbody>
</table>

**Conclusion**

This chapter presented the results of the study in attempt to answer the four research questions that guided this exploration of the change process and attitudes toward the implementation of inclusion. The subsequent chapter will summarize and discuss the
findings from the study, relating the results to prior research and implications for future practice and investigations.
CHAPTER V
RESULTS

This descriptive correlational research study examined the relationship between the change process for inclusive teaching practices and the attitudes of educators toward inclusion of students with disabilities in the general education classroom. Additionally, the study examined the relationship between educators' attitudes toward inclusion and variables related to experience, certification and professional development, and training. This chapter presents the summary of the data, draws conclusions from the current study, and makes recommendations for the field and for future research. The summary includes a restating of the purpose, research questions, hypotheses, and findings of the study. The conclusion and recommendations of the study are reported based upon the outcomes of each research question dealt with statistically in Chapter IV.

Summary of the Study

Using the diffusion of innovation model (Rogers, 1995) and guided by a theory-driven facilitative change leadership framework (Hord, 1992), this study compared the attitudes of teachers and administrators toward two constructs: (1) the change process as inclusion was introduced in the schools; and (2) the inclusion of students with disabilities in the general education classroom. Teacher and administrator attitudinal data were determined by the Opinions Relative to the Integration of Students with Disabilities (ORI). The ORI is a self-administered 25-item Likert assessment designed to measure educators' attitudes of the inclusion of students with disabilities in the general education
setting. The educators' perception of the change process as the schools implemented inclusion was assessed by the 21-item Change Process Survey (CPS). Finally, a brief demographic survey collected data on the variables pertinent to the participants’ educational and experience background.

Upon the return of the surveys, the demographic data were analyzed to identify themes in an effort to categorize the data. The data were analyzed using methods that best fit the research question posed by the researcher and would provide the analysis to either reject or fail to reject the null hypothesis.

Participants

The population for the sample consisted of all elementary schools within the Green River Regional Education Cooperative, which includes 35 school districts within central Kentucky. After meeting with all Directors of Special Education from these 35 school districts during a regional meeting, the request was made for the Directors to nominate elementary schools in their districts that may be willing to participate. The researcher followed up with the Directors by email to introduce the study and the data collection procedure. From the 35 school districts within GRREC, 5 districts replied with their willingness to participate, resulting in 7 participating schools.

The population consisted of 311 teachers and administrators from the 7 schools. The researcher mailed surveys to the Directors, along with a cover letter detailing instructions on returning the surveys and a self-addressed stamped envelope. The schools returned 96 completed surveys (31% return rate) from 83 teachers and 13 administrators, which provides a comparable response rate consistent with current literature of 34.6% to 39.6% (Cook, Heath, & Thompson, 2000). This represents a relatively low participation
rate (3.5%) for the entire GRREC region, however, given that the region employs over 2600 educators.

With a small sample size, inferences made for the entire collection of unobserved scores will potentially be subject to error (Asraf & Brewer, 2004; Dillman, Smyth, & Christian, 2009). The response rate of mail surveys, therefore, becomes contingent upon two factors: saliency and leverage (Dillman et al.). Based upon the findings of Groves, Singer, and Corning (2000), the leverage-saliency theory proposes individuals are differentially motivated to respond to surveys, and a single survey design attribute will “have different ‘leverages’ on the cooperation decision for different persons” (p. 306). First, participants respond based upon different aspects of the surveys (i.e., leverage). Leverage aspects may include monetary incentives, survey length and design, and the survey topic. Secondly, participants respond based upon the emphasis placed upon each aspect by the researcher (i.e., saliency). Saliency refers to the degree in which the topic resonates with the prospective respondent. As the leverage-saliency theory suggests, if the participant finds the topic of great interest or beneficial to the good of society, the more salient the participant finds the topic.

With the current study, leverages of the survey design and implementation may have attributed to the saliency of the study, thus resulting in a low response rate. Although Dillman, Smyth, and Christian (2009) found larger surveys (8-1/2” by 11”) are a more conventional format that is easier for participants to handle, Beebe, Stoner, Anderson, and Williams (2007) found a smaller survey size (6-1/8” by 8-1/4”) yields greater return of completed surveys. Beebe et al. noted, however, that the larger size does provide a greater response rate if printed on colored paper (i.e., non-white).
regards to the current study, teachers completed survey booklets printed on white paper, folded to 8-1/2” by 11” size; administrators completed survey booklets of the same size printed on blue paper. The response rate for administrators (62%) far exceeded the teachers (29%).

This chapter is divided into several sections. First, the findings are reviewed and related to research-supported evidence within the context of related literature on change and attitudes toward inclusion. Secondly, the limitations of this study are presented and reviewed. Finally, recommendations for future educational research are presented.

**Theoretical Framework**

Rogers’ (2003) *Diffusion of Innovations* model presents a complex theory toward understanding how new programs and practices become successfully introduced within an organization. As Rogers postulated, an innovation undergoes a gradual transformation, morphing from an idea or concept until ultimately accepted within the organization as a practiced norm. This model, the *innovation-decision process*, provides the impetus for change to take place with success.

The diffusion begins with the pioneering guidance and direction of the leader and gradually filters through the organization via the change implementers. As the innovation permeates throughout the organization, the acceptance rate of the innovation becomes expeditious, gaining momentum as more members of the organization come to accept and practice the innovation. The innovation-decision process involves a multi-step procedure: understanding the innovation (*knowledge*), formulating a positive or negative opinion of the innovation (*persuasion*), acceptance or rejection of the innovation (*decision*), and the innovation becomes common practice (*implementation*).
When the innovation introduced is inclusion, the principals become the facilitative leaders, and the teachers assume the role of the change implementers. Based upon Rogers’ (2003) postulate, teachers will come to accept inclusion when they realize inclusion yields an advantage to them. Based upon the facts of the current study, the participants have achieved the implementation stage, as inclusion was part of the schools’ culture for students with disabilities. However, Rogers further adds that a final stage exists, although many do not encounter this phase: confirmation stage. During this stage, individuals may reverse their decision to accept the innovation, particularly if the members of the organization encounter opposition or disrupt the equilibrium of the organization. The teachers of the current study reported consistently neutral opinions toward the inclusion of students with disabilities in the classroom. Given these results, the teachers could encounter the final phase, if the teachers continue to perceive that inclusive practices contribute to their negative attitudes.

Findings

The research for this study was framed to address one overarching question that guided this study: Does the fidelity toward change during the implementation of the inclusion innovation affect educators’ attitudes toward inclusive practices for students with disabilities? The researcher hypothesized that if change is implemented with fidelity, then change implemented for inclusion will be an accepted and committed school practice for students with disabilities. Four research questions guided this study to help answer the overarching question:

1. How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?
2. How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools?

3. Are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers’ attitudes?

4. How are the attitudes of teachers toward inclusion influenced by the following demographic variables: years of experience, years implementing inclusion within the schools, number of special education courses completed during teacher education programs, amount of training or professional development devoted to special education, and amount of training or professional development devoted to inclusion?

In the subsequent sections, each of research questions and null hypotheses will be addressed independently based upon the data collection and analysis discussed in Chapter IV.

**Research Question 1**

*How does fidelity to the constructs of the change process influence the attitudes of teachers who have implemented inclusion in their classrooms?*  
Quinn, Spreitzer, and Brown (2000) noted change does not come about easily, but can occur by all members of the organization assembling collaboratively to adjust their feelings and attitudes. The conceptual framework supported by the literature for this study concludes the process in which organizations undergo systemic change have great influence over how the members of the organization perceive, and either come to accept or reject, the change. Therefore, the success and sustainability of inclusion in the schools relies upon the
administrator as the change agents within the schools (Fullan, 2002a; Fullan, 2002b; Hall & Hord, 1987).

The framework of organizational change, as outlined by Hord (1992), focuses on the six constructs that guide change agents through the process. Hord recommends the six constructs include: (1) creating a change culture; (2) developing a vision; (3) resource management; (4) training and professional development; (5) monitoring progress; and (6) continued assistance.

The relationship between teachers’ attitudes and the change process constructs was examined using the CPS (Keaster, 2007) and the ORI (Antonak & Larrivee, 1995). The mean scores of the teachers’ CPS constructs provided evidence the teachers viewed fidelity to change process constructs as slightly disagree to slightly agree ($M$ range 2.70 to 3.70). Teachers ranked the highest scores on creating a change culture (Construct 1; $M = 3.73$), developing a vision (Construct 2; $M = 3.13$), and monitoring progress (Construct 5; $M = 3.13$). The lowest ranked constructs were continued assistance (Construct 6; $M = 3.10$), resource management (Construct 3; $M = 3.05$), and training and professional development (Construct 4; $M = 2.68$). Based upon these findings, the null hypothesis was rejected.

The correlations between the change constructs and the ORI scores indicated that the administrators’ adherence to the fidelity of the change process increases teachers’ attitudes toward inclusion practices in the schools. The findings indicated a statistically positive correlation between the attitudes toward inclusion and each of the change process constructs of creating a change culture ($r = .323, p < .01$); developing a vision ($r = .357, p < .01$); resource management ($r = .215, p = .51$); training and professional
development \( (r = .277, p < .05) \); monitoring progress \( (r = .343, p < .01) \); and continued assistance \( (r = .423, p < .01) \). The correlations between the teachers’ attitudes and the constructs of creating a change culture, developing a vision, monitoring progress, and continued assistance may be viewed as moderate, while the correlation between the teachers’ attitudes and the constructs of resource management and training and professional development may be viewed as small. Based upon the data, these statistically significant positive correlations, nonetheless, would indicate that as the administrators’ fidelity to each of the change constructs increases, the attitudes of teachers would increase.

The strongest relationship was noted between the teachers’ attitudes and continued assistance. Once an innovation has been introduced, leaders must provide guidance and support to continue successful implementation. Hord (1992) stipulates leaders may provide assistance through various avenues, such as individual assistance from staff (i.e., coaching) or visits to other schools where inclusion has been successfully implemented. Administrators must, however, be cognizant of examining the change process from various perspectives, as teachers learn differently and change at different rates and, therefore, will need varying levels of continued assistance and coaching. Prior research (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Hu & Roberts, 2011; Irvine, Luport, Loreman, & McGhie-Richmond, 2010; Southwest Educational Development Laboratory, 2000; Villa, Thousand, Nevin, & Liston, 2005; Worrell, 2008) supports the findings from this study in regards to leaders providing continued assistance.

As evidenced by Villa et al. (2005), successful inclusive practices were indicative of a supportive administrative staff. The success of an innovation relies upon the support
from the leaders within the organization, not only before and during implementation, but even after the implementation phase. *Continued assistance* from the principals provides the teachers reassurance of the administrator and school’s commitment to inclusion, thus increasing the likelihood of achieving sustainable inclusive practice in the schools (Hu & Roberts, 2011; Worrell, 2008).

The *continued assistance* construct extends beyond guidance solely within the classroom and requires principals to be supportive in changing the overall culture of diversity within their buildings. Principals transform the thought process, shifting from attempting to understand the *disability* to accepting the *diversity*. As teachers witness principals making this transformation, leaders further support and empower their teachers in continuing inclusion (Irvine, Luport, Loreman, & McGhie-Richmond, 2010; Ryan, 2006). Thus, this advocacy for acceptable inclusion facilitates the *continued assistance* outside the classroom as principals foster and nurtures the change process.

The Southwest Educational Development Laboratory (SEDL; 2000) further noted the importance of providing *continued assistance* in establishing collaboration and collegiality within the school. The principals and teacher, therefore, foster opportunities to extend learning and practices of inclusive teaching. Through these practices, leaders enable their teachers through coaching by having other individuals (e.g., peer teachers, consultants, principals) provide additional instruction and support (SEDL). Earlier research of Joyce and Showers (1980) supports coaching by stipulating when new strategies or practices are implemented, assistance in the classroom from other individuals assist in transferring the skills and strategies to the classroom setting.
Finally, the continued success of inclusion relies upon leaders to establish and maintain a committed and ongoing focus on school improvement. Evoking inclusive change within the schools depends upon the building leaders to periodically evaluate the implementation of inclusion and provide teachers supports in areas of deficit, which may include staff development and growth (Salisbury & McGregor, 2002) or instructional leadership (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004).

Fullan (2002a) postulates that sustained school improvement cannot be achieved unless the whole system is moving forward. In order for the system to move forward, the organization must engage and share in developing a vision. Other researchers (Hu, 2011; Thompson, 2010; Trybus, 2011) further contend that change agents work to build commitment to the common vision by communicating the benefits of the proposed change. In the current study, the second of Hord’s (1992) change process construct noted the second strongest relationship, which is consistent with current literature. Principals must diligently work to facilitate a collaborative vision for inclusion (Smith & Leonard, 2006), while all stakeholders invest in the change for the benefit of the students (Riehl, 2008). Hu (2011) further adds the shared commitment of the entire school community shall produce a greater positive outcome for students with disabilities taught within inclusive settings. Consistent with the current findings, prior research (Beets, Flay, Vuchinich, Acock, Li, & Allred, 2008; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Guzman, 1997; Roach & Salisbury, 2006) suggests the need for administrators and teachers to establish a shared vision for the success of inclusive programs.

Hord (1992) and the SEDL (2000) regard monitoring progress as a method to evaluate the effectiveness of a program in efforts to identify problems, challenges and
concerns, and resolve them quickly. Rice and Urban (2010) consider this construct part of organizational management that requires administrators to evaluate the contribution teachers make to student’s learning, to the school’s culture, and the retention and development of teachers in the school. Consistent with the findings of this study, the *monitoring progress* construct contributes to the positive attitudes of teachers when administrators closely monitor the progress of inclusion implementation (DiPaola, Tachannen-Moran, & Walther-Thomas, 2004). The moderate correlation between the *monitoring progress* construct and teachers’ attitudes is further validated by previous research studies, which allude to administrators using evidence (e.g., student test scores, classroom observations, peer groups) to continually monitor and evaluate the implementation of an innovation (Fullan, 2002a; Fullan, Cuttress, & Kilcher, 2005; Hirsh & Hord, 2010).

The need of *creating a change culture* relies upon school administrators to create a context that fosters school change and improvement (Southwest Educational Development Laboratory, 2000). Changing the culture of the school requires leaders to build capacity, which involves moving people forward (Fullan, Cuttress, & Kilcher, 2005), while creating the context for change through open dialogue and building coalitions (Hord, 1992).

The statements of teachers’ CPS related to *creating a change culture* included Item 1 (*M* = 4.36), Item 2 (*M* = 4.12), and Item 3 (*M* = 3.83), all of which had the highest mean scores for teachers. Items 1 and 2 assessed teachers’ perception of their supervisors’ efforts to establish a “proactive orientation toward organizational improvement efforts” while the supervisors “support taking risks” that foster school
improvement. Both statements fall within the “Agree” to “Strongly Agree” ratings, which indicate the schools are supportive of implementing change even if the change involves unorthodox measures. Item 3, however, specifically solicits teachers’ response toward their belief that prior to implementation, inclusion would improve performance for students with disabilities. Teachers’ responses rated between “Undecided” and “Agree” ($M = 3.83$), which potentially reflects the notion that while the schools were supportive of change, many of the participants may not have invested in open discussion regarding the benefits of inclusion before implementation. Furthermore, without dialogue among the school stakeholders, resistance to implementation of inclusion becomes stagnant because of the school’s entrenched culture that resists efforts to change (Ryan, 2010).

The findings related to Items 1 and 2 are validated by current school improvement literature that leaders must provide supportive, motivating leadership when implementing improvements within their schools (Irvine, Lupart, Loreman, & McGhie-Richmond, 2010). The research of DiPaola, Tschannen-Moran, and Walther-Thomas (2004) further adds that principals are the prime influence on school culture and demonstrate willingness to “do whatever it takes” to promote change for the betterment of the students (p. 4). Item 3, however, requires teachers and leaders to communicate on the challenges, concerns, and benefits related to implementing change. Garrison-Wade, Sobel, and Fulmer (2007) concur that individuals within an organization must communicate to identify processes that foster an environment of inclusive schools. Through communication among stakeholders, principals become informed on the needs and concerns of teachers to make inclusion a successful program in the schools (Guzman, 1997). Therefore, creating a change culture can be the most difficult step for
implementation of a new program because it requires schools to change prevailing structures (Southwest Educational Development Laboratory, 2000), such as values and norms (Fullan, 2002a; Smith & Leonard, 2006) and established behaviors (Schumacher, 2011). Creating the change requires principals to empower their staff to move forward by engaging in decision-making that promotes successful implementation of inclusion (Smith & Leonard).

The weakest relationship, albeit statistically significant, was noted between the teachers' attitudes and the construct of resource management. Resources necessary for the implementation of inclusion include not only financial assets, but allocations of time, people or staff, materials, and equipment (Hord, 1992). While the correlation was small, the results support prior of Kochlar, West, and Taymans (2000) that identify resources as one of the organizational barriers to inclusion, which may have resulted in the weak correlation.

The questions of the CPS pertaining to the teachers' perception of resource allocation included Item 8 ($M = 3.2$), Item 9 ($M = 2.94$), Item 10 ($M = 3.27$) and Item 11 ($M = 2.89$). The administrators responded more favorably than the teachers on the same statements: Item 8 ($M = 4.0$), Item 9 ($M = 3.75$), Item 10 ($M = 3.83$) and Item 11 ($M = 3.92$). This difference in the means, particularly for Items 9 and 11, indicate administrators may not be providing the necessary supports and funds to meet the needs of the teachers.

Item 9 asked for the participants to rate their response to the following statement: "Concerning the implementation of inclusion of students with disabilities in my organization, I was provided appropriate funds to successfully carry out the inclusion of
students with disabilities program.” Hu and Roberts (2011) support the importance of administrators providing appropriate resources for the successful implementation of inclusion. DiPaola, Tschannen-Moran, and Walther-Thomas (2004) further add this process must begin with the administrator in the management and administration of the organizational processes.

Administrators are charged with the responsibility of making resources available and allocating in ways to maximize school effectiveness (Hord, 1992). The allocation process involves a limited number of people, often through discussions between the administrator and school site-based committees. The difference between the administrators’ and teachers’ means for Item 9 may be indicative of teachers not being made aware of the limited availability of funds the principals may have to allocate for inclusive teaching. Based upon the results for Item 9, principals report they provided enough funds for inclusion to be implemented in the schools. The teachers, with their limited understanding or involvement in the budgetary process, do not feel the administrators provide adequate financial resources to purchase resources necessary for successful inclusion. While the differences exist between teachers and administrators in their perception of adequate funding, teachers come to the realization that budgets are limited and, over time, may be accustomed to the limited resources.

Item 11 asked the participants, “Concerning the implementation of inclusion of students with disabilities in my organization, I was given appropriate release time for planning and training for successful implementation.” As evidenced in prior research (Laframboise, Epanchin, Colucci, & Mocutt, 2004; Paliokosta & Blandford, 2010), time management plays an integral part in the success of inclusion, which again falls upon the
responsibility of the administrator to allocate time for planning (Worrell, 2008) and training (Boyer & Bandy, 1997; Kozik, Cooney, Vingiguerra, Gradel, & Black, 2009). In the early research of Haring, Stern, and Cruickshank (1978), the researchers’ findings support the idea that teacher’s attitudes toward inclusion greatly improve once educators are allowed time for training. Therefore, the correlation between teachers’ attitudes and their perception of the administrators’ resource management may be enhanced if administrators focus on providing teachers the necessary supports and resources necessary to make inclusion a successful practice (Agbenyega, 2007).

While the correlations between the teachers’ attitudes toward inclusion and their perception of the administrators’ adherence to the fidelity of the change process strategies were small to moderate, the findings of this study support prior research (Abell, 2009; Hord, 1992; Southwest Educational Development Laboratory, 2000). The six constructs of the change process are inherent in implementing successful changes within a school organization.

**Research Question 2**

*How do the views of teachers and administrators differ on their perceptions of the implementation of inclusion within their schools?* As leaders within the organization, principals serve as the facilitators to the change process by introducing an innovation to the organization. The principal infuses the concept of the innovation, in this case inclusion, through positive communication to all other members, in efforts to arouse interest and support for the change. However, as Fullan (2001) stated, many times individuals within the organization may not fully comprehend the reason for change or how to adequately introduce a new innovation within the organization. As a result, the
change process evokes a different sense of meaning for all members within the organization. For this reason, leaders within the organization must initiate change by empowering the staff and creating a culture conducive for change.

The findings for Research Question 2 revealed a difference between the teachers' and administrators' CPS scores, with the administrators scoring more favorably toward the inclusive practices. Because of the low sample size, a non-parametric analysis was conducted in order to provide more reliable results. Using the Mann-Whiney U test required a comparison of the median scores of the administrators (3.90) and teachers (3.24). Since principals assume the role of a change agent, the leaders envision the change process and initiate the steps necessary to carry through with implementation. Part of that process involves principals creating a shared vision within the schools, by which they ultimately hope to entice other members of the school to embrace the change. The slight gain in the principals' CPS scores over the teachers possibly reflects the leaders' ineffectiveness in establishing a shared vision among the staff. Trybus (2011) supports the theory that leaders must know how others within the school will react to change and then develop a process that involves planning, implementation, and monitoring (Fullan, 2007).

A further explanation regarding the discrepancy in the participants' scores (i.e., administrators' higher scores versus teachers' lower scores) may be attributed to the critical incident methodology, which provides insight into how perceptions and attitudes develop. Dollarhide, Smith, and Lemberger (2007) define critical incidents as situations or events that provide a phenomenological understanding as to how individuals attribute meaning to various learning experiences, whether positive or negative. Critical incidents
provide individuals opportunities to identify certain aspects of their own lives and
discover the underlying meaning of what has occurred (Halquist & Musanti, 2010).
Furthermore, Shapira-Lishchinsky (2011) added that teachers may categorize critical
incidents based upon the significance and meaning teachers attribute to the incident.

The teachers’ lower responses could potentially reflect negative prior experiences
teachers had working with students with disabilities. Through self-reflection, if teachers
found themselves to be inadequate or unprepared in teaching students with disabilities,
the meaning they attribute to the situation will be less favorable. As Friman (2004)
posits, negative critical incidents elicit a greater variety of emotions. Therefore, when
encountering a student with a disability in the classroom, particularly one that is more
profound or severe, teachers may associate the current experience as unfavorable as the
previous experience.

Through a comparison of the teachers’ and administrators’ CPS mean scores for
each of the 21-items, the teachers scored higher than the administrators on three items:
Item 1 and Item 2, which assessed the leader’s effectiveness in promoting improvement
in the schools; and Item 14, which assessed if teachers and administrators had similar
training regarding inclusion.

These findings appear consistent with current research on administrative roles
(Irvin, Lupart, Loreman, & McGhie-Richmond, 2010). Principals define their role as a
supportive leader and mentor for others in the school, working with staff to promote the
successful implementation of inclusive practices. Therefore, teachers, as the
implementers of the inclusive change, may attribute their lower perception of the change
process to a lack of necessary communication (Guzman, 1997). If teachers encounter an
area of concern (e.g., lack of appropriate instructional materials, training, planning time), then teachers must engage in open dialogue with the principals regarding these needs. Without the communication, principals infer the implementation is running without any concerns. Therefore, this assertion would suggest that teachers and administrators should be united in their efforts to evoke a successful inclusive program within the schools (Beets, Flay, Vachinich, Acock, Li, & Afred, 2008; Riehl, 2008), and be purposeful in establishing a system that allows for rich dialogue (Garrison-Wade, Sobel, & Fulmer, 2007).

**Research Question 3**

*Are the overall attitudes of teachers toward inclusion consistent with the perception administrators have of their teachers' attitudes?* The findings of the current study related to RQ 3 revealed no significant difference in the teachers' attitudes toward inclusion and the administrators' perception of their teachers' attitudes. The roles within the organization define what responsibilities teachers and principals assume in the change process. Administrators, acting as the change agent, initiate the movement for inclusion by providing supervision to teachers and evaluation of the program (Crockett, 2002) and providing necessary resources to promote the change (Soloman, Schaps, Watson, & Battistich, 1992; Villa, Thousand, Nevin, & Listen, 2005), while reducing resistance to the change initiative (Ryan, 2006). One person, however, cannot implement and sustain change (Akom, 2011). Teachers, assuming the role of the change implementer, must be committed and involved in creating a cultural shift to make inclusion successful (Roby, 2011). With the classroom teachers working to implement the inclusive program, they
witness firsthand what does work, what barriers exists, and what is further needed to make inclusion successful.

The analysis of each item of the teachers’ ORI scores reflects a fairly neutral attitude toward inclusion. The typical response fell between I agree a little (+1) to I disagree a little (-1). These results were consistent with those of Jobe, Rust, and Brissie’s (1996) study that utilized the ORI to examine teacher attitudes toward inclusion. As Jobe et al. posit, these neutral findings are gratifying; however, in the time span between the former authors’ study and the current study, results would be expected to have improved.

The data from the current study remain unique as no prior research compared teachers’ attitudes to principals’ perceptions of the teachers’ attitudes. However, drawing inferences from the current study’s data, a change in the school culture necessitates the success of inclusion by changing attitudes to fit the needs of the organization (Patterson, 2003). The change in attitudes originates from the leadership and is dependent upon the leaders committing to empowering their staff and teachers (Thousand & Villa, 1994).

Since no significant difference was found between the two groups, evidence suggests the teachers and administrators are in agreement on the effects inclusion has upon the school and supports the research of Hu and Roberts (2011) that a shared commitment of teachers and administrators fosters a more positive experience.

While there was no significant difference, the data suggest there continues to remain somewhat negative feelings toward the inclusion of students with disabilities in the general educational setting. As Antonak and Larrivee (1995) purport, the four factors – Benefits of Integration, Integrated Classroom Management, Perceived Ability to Teach


Students with Disabilities, and Special Versus Integrated Classroom Education – are components of the general education classroom necessary for inclusion to be successful. The scores from the total population reveal teachers may continue to lack the necessary elements to make inclusion successful. The concern, therefore, remains that negative teacher attitudes greatly affect the instruction (Hammond & Ingalls, 2003) and expectations teachers have for students with disabilities (Robinson, 2002; Santoli, Sachs, Romey, & McClurg, 2008).

As the diffusion of innovation model suggests, salient attributes (i.e., attitudes) toward a new innovation will begin to modify and change over time with greater implementation of the innovation (Rogers, 2002). Therefore, teacher attitudes toward inclusion will increase over a given period of time as the teacher recognizes the effectiveness of inclusion and observe the positive results. With 41% of the teachers reporting inclusion experience of 10 years or less, the innovation remains a new innovation for the participants. With continued administrative support and teaching experience, teachers' attitudes toward inclusive teaching and practices will continue to increase (Beets, Flay, Vuchinich, Acock, Li, & Allred, 2008)

Factor I, the Benefits of Inclusion, included items related to the benefits of inclusion for students with and without disabilities. The current analysis indicated Factor I was the most favorable of all factors, resulting in a negatively skewed distribution. This indicates more responses were identified as (+2) I agree pretty much and (+3) I agree very much. With a score range of 0-48, the mean score teachers and administrators, collectively, was 36.88, which implies the participants find value of integration for all
students, including the academic growth of students with disabilities, the acceptance of diversity in the classroom, and the promotion of social independence.

The results from the current study concur with prior research in that inclusion supports the academic growth and success of students in the general setting (Cole, Waldron, & Majd, 2004; Garriott, Miller, & Snyder, 2003; Rea, McLaughlin, & Walther-Thomas, 2002), but only when teachers provide instructional strategies that are known to support academic achievement for children with disabilities (Bender, Vail, & Scott, 1995). Moreover, Freeman and Alkin (2000) further add that full inclusion does benefit students with disabilities academically rather than partial integration. Students that spend a greater majority of time included in the general classroom benefit by consistent exposure to the curriculum when individualized to meet the needs of the student.

Factor II, the Integrated Classroom Management, included items concerning with the behavior of the students in an inclusive classroom and classroom management strategies necessary for successful inclusion. The teachers responded based upon observed behavioral issues students with disabilities exhibit in the general education classroom and the negative effect these students may have on others in the classroom. Based upon the findings of the current study, the respondents were less favorable in their responses, with a mean score of 36.23, with a possible score range of 0-60.

The results for this study conflict with the current research. Peltier (1997) found teachers favored the inclusion of students with disabilities because of the social benefits, such as the student’s sense of belonging and community within the school. Moreover, Peltier found the integration of students with and without disabilities provided benefits for both sets of students by fostering acceptance and tolerance of diversity. Teachers
noted students without disabilities were not inhibited in their social development, as inclusion reduced fears and uncertainty in having students with disabilities in the same classroom. On the contrary, with the additional supports typically evidenced in inclusive settings (i.e., collaborative special education teachers, supplementary aids), students without disabilities benefited from these as well as students with disabilities, supporting the Cole et al. (2004) assumption that inclusion benefits all students.

From the current study, the majority of survey item responses for Factor II fell within the (-2) *I disagree pretty much* to (+1) *I agree a little*, indicating the participants continue to exhibit inhibition or lack of confidence in their ability to teach students with disabilities. This self-efficacy idea is consistent with Lopes, Monteiro, Sill, Rutherford, and Quinn (2004) that found teachers may be willing to teach students with problems, but many do not think they are doing a good job. Therefore, Lopes et al. suggests teachers must be open to new teaching strategies and ideas.

Factor III, *Perceived Ability to Teach Students with Disabilities*, includes three items related to the teacher’s ability and training to teach students with disabilities. Item 10 required participants respond to “*General-classroom teachers have the ability necessary to work with students with disabilities.*” Being the only statement that required the participants to self-reflect on their own abilities, the teachers responded favorably, which would be expected of their own capabilities. Nearly three-fourths (73%) of the respondents answered with one of the three positive (+) ratings. Two statements, Item 2 and Item 19, required participants to examine their level of training in working with students with disabilities. Nearly 70% (Item 2) of the participants found inclusion to require “retraining” of the general classroom teacher, while 68% (Item 19) did not think
general classroom teachers have sufficient training to teach students with disabilities. Not surprisingly, nearly 70% of the participants had 5 or fewer hours of training devoted specifically to inclusion, and 67% had 5 or fewer hours of special education training or professional development.

Research conducted by Buell, Hallam, Gamel-McCormick, and Scheer (1999) and Lifshitz, Glaubman, and Issawi (2004) concur with the findings of this study on teacher self-efficacy. Teachers may believe they exhibit tolerance and acceptance of students with disabilities, but may be instructionally underprepared in knowing how to teach the students, particularly for students with moderate to severe disabilities (e.g., physical impairments, blindness, or moderate/severe mental retardation). While the current study did not collect student-specific data, the researcher noted this information may have some bearing on the participants’ responses.

General education teachers, likewise, must have the knowledge, skills, and supports in place in order for them to gain confidence in teaching students of inclusion. Many teachers of this study did not believe they were well-equipped or prepared, but they did think they were capable of teaching students with disabilities in their class. This finding is supported by the fact that most teachers may not be adequately prepared to teach students with disabilities (Lopes, Monteiro, Sil, Rutherford, & Quinn, 2004), but are willing to accept the students because of the availability of supportive services, such as classroom aides or co-teachers (Larrivee & Cook, 2001). Therefore, prior research (Avramidis, Bayliss, & Burden, 2000; Beattie, Anderson, & Antonak, 2004; Jung, 2008; Robinson, 2002) supports the necessity for teachers to have training in working with diverse populations. Jung further added that preservice or teacher preparation programs
should focus the university’s curriculum on preparing future teachers on successful inclusion, including requiring the students to see successful inclusion in practice.

Factor IV, *Special Versus Integrated Classroom Education*, included four survey items soliciting participants’ response to the best placement option for students with disabilities: (a) the general education classroom, or (b) a special or resource classroom. The results from the participants in the current study noted inconsistencies in the responses that leave room for speculation. Item 5 found 83% of the participants agree the general education classroom is the best setting for students with disabilities, but Item 23 reports 64% of the educators believe teaching of the students should be done by the special education teacher. From these findings, the researcher infers general education teachers welcome students with disabilities in their classroom, but prefer to have the support of the special education within the classroom (i.e., co-teaching). Robinson (2002) concurs with this speculation as general education teachers may learn new instructional strategies to provide effective teaching for students with disabilities. Smith and Leonard (2008) further add that the incorporation of a special education teaching in the regular classroom may garner support for inclusion by each becoming mutually supportive of one another in the shared vision of educating students with disabilities.

The educators’ responses on the ORI, collectively, reveal remarkable findings for the researcher. With no significant difference between the teachers’ and administrators’ responses, the results indicate there is consistency in the general attitudes of both groups toward inclusion. While inclusion is a relatively new innovation (10 years or less experience) for the participating schools, the negative attitudes continue to persist in the areas of training and the detrimental effect students with disabilities may have on the
entire classroom. The findings of this study provide evidence that training continues to plague successful inclusive practices within schools. This comes as no surprise when comparing the results of ORI’s Factor III with Item 14 of the CPS (... was provided the same/similar training regarding inclusion of students with disabilities as my supervisor.). These results indicate the educators are cognizant of the inept inclusion preparation and the need for further professional development or training.

Research Question 4

How are the attitudes of teachers toward inclusion influenced by the following demographic variables: years of experience, years implementing inclusion within the schools, number of special education courses completed during teacher education programs, amount of training or professional development devoted to special education, and amount of training or professional development devoted to inclusion? Teachers bring strengths and qualifications to every classroom experience, including a wealth of background experience and training. Carpenter and Dyal (2007) report administrators, when implementing a systemic change such as inclusion, should examine common characteristics of new and veteran teachers, including the teacher’s qualifications and strengths and professional development experiences. Research Question 4 examines various teacher variables and the relationship these variables have upon inclusion, including teacher experience, the amount of training or professional development devoted to special education and inclusion, prior inclusion experience, and the amount of special education coursework completed. The findings of the current study found no significant difference between teacher attitudes toward inclusion and the demographic variables with the exception of teaching experience. There existed a significant difference for
experience groups with less than 10 years of teaching experience and greater than 20 years of teaching experience. The means for the group with less than 10 years teaching experience was 87.83 and the mean for the group with greater than 20 years of teaching experience was 103.33. This indicates that teachers with more experience in the classroom have a more favorable attitude toward students with disabilities being included in the general classroom setting. Over time, teachers develop a repertoire of teaching strategies and skills that they find beneficial and effective for students, particularly those with disabilities. Teachers with more classroom experience, therefore, rely upon their wealth of experience, professional development and training that novice teachers have yet to master or develop. Additionally, experienced teachers are exposed to students with disabilities more frequently, giving the teachers adequate time to study and understand the disability, thus allowing them more time to be acclimated to the expectations of the disability category.

The findings of this study in regards to special education courses indicated that while there was no significant difference the in teachers' attitudes, there was a positive correlation, albeit slight, between the teacher attitudes and number of special education courses the teachers had completed. The means increased slightly between the groupings of 0-9 courses (M = 90.35), 10-19 courses (M = 92.92), and 20 or more courses (M = 100.75). While only slight, this increase reflects the notion that specialized coursework within special education contributes to the positive attitudes of teachers toward working with students with disabilities. This evidence correlates with prior research (Jung, 2008; Shippen, Crites, Houchins, Ramsey, & Simon, 2005; Turner, 2003) that found the more academic preparation an educator enjoyed, this had a greater impact on attitude.
formation, particularly if the educator participated in guided field experience (Jung) or obtained a dual certification in regular and special education (Shippen et al.).

In regards to teaching experience, prior research (Male, 2011) finds that teachers with fewer years of teaching experience (less than 10 years) have a more favorable attitude toward inclusion. This contradicts the findings of the current study. With 43% of the teachers having 10 or fewer years of experience, these teachers had a mean ORI score of 87.83, while teachers with 20 or more years of experience had a mean ORI score of 103.33. These results imply that as teachers gain classroom experience, the attitudes tend to be more positive. This contradiction with current research may be due to several factors: (a) personal efficacy of the teacher (Bender, Vail, & Scott, 1995; Subban & Sharma, 2005), (b) better understanding over time of student disabilities (Subban & Sharma, 2005), and (c) effective use of available resources (Robinson, 2002). Likewise, Avramidis, Bayliss, and Burden (2000) reported in previous studies teaching experience tends of be inconsistently reported and cannot be regarded as a strong predictor of teacher attitudes. Avramidis et al. agreed there is not a significant relationship between teacher attitudes and years of classroom experience.

Professional development and training has been stressed as an important contributing factor to teacher’s acceptance of inclusion. The findings of Avramidis, Bayliss, and Burden (2000) propose training is one of the greatest factors in the formation of positive attitudes, and while these researchers supported these findings, the current study found no significance between the professional development for inclusion or special education and the teacher attitudes. Other studies (Herner-Patnode, 2009; Kilanowski-Press, Foote, & Rinaldo, 2010; Male, 2011; O’Gorman & Drudy, 2010;
Philpott, Furey, & Penney, 2010; Simon & Black, 2011; Smith & Leonard, 2006) supported the notion that attitudes were positively affected when teachers acquired professional development or training.

It is worth noting, however, the type of training can have impact on the teacher attitudes. O’Gorman and Drudy (2010) suggest training should focus on developing system capacity for the school, where the entire school receives the same training for all teachers. This method places accountability on all school staff, rather than having an elite group (i.e., special education teachers) responsible for the inclusive practices while supporting the shared vision philosophy (Fullan, 2002a, 2002b, 2007; Hord, 1992).

Conclusions

These findings of the current study suggests that in order to ensure teachers implement the inclusive program with fidelity, school leadership must first develop a culture that encourages a shared vision among the faculty and is supportive of the innovation. The implementation process, however, is a collaborative effort, combining the leadership of the principals as the change agents and the change facilitation of the teachers as the implementers.

One overarching research question guided the research for this study: Does the fidelity toward change during the implementation of the inclusion innovation affect educators’ attitudes toward inclusive practices for students with disabilities? It is hypothesized that if the change process is implemented with fidelity, then change implemented for inclusion will be an accepted and committed school practice for students with disabilities. The results revealed that often the fidelity to a change innovation encounters circumstances unbeknownst to the change agents or beyond their control. For
the inclusion innovation, often principals lack one or more of the necessary elements teachers find necessary to implement inclusion.

With the current study, appropriate resource management and planning was not consistent with the expectations of the teachers. As Hord (1992) contends, the six constructs of the change process, which includes the allocation and management of resources, necessitate a successful implementation of any innovation. The results did, however, reflect a positive correlation between the six constructs and the educators’ attitudes. Therefore, to answer the predominant research question as it relates to the current study, when administrators adhere to the fidelity of inclusive change in the schools, the attitudes of educators will be positively influenced. As for being a committed practice within the schools, this depends upon the sustained efforts of those involved in the change process. Sindelar, Shearer, Yendol-Hoppey, and Liebert (2006) provide evidence that good programs often are prematurely aborted because of leadership change and teacher turnover.

As evidenced with this study, continued assistance ensures school leaders and teachers have the necessary supports to meet the needs of school improvement, particularly for students with disabilities. Continually assessing the school’s needs, as the change process entails, cultivates greater allegiance to the proposed innovation, thus creating a more sustainable program. As Fullan (2002b) posit, the longevity of school change requires the principals and teachers to nurture the change on a daily basis to help foster an environment conducive to change. This requires leaders to regularly assess the change and provide the supports to carry out the innovation with fidelity.
A leaders’ fidelity to the change process requires principals to find balance between authoritarian and supporter, which are crucial in shifting a school’s inclusive program from innovation to common practice. Yet, the transformation from an innovation to a sustainable practice, from creating a change culture to continually providing assistance to a new program, further validates the widely espoused axiom that “change is a process”.

**Limitations**

Any implications associated with this study should be made cautiously in light of the study’s limitations. The researcher, therefore, notes several limitations of the study that may affect the ability to generalize the findings: (a) the small sample size, (b) the sampling of non-urban elementary schools with small school populations, (c) lack of student-specific data (i.e., disability categories served by the teachers), (d) self-reporting of data, and (e) use of a traditional survey method (i.e., paper and pencil).

The return rate of 31% represents a small percentage of the GRREC population, considering the 96 teachers that make up the sample are to be representative of the approximately 2,600 teachers employed in the GRREC region. Given the small sampling, it would be erroneous to make any implications from this study toward the entire population based upon the participating 3% of the population. It is likely the participants in this study are not representative of the larger population of educators. To combat this issue for future implications, the researcher notes school-based surveys should not be administered at the start of school. Additionally, the researcher used a sample of convenience rather than a true random sampling. With not all educators within a single school participating, it is unknown if those who chose to participate are
systematically different from those who chose not to participate. The results of this study cannot be generally applicable to a larger population, but only suggested.

A second potential limitation is the sampling of non-urban school districts, with the largest town population consisting of 6,950 individuals. Each school district participating was located in the south central Kentucky geographical region, all within small farming communities. Caution should be used when generalizing the results of this study for larger, urban areas.

While all the schools participating in this study were of rural communities, this limitation may be considered an advantage given that larger, more urbanized schools potentially have larger budgets in which to operate. This provides schools with greater, more readily available resources that rural schools may otherwise not have access. Additionally, rural schools may have a smaller special education population, thus limiting general education teachers’ exposure to some categories of moderate to severe disabilities (e.g., autism, hearing impaired, severe cognitive delays). Therefore, teachers in rural districts may attribute this limited awareness as inferiority toward students with disabilities.

The third limitation of this study includes the lack of student data during the data collection process. Prior research (Lifshitz, Glaubman, & Issawi, 2004; Lopes, Monteiro, Sil, Rutherford, & Quinn, 2004; Praisner, 2003) alluded to certain disabilities teachers found to be most challenging in the classroom and should not be taught in the general education classroom. Since inclusion generally would imply various disability categories in the same classroom, teachers may have used a “worse case” scenario when responding. Teachers may harbor stronger, more negative attitudes toward students having a more
severe disability type (e.g., autism, cognitive disabilities, and emotional-behavioral
disability) as opposed to a less severe disability (e.g., specific learning disability, speech-
language disorder).

The self-reporting of data is limited by the fact that it rarely can be independently verified. The reliability of the data relies upon the honesty of the participants. Although no obvious identifiers in the demographic questionnaire were collected to ensure responses that truly reflect the respondents’ attitudes, there can be no guarantees honest responses were recorded. Additionally, there may be some element of political correctness in the participant’s responses. Consciously, the participants may find it socially acceptable to say or infer individuals do not want or like students with disabilities in their classrooms.

Finally, the use of traditional survey methods (i.e., paper and pencil) may limit participants’ willingness to contribute. Limiting the survey methods to paper and pencil limits the ability to target larger populations, primarily due to increased costs (Greenlaw & Brown-Welty, 2009). Employing a mixed-mode design requires the use of both paper and pencil surveys and Internet-based survey provides a greater global outreach (Evans & Mathur, 2005; Greenlaw et al.) which may enhance response rates (Porter & Whitcomb, 2007). Providing educators options in completing surveys would provide an alternative to those teachers more technologically savvy who prefer Internet surveys over traditional paper and pencil surveys.

Recommendations for Practice

While this study provides additional considerations for future research, consideration for educational practice is provided as well. Teachers and administrators,
particularly those in the GRREC region, should use the results as a guiding tool to foster training programs and professional development on inclusion. With teachers of this study reporting limited knowledge with regards to inclusion and special education, the success of inclusion resides within these educators to become knowledgeable in this area. In order for inclusion to be successful, teachers and administrators must be committed to the effort, and training plays an essential role in this commitment process.

Superintendents and principals should consider special education professional development for general education teachers in areas of accommodations and modifications, disability dynamics, and instructional strategies to meet the needs of students with disabilities.

Additionally, preservice teacher programs (i.e., university undergraduate settings) could use the findings of this study as evidence teachers need further coursework in the area of exceptional children and disabilities. With more students with disabilities being included in the general educational setting, regular education teachers must have a better understanding of how to meet the educational needs of children with disabilities.

Preservice teachers enter the classroom for the first time armored with new teaching knowledge, curricula, and best practices to meet the needs of their students. However, evidence suggests these teachers come to the classroom with limited background coursework in effectively teaching students with diverse educational needs, aside from a general introductory special education course. The findings of this study could provide useful information for university program administrators who are designing new teacher programs or evaluating current curricula in order to incorporate inclusive teaching preparation.
Moreover, teacher education programs should address critical incident analysis with potential teacher candidates. With some understanding into behavioral applications, teachers need to understand the process of analysis and interpretation of the meanings teachers associate with incidents they encounter. The analysis would enable teachers to develop the practice of self-reflection – to examine *where* the thought process originates, *why* a particular emotion is associated with the incident, and *how* to process the incident to a more conducive, positive outcome.

At the local level, just as important for teachers to be adequately prepared to teach students with disabilities, educators wishing to implement an inclusive program within the schools must first begin an examination of the school culture. Hord (1992) concurs that one of the most crucial aspects to the adoption and implementation of a new program is for the organization to share in a common vision. Training and professional development provides the catalysts for encouraging a collaborative school culture. Therefore, local educational cooperatives may utilize the results of this study to develop or further enhance training to include ways of fostering more positive attitudes toward inclusion. Moreover, teaching training and professional development support skilled teachers in becoming more effective in working with students with disabilities in the regular educational setting by bridging old practices with new. Teachers may adopt alternative teaching practices to accommodate the various learning styles or altering current curriculum to accommodate the various needs of students with disabilities in their classrooms. Training and professional development aid educators in addressing the new paradigm: teaching the various levels of students within the general educational setting.
Professional development and training is an expected part of an educator’s career. Principals and school administrators may provide job-embedded training and professional development that promotes teacher growth while enriching the inclusive practices within the schools. Job-embedded training may include the development of professional learning communities (PLC’s) or mentor programs or support. As Darling-Hammond and Richardson (2009) conclude, professional development should further deepen the teachers’ knowledge, provide opportunities for active, hands-on learning, and is collaborative and collegial. Likewise, Fogarty and Pete (2009) further add that job-embedded professional development increases teachers’ rate of success for implementing new practices within the school, which is critical for sustainable, lasting change.

Principals and school leaders are the backbone of the public school system, and are instrumental in the change process as inclusive practices are introduced in their schools. Principals must be not only understand the process of change, but also well versed in the strategies necessary for effectively changing the school culture and promoting inclusive practices. Job-embedded training and support for inclusion fosters teacher learning by targeting inclusive school reform to better prepare teachers and administrators to meet the needs of students with disabilities. Furthermore, by providing job-embedded inclusive training, principals address two needs of the school: (1) promote individual teachers’ professional growth; and (2) establish inclusion as a community norm.

**Recommendations for Further Research**

While this study provides additional considerations for further practice, consideration for further educational research is provided as well. Future research could
address the limitations in order to further examine the relationship between the 
implementation of an inclusive program and teacher attitudes.

A particular area of further research would be to examine the relationship of 
attitudes of inclusion toward the various disability categories. As mentioned in the 
limitations, teachers may find particular disabilities more demanding of their time and 
resources, particularly those disabilities identified as moderate to severe (i.e., cognitive 
disabilities, autism, and emotional-behavioral disorders). The present study only 
examined the relationship of attitudes toward inclusion, without considering the various 
disability categories served by the participants. Future research may wish to examine 
how the various dynamics of more severe disabilities impact educator’s general attitudes 
toward inclusion. Likewise, moderate or severe disability types may hinder the change 
process as new schools being to implement inclusive practices. Without considering the 
needs of students across all disability categories, teachers and administrators may not 
adequately prepare for training, the allocating of resources, or effective monitoring of the 
 inclusion innovation.

The research of this study was novel in that it was the only documented research 
in comparing teacher attitudes with the administrative perception of their teachers’ 
attitudes. The use of a perception-based analysis provides insight into the differences 
between administrators’ perceptions of what is occurring in the classroom versus how 
teachers actually believe or feel. Plausibly, perception can be a different facet to study 
with individuals. The research, however, in this area could be expanded by examining 
how the various theories of knowledge (e.g., realism, phenomenalism) affect the attitudes 
of teachers and administrators toward inclusion.
An additional limitation that future research could explore is the administration of the surveys to larger, urban or metropolitan geographical regions. The current study was limited in the diversity among the schools. All the participating schools were located in small towns or communities. Given that school district budgets are dictated by the student population, urban milieus have an advantage over the smaller districts in terms of budgets and the availability of resources. Since research (Irvine, Lupart, Loreman, & McGhie-Richmond, 2010; Mastropieri & Scruggs, 2001; Praisner, 2003; van Hover & Yeager, 2003) suggests teachers’ attitudes are affected by the availability of resources, larger districts may be able to provide training, instructional materials, additional teachers, or other resources that is not readily available to rural districts or schools. Therefore, the availability and management of such resources could positively impact teacher and administrator attitudes toward implementation of inclusive teaching practices.

Summary

Teachers and administrators influence the fidelity of implementation of school-based reform. Using a diffusion of innovations framework, the relationships among teacher beliefs and attitudes towards the implementation of an inclusive program and the influence of the school’s administrative support and perceptions, students with disabilities have increasingly received a quality instructional program. Change does not come quickly or naturally; it develops from the visionary support and guidance of a facilitative leader. Through a shared vision process with teachers and staff, the implementation of inclusion seemingly affects the beliefs and attitudes of all those involved. The fidelity to the change process becomes the catalyst for implementing inclusion, thus turning theory into policy and practice.
REFERENCES


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ordinary school in one local education authority. *Educational Psychology, 20*, 191-211.


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doi:10.3102/0013189X11405038


APPENDIX A

DEMOGRAPHIC SURVEY
TEACHER DEMOGRAPHIC SURVEY

Thank you for your cooperation and time to complete the surveys. This information will be used to understand the relationship between the implementation of inclusion for students with disabilities and the attitudes toward inclusion. Completion of all three surveys is estimated to take 15 minutes.

For the purposes of this survey, please keep in mind the following term when completing these survey instruments:

INCLUSION: the integration of students with disabilities in regular classrooms for any specific period of the school day where both students with and without disabilities are educated together.

1. Years of teaching experience:

2. Primary grade level currently teaching:
   (includes teaching and administrative experience)

3. Area of certification prior:
   (e.g., Elementary Ed., math, science, band, special education, etc.)

4. Do you have a special education certification? 
   YES  NO

5. Number of years teaching in an inclusive classroom: 
   (including current year)

6. Number of special education courses completed during undergraduate/graduate education

7. Hours of training or professional development devoted to special education

8. Hours of training or professional development devoted to inclusion
ADMINISTRATOR DEMOGRAPHIC SURVEY

Thank you for your cooperation and time to complete the surveys. This information will be used to understand the relationship between the implementation of inclusion for students with disabilities and the attitudes toward inclusion. Completion of all three surveys is estimated to take 15 minutes.

For the purposes of this survey, please keep in mind the following term when completing these survey instruments:

INCLUSION: the integration of students with disabilities in regular classrooms for any specific period of the school day where both students with and without disabilities are educated together.

1. Years of administrative experience:

2. Total years of education experience:
   (includes teaching and administrative experience)

3. Area of certification prior to administrative role
   (e.g., Elementary Ed., math, science, band, special education, etc.)

4. Do you have a special education certification?  YES  NO

5. Number of years implementing inclusion in your school
   (including current year)

6. Number of special education courses completed during
   undergraduate/graduate education

7. Hours of training or professional development devoted
   to special education

8. Hours of training or professional development devoted
   to inclusion
APPENDIX B

OPINIONS RELATIVE TO THE INTEGRATION OF STUDENTS WITH DISABILITIES SURVEY (ORI)
Opinions Relative to the Integration of Students with Disabilities Survey (ORI)

**General Directions:** Educators have long realized that one of the most important influences on a child's educational progress is the classroom teacher. The purpose of this questionnaire is to obtain information that will aid school systems in increasing the classroom teacher's effectiveness with students with disabilities placed in his or her classroom. Please circle the number to the left of each item that best describes your agreement or disagreement with the statement. There are no correct answers - the best answers are those that honestly reflect your feelings. There is no time limit, but you should work as quickly as you can.

<table>
<thead>
<tr>
<th>Please respond to every statement</th>
<th>KEY</th>
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<tbody>
<tr>
<td></td>
<td>-3: I disagree very much</td>
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<tr>
<td></td>
<td>-2: I disagree pretty much</td>
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<tr>
<td></td>
<td>-1: I disagree a little</td>
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<tr>
<th>Item</th>
<th>Statement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Most students with disabilities will make an adequate attempt to complete their assignments.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>2</td>
<td>Integration of students with disabilities will necessitate extensive retraining of general-classroom teachers.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>3</td>
<td>Integration offers mixed group interaction that will foster understanding and acceptance of differences among students.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>4</td>
<td>It is likely that the student with a disability will exhibit behavior problems in a general classroom.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>5</td>
<td>Students with disabilities can best be served in general classrooms.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>6</td>
<td>The extra attention students with disabilities require will be to the detriment of the other students.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>7</td>
<td>The challenge of being in a general classroom will promote the academic growth of the student with a disability.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>8</td>
<td>The challenge of students with disabilities will require significant changes in general classroom procedures.</td>
<td>-3 -2 -1 +1 +2 +3</td>
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<tr>
<td>9</td>
<td>Increased freedom in the general classroom creates too much confusion for the student with a disability.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>10</td>
<td>General-classroom teachers have the ability necessary to work with students with disabilities.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>11</td>
<td>The presence of students with disabilities will not promote acceptance of differences on the part of students without disabilities.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>12</td>
<td>The behavior of students with disabilities will set a bad example for students without disabilities.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>13</td>
<td>The student with a disability will probably develop academic skills more rapidly in a general classroom than in a special classroom.</td>
<td>-3 -2 -1 +1 +2 +3</td>
</tr>
<tr>
<td>14</td>
<td>Integration of the student with a disability will not promote his or her social independence.</td>
<td>-3 -2 -1 +1 +2 +3</td>
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</table>
Please respond to every statement

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<tr>
<th>KEY</th>
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<tr>
<td>-3: I disagree very much</td>
<td>+1: I agree a little</td>
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<td>-2: I disagree pretty much</td>
<td>+2: I agree pretty much</td>
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<td>-1: I disagree a little</td>
<td>+3: I agree very much</td>
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15. It is not more difficult to maintain order in a general classroom that contains a student with a disability than in one that does not contact a student with a disability.

16. Students with disabilities will not monopolize the general-classroom teacher’s time.

17. The integration of students with disabilities can be beneficial for students without disabilities.

18. Students with disabilities are likely to create confusion in the general-classroom.

19. General-classroom teachers have sufficient training to teach students with disabilities.

20. Integration will likely have a negative effect on the emotional development of the student with a disability.

21. Students with disabilities should be given every opportunity to function in the general classroom where possible.

22. The classroom behavior of the student with a disability generally does not require more patience from the teacher than does the classroom behavior of the student without a disability.

23. Teaching students with disabilities is better done by special- than by general-classroom teachers.

24. Isolation in a special classroom has a beneficial effect on the social and emotional development of the student with a disability.

25. The student with a disability will not be socially isolated in the general classroom.
APPENDIX C

CHANGE PROCESS SURVEY (CPS)
CHANGE PROCESS SURVEY  
(Teacher Version)

For each item identified below, circle the number that best fits your judgment of its quality. Use "NA" if the question does not apply to inclusion was implemented prior to your employment at this school.

Use the following scale to select the quality number:

1 = Strongly Disagree 2 = Disagree 3 = Undecided 4 = Agree 5 = Strongly Agree

1. I work in an environment where my supervisor(s) exhibit a proactive orientation toward organizational improvement efforts.  
   1 2 3 4 5

2. I work in an environment where my supervisor(s) support taking risks for organizational improvement.  
   1 2 3 4 5

To answer the remaining items, use the following stem: "Concerning the implementation of inclusion of students with disabilities in my organization, I..."

3. Did inclusion of students with disabilities feel like a good way to improve performance before we implemented it in our organization?  
   1 2 3 4 5 NA

4. Was allowed to meet with fellow employees to discuss and share ideas regarding inclusion of students with disabilities prior to implementation?  
   1 2 3 4 5 NA

5. Was provided a clear purpose for inclusion of students with disabilities?  
   1 2 3 4 5 NA

6. Was provided a clear "picture" of successful inclusion of students with disabilities?  
   1 2 3 4 5 NA

7. Was provided opportunities to discuss/develop input concerning inclusion of students with disabilities prior to implementation?  
   1 2 3 4 5 NA

8. Was provided guidelines for implementing inclusion of students with disabilities prior to implementation?  
   1 2 3 4 5 NA

9. Was provided appropriate funds to successfully carry out the inclusion of students with disabilities program?  
   1 2 3 4 5

10. Was provided appropriate resource(s) (e.g., people, materials, and equipment) to successfully carry out the inclusion of students with disabilities program?  
    1 2 3 4 5

11. Was given appropriate release time for planning and training for successful implementation?  
    1 2 3 4 5

12. Was able to visit other successful inclusion of students with disabilities program prior to implementation in my organization?  
    1 2 3 4 5

13. Was provided training to develop new skills to initiate a inclusion of students with disabilities program?  
    1 2 3 4 5

14. Was provided the same/similar training regarding inclusion of students with disabilities as my supervisor(s)?  
    1 2 3 4 5

15. Was often visited by my supervisor(s) to see the inclusion of students with disabilities program in progress?  
    1 2 3 4 5

16. Was provided feedback from my supervisor(s) following visits?  
    1 2 3 4 5

17. Was provided direct assistance, consultation, and/or support during the implementation phase?  
    1 2 3 4 5

18. Was provided opportunities to meet with other employees to discuss inclusion of students with disabilities during the first year of implementation?  
    1 2 3 4 5

19. Was provided opportunities to meet with other employees to discuss inclusion of students with disabilities following the first year of implementation?  
    1 2 3 4 5

20. Experienced positive reinforcement (e.g., recognition/praise) from my supervisor(s) for efforts regarding my work with inclusion of students with disabilities?  
    1 2 3 4 5

21. Am convinced that inclusion of students with disabilities is a good way to improve the organization's effectiveness after having worked with it in our organization?  
    1 2 3 4 5
### CHANGE PROCESS SURVEY
(Administrator Version)

For each item identified below, circle the number to the right that best fits your judgment of its quality. Use "NA" if the question does not apply or inclusion was implemented prior to your employment at this school. Use the following scale to select the quality number:

1 = Strongly Disagree  2 = Disagree  3 = Undecided  4 = Agree  5 = Strongly Agree

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<thead>
<tr>
<th>Item</th>
<th>1</th>
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<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>1. I work in an environment where my supervisors exhibit a proactive orientation toward organizational improvement efforts.</td>
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<td>2. I work in an environment where my supervisors support taking risks for organizational improvement.</td>
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<td>3. I felt inclusion of students with disabilities was a good way to improve effectiveness before it was implemented in our organization.</td>
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<td>4. Provided a clear purpose for inclusion of students with disabilities to employees prior to its implementation.</td>
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<td>5. Provided clear guidelines for incorporation of students with disabilities to employees prior to its implementation.</td>
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<td>6. Provided clear guidelines for implementation of students with disabilities to employees prior to its implementation.</td>
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<td>7. Provided opportunities for employees to discuss inclusion of students with disabilities prior to its implementation.</td>
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<td>8. Provided opportunities for employees to discuss the implementation of inclusion of students with disabilities.</td>
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<td>9. Provided appropriate funds to successfully carry out inclusion of students with disabilities program.</td>
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<td>10. Provided appropriate resources (e.g., time, people, material, and equipment) to successfully carry out the inclusion of students with disabilities program.</td>
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<td>11. Provided resources to allow employees' release time for planning and training to successfully carry out the inclusion of students with disabilities program.</td>
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<td>12. Provided opportunities for employees to visit other successful inclusion of students with disabilities programs prior to implementation in my organization.</td>
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<td>13. Provided training about inclusion of students with disabilities for employees.</td>
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<td>14. Provided similar training to employees regarding inclusion of students with disabilities as received.</td>
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<td>15. Offered feedback to employees following my visits.</td>
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<tr>
<td>16. Provided direct assistance, consultation, and/or support to employees during the implementation phase.</td>
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<tr>
<td>17. Provided opportunities for employees to meet with each other to discuss inclusion of students with disabilities during the first year of implementation.</td>
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<tr>
<td>18. Provided opportunities for employees to meet with each other to discuss inclusion of students with disabilities during the first year of implementation.</td>
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<tr>
<td>19. Provided positive reinforcement (e.g., recognition/praise) for employees for efforts regarding their work with inclusion of students with disabilities.</td>
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<tr>
<td>20. Am convinced that inclusion of students with disabilities is a good way to improve the organization's performance after having worked with it in my organization.</td>
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APPENDIX D

IMPLIED CONSENT FORM
I understand that by returning this survey, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I am aware that the information is being sought in a specific manner so that only minimal identifiers are necessary and so that confidentiality is guaranteed. I understand that the results will be given in a manner that subjects will not be identified. I also understand that potential benefits that might be realized from the successful completion of this study.

The overall results of this study will be available to school administrators and participants of this study. The individual school or district results will not be disseminated; only the results of total sample will be available for review. The information can be used in order to meet the needs of students with disabilities. I realize that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

The label below is linked only to your school and does not
CURRICULUM VITAE

EDUCATION

2007 - 2013 Western Kentucky University Bowling Green, KY University of Louisville Louisville, KY

Doctorate of Philosophy
Educational Leadership & Organizational Development
- Cooperative doctoral program in P-12 Administrative Leadership specialty area
- Focused on inquiry and analysis of research, and the professional practices of an administrator in public education environments
- Specialization and area of interest – Exceptional Education and the Change Process as Inclusion is Introduced within Schools

2006 - 2009 Western Kentucky University Bowling Green, KY

Endorsement for Individual Intellectual Assessment (I.I.A.)
Director of Special Education
Director of Pupil Personnel
Supervisor of Instruction
- Responsible for administering and compiling the results of a wide variety of assessment instruments including individual IQ tests
- Assist in evaluations for students of exceptional education
- Expected completion date – May, 2010

2005 - 2006 Western Kentucky University Bowling Green, KY

Masters in Counseling, Marriage and Family Program
- Marriage and Family Track (60 hour program)
- Leads to certification as a Marriage and Family Therapist (MFT) and Professional Clinical Counselor (PCC)
- Degree Awarded - December, 2006

2004 - 2005 Western Kentucky University Bowling Green, KY

Rank I – Secondary Guidance Counseling

2002 - 2004 Western Kentucky University Bowling Green, KY

Masters in Arts, Exceptional Education
Certified in area of Exceptional Education (Special Education), Learning and Behavior Disorders (LBD), Grades P-12

PROFESSIONAL EXPERIENCE

2008 – present
Logan County Board of Education
Russellville, KY
Director of Pupil Personnel, Director of Special Education & Preschool; Director of Adult Education Programs
- Involved in working with at-risk students and various community agencies (e.g., DCBS, LifeSkills, Court Designated Worker, etc.) to resolve student issues
- Enforce compulsory attendance regulations and facilitate student/parent participation in daily school attendance
- Negotiate with Family Resource Centers and community agencies to ascertain student or family needs
- Coordinated and scheduled home visits to assess student’s justification for poor school attendance
- Counseled students at-risk for dropping out, providing alternative means to obtaining high school credits
- Attend weekly Juvenile Court, and District Court if subpoenaed, to report to the courts on student and/or parent progress and compliance with court orders.
- District Representative and Chairperson of Admissions and Release Committee meetings
- Coordinate a special education staff of approximately 55 certified teachers, 20 classified staff (i.e., related services, instructional assistants)
- Facilitate the adult education programs for Logan County, including a staff of 9 and a budget of $217,000 annually

2007 - 2008
Logan County High School
Russellville, KY
Guidance Counselor and Literacy Specialist
- Responsible for academic and psychological concerns of 288 junior students
- Implemented the Individual Learning Plan (ILP) at the high school level for 1100 students
- Administrator of the ILP Program at Logan County High
- Developed Education Plans for students to complete as 9th graders to map their high school academ according to their career clusters
- Implementer of the new READ 180 program to target struggling readers and promote literacy through use of technology and guided independent reading
• Developed reading strategies to assist content teachers with reading deficits among their teachers
• Coordinator of the special education records for the guidance department
• Chairperson of Admissions and Release Committee meetings for the school

2007 - 2009
Western Kentucky University, Russellville, KY
Dual Credit Instructor
• Department of Education instructor for EDU 250 -- Introduction to Teaching course required for all students interested in a teaching career
• Taught high school junior and senior students

2005 - 2006
LifeSkills, Inc. - ACSU, Bowling Green, KY
Clinical Intern
• Responsible for group and individual sessions
• Assist clients with crisis stabilization

Summer, 2005
LifeSkills, Inc. – Logan Co. Office, Russellville, KY
Therapeutic Child Services
• Work with children and adolescents toward therapeutic goals
• Developed direct relationship with therapists for the client

2002 - 2007
Logan Co. Board of Education, Russellville, KY
Special Education Teacher
• Freshman Academy Special Education Teacher; collaborating with all teachers in the academy on effective instructional delivery to students with learning and/or behavior disorders
• Develop Individual Education Plans for students with disabilities
• Work with students, parents and community agencies to develop transition plans upon graduation

PROFESSIONAL ORGANIZATIONS

• Kentucky Directors of Pupil Personnel, 2009-present
• Association for Supervision and Curriculum Development (ASCD), 2008-present
• Kentucky Association of School Administrators, (KASA) 2008-present
• Chi Sigma Iota Counseling Honor Society, Omega Kappa Upsilon Chapter, 2007
• American Counseling Association, 2006
• Kentucky Mental Health Counselors Association, 2005
• Kentucky Counseling Association, 2005
• Kentucky School Counselor Association, 2005
• Gamma Beta Phi Honor Society, 2004
• Council on Exceptional Children, 2003-present
LEADERSHIP

District Administrator - Logan County Schools

- Director of Special Education
  - Responsible for 58 certified and 32 classified staff
  - Coordinate professional development activities and presentations to the staff on federal/state/district regulations
  - Compile mandated reports for submission to the Kentucky Department of Education
  - Oversee records compliance of over 600 students identified in special education

- Director of Pupil Personnel
  - Advise attendance clerks/registrars at 6 schools on regulations pertaining to compulsory attendance and truancy
  - Responsible for submission of attendance and calendar reports to Kentucky Department of Education for final approval
  - Introduced as one of two district-level representatives for Infinite Campus Student Information Systems

- Individual Learning Plan Administrator Logan County High School
  - Development and implementation of the State initiative of the ILP for the high school
  - Assist students, parents and teachers in completing the process for transitioning from high school
  - Presented ILP Program to parents during Parent-Teacher Conferences, February 2007

- Admissions & Release Committee Chairperson
  - Preside over ARC meetings for students with disabilities
  - Develop interventions to assist parents, students and teachers toward meeting goals of the student’s IEP (Individual Education Plan)
  - Officiate the meetings with an understanding of the federal and state special education laws

- Co-teacher Western Kentucky University Bowling Green, KY
  - Co-taught the Western Kentucky University class under the supervision of Dr. Shaffer
  - Worked with the first year practicum students to effectively implement techniques and counseling skills
  - Developed curriculum and instruction on counseling ethics, working with diverse population of clients, and advocacy for the profession
CERTIFICATIONS & EDUCATION CREDENTIALS

- Doctorate of Philosophy, *ABD* (dissertation currently in progress)
- Supervisor of Instruction (October 2010)
- Director of Pupil Personnel (June 2009)
- Individual Intellectual Assessment Endorsement (December 2008)
- Director of Special Education Certification (June 2008)
- Marriage and Family Therapist Associate (MFTA; 2008)
- Licensed Professional Counselor Associate (LPCA; 2008)
- Rank I Credential (December 2005)
- Provisional Certificate for Guidance Counselor, Secondary Grades 5-12 (July 2005)
- Professional Certificate for Teaching Exceptional Children – Learning and Behavior Disorders, Grades P-12 (May 2004)

PUBLIC AFFILIATIONS AND COMMUNITY SERVICE

- State Advisory Panel for Exception Children (August 2011)
  
  *Appointed by the Governor of Kentucky to provide guidance to the Department of Education on policy and procedures related to individuals with disabilities.*

- Citizen Foster Care Review Board (October 2010)
  
  *Appointed by the District Judge to review cases of foster care children to facilitate an expedited permanent placement.*

- Kentucky Kiwanis International (September 2010)
  
  *Service Organization designed to assisting children through volunteering through various programs*