The Development of Survey Instruments to Examine Dominant Educational Assumptions Held By High School Principals and Their Beliefs on the Importance of Implementing Inclusion

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DEDICATION

This dissertation is dedicated to the late Zura Maryland Dortch, my strong and loving mother, teacher and very best friend.

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ABSTRACT OF DISSERTATION

Nationally, high schools have lagged behind earlier levels of schooling in structuring inclusive learning environments and supporting inclusive curricula for all students. A review of the literature on high school principals of special education services revealed that there was a need to examine principals' educational assumptions and the relationship of those assumptions to their beliefs on the importance of implementing inclusion in high schools. Inclusion was defined as the education of students with disabilities in general education classrooms. Educational assumptions were defined as the underlying thought processes that establish predispositions on one's perceptions, actual behavior, and subsequent actions in the context of education. Such educational assumptions held by school leaders may hold the key to effective and equitable implementation of inclusion. The control that school leaders have to facilitate or negate inclusion may be attributed to assumptions.

The purpose of this study was to develop survey questionnaires to examine key issues (a) educational assumptions held by a sample of high school principals, (b) importance of implementing inclusion as indicated by the sampled principals, and (c) correlation between (a) and (b). This study was driven by the belief that the assumptions of high school principals may have an impact on the acceptance or rejection of high school students with disabilities into general education classrooms.

Two survey questionnaires were developed by the researcher to examine such assumptions and beliefs. Assumptions were categorized into five domains:

political, social, contextual, individual, and procedural. The principals identified their educational assumptions under these domains and then responded to inclusion importance indicators. Data collection was conducted in years 2003-2004. The educational assumptions instrument was framed from the work of Astuto, Clark, Read, McGree, and Fernandez (1994). The inclusion implementation importance instrument was taken directly from the work of Kochhar, West and Taymans (2000). Data were subjected to several levels of descriptive statistical analysis. Analysis of the data indicated statistical relationships among educational assumptions and domains, specific descriptors, and indicators of the importance of implementing inclusion. Findings provided empirical support for strengthening and redefining professional development and systemic reform in educational leadership and special education in high schools.

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CHAPTER ONE

INTRODUCTION

Context of the Study

Meeting and maintaining the educational needs of special education students in general education environments have been a major focus of both policy and practice reform (Chapman & King, 2004). This focus was based on the belief that a society will endure when it values educating all children to become contributing members of society regardless of individual ability levels. When assumptions are made that all children are entitled to the benefits of an equal and equitable education, then the efficacy of education becomes a measurable difference. Society is not an isolated entity void of the responsibility to support generations of people. Building generations of educated people and bringing all children into the fold serve as mission indicators in today's society.

Beliefs and philosophies of educational leaders may shape genuine commitment to all children in a society (Watson & Ashton, 1995). It was important to explore the assumptions made by principals since these assumptions underlie their responses in educating all children in inclusive classroom settings, meaning they do not exclude those with disabilities or special abilities (Wrightsman, 1992). Protz (2005) conducted research to ascertain the knowledge base of public elementary, middle, and high school principals, assistant principals, and principal interns and found a need to question the assumptions of principals about special education (Protz, 2005). Knowing special education law and being aware of one's assumptions may be significant indicators of effective implementation of

inclusion (Protz, 2005).

Inclusive education embodies the spirit and the intent of the *Individuals with Disabilities Education Act* (IDEA, 2004), which represents the culmination of more than three decades of research, practice, advocacy, and civil rights litigation aimed at ensuring that the diverse population of students served by special education enjoy the same access to a free appropriate public education as their general education peers across the nation (Halvorsen & Neary, 2001; Turnbull, Turnbull, & Wehmeyer, 2006; Jimenez, Graf, & Rose, 2007). According to Lawrence (2004), “children are people first, with rights the same as any human being” (Lawrence, 2004, p. 44). Inclusive education benefits all children but the effort over the years has been one a struggle to become the predominant form of education in America (Kugelmass, 2004). Finding out the impact, if any, of barriers or facilitators related to dominant educational assumptions held by school leadership and the implementation of inclusion was worth investigative research.

Schnorr, Black and Davern (2000) state that in some cases the inclusion of students with disabilities was an outcome of reform efforts to improve outcomes for all learners, but high school inclusion also reflects the evolution of special education services. Nationally, high schools have lagged behind earlier levels of schooling in structuring inclusive learning environments and classroom settings and supporting inclusive curricula for all students. Researchers have suggested that some of the barriers to including students with disabilities in high schools occur because special education often represents a separate entity that

may typically operate outside the school's curricular structure in separate resource rooms and self-contained classes (Schnorr, Black & Davern, 2000). The first step toward inclusion was to develop a commitment to serve all students in general education classes with typical peers and appropriate supports and services; the second step was to sustain that commitment (Schnorr et al., 2000).

The *National Center on Education Restructuring and Inclusion* (NCERI) had conducted national research on inclusion best practices (Lipsky & Gartner, 2007). The researchers discovered that while inclusion was taking place across the country, overwhelmingly there was only inclusion of some, not all, students with disabilities. It was indicated that inclusion was not inclusive but rather had restrictions on the involvement of some students with disabilities. In other words, the practice of inclusion was selective across disabilities and programs. An additional study, suggesting the need to further study inclusion and its successful implementation, found that inclusion for all students was not a policy requirement for any district (Halvorsen & Neary, 2001). The study also found that there were fewer inclusive programs at the secondary than at the elementary level (Halvorsen & Neary, 2001).

Inclusion was the term used most commonly with successful teaching and learning of these special learners with the general populations (McGregor & Vogelsberg, 1998). The successful implementation of instructional curricula, activities, events, and programs that embraces all students, special education learners and non-special learners, has been referred to as inclusion best practices. Inclusion best practices exist when all students have the benefit of

learning environments including all of their peers, disabled or abled (McGregor & Vogelsberg, 1998). All students learn from each other and learn to accept each other (Bauer & Shea, 1999). Inclusive environments tend to build strong and broad capacities for tolerance, acceptance, caring and assistance (Jorgenson, 1997). Inclusion best practices have been successfully implemented and sustained within school systems, districts and individual schools (Halvorsen & Neary, 2001).

When students with disabilities are included in general classrooms, roles of faculty and staff may shift, for example, from teacher to specialist, support to facilitator, or consultant to collaborator (Ferguson & Ralph, 1996). It may or may not be evident that the participation of school leaders in inclusive settings ensures the successful implementation of inclusion best practices. (Tucker-Ladd (1991) found that school leaders can influence the climate and culture of schools, thereby affecting outcomes of student learning. Educational practices in schools and school systems do not happen independent of school leadership. For example, according to West and Markiewicz (2004):

> Team leadership is very different from traditional supervision; for supervisors are often (1) directive, rather than facilitative, (2) advice-giving rather than advice-seeking, (3) determine views rather than integrate views, and (4) play a support role rather than a supportive role. (West & Markiewicz, 2004, p. 108)

West and Markiewicz (2004) observed, “The function of a leader of teams is very different from traditional supervision; for it is to ensure that the team

profits optimally from its shared responsibility, knowledge, experience and skill" (West & Markiewicz, 2004, pp. 108-110). Local school leaders may demonstrate varying styles of poor or effective practices of leadership or exhibit a total lack of leadership (Giangreco, Cloninger, & Iverson, 1993). Achievement or non-achievement of all students may be directly tied to the leadership in educational settings. Hallinger & Heck (1998) examined the effects that principals' instructional leadership had on school achievement outcomes. He found that there was a relationship between perceptions that principals had of their own instructional leadership value and students' achievement outcomes (Hallinger & Heck, 1998). While all school levels warrant additional research, this study selected the high school level as a focus due to the lower rate of inclusion being implemented at that level across the country during the last decade.

Statement of the Problem

The problem addressed by this research targeted the lack of assessment instruments in the fields of educational leadership and special education to assess whether educational assumptions held by high school principals have an impact on their perception of the importance of implementing inclusion in their respective high schools. More specifically, little was known about whether or not the educational assumptions held by high school principals presented barriers or facilitators to the implementation of inclusion.

Little research existed on the role high school principals' assumptions play in their implementation of inclusion. A review of the literature on high school administration of special education services revealed that there was a significant

need to examine educational assumptions held by high school principals and the relationship of those assumptions to the principals' perceived importance of implementing inclusion in their respective high schools. There was research on the attitudes and beliefs of teachers on having special education students in their classrooms (Snyder, 1999). However, there was no research found that explored the gap between the attitudes, beliefs, or assumptions of high school principals and the impact on the implementation of successful inclusion or even the implementation of successful special education programs.

The problem of not implementing inclusion in high schools became evident when an examination was made of the lack of uniformity or comprehensiveness of high school reform movements across the country (Fisher, Sax & Pumpian 1999). High schools seem to lack uniformity or comprehensiveness across school systems or districts even within the same systems (Jorgenson, 1997). In addition, the professional development and training of secondary school leaders was not necessarily uniform in support of inclusion (Fisher et al., 1999). The principals' leadership and active participation signal that any special changes represent school-wide development, rather than a special education agenda (Schnorr, Black & Davern, 2000). Unfortunately, the lack of uniformity and abstract nature of principal leadership may still leave some students inequitably taught or accommodated in the school environment. Some students who are identified as special education students or special learner populations may still be shut out of the mainstream of learning and secondary

and postsecondary training that undermines their opportunities for successful transition to adulthood and productive employment.

Much attention in the literature has been given to general education skills and competencies, especially for leading general education curricula (Aldridge & Goldman, 2007). However, less attention has been paid to principals' underlying belief systems or dominant assumptions and how they impact on leading the special education curricula. It was not clearly understood whether certain specific educational assumptions held by some high school principals related to their perception of the importance of implementing inclusion. The question that needed an answer was---Was there a correlation or relationship between educational assumptions and inclusion implementation or was there no correlation or relationship?

Purpose of the Study

The purpose of this study was to develop survey instruments to specifically examine the following key issues (a) the educational assumptions held by a sample of high school principals; (b) the importance of inclusion being implemented as indicated by the sampled principals; and (c) whether or not generalities may be made between specific educational assumptions held and the importance of implementing inclusion. The development of the survey instruments, in the form of questionnaires, focused on one aspect of leadership involving principals' dominant educational assumptions. The survey instruments were designed to examine the relationship between assumptions held by selected high school principals and inclusion implemented in high schools. The

intent of the research effort was to evaluate the impact of educational assumptions held by high school principals on their perceived importance of having to implement inclusion in their respective high schools. Specifically, the researcher-developed survey instruments focused on high school principal leadership through surveying their individual educational assumptions and their perceived importance of implementing inclusion. Therefore, a secondary goal of this study was to ultimately impact the field of professional development for high school principals regarding the need to improve the teaching and learning for all students in inclusive classroom settings (Walther-Thomas, Korinek, McLaughlin & Williams, 1999). It was intended that results of this study would add to the body of knowledge on principal leadership and special education.

Significance of the Study

The significance of the study was to add to the body of research methodology through the development of dual sets of survey instruments to assess educational assumptions and inclusion implementation. Prior to this study, no instruments were found to test the basic assumptions about inclusion held by high school principals. There was no research found that studied the impact of principals' assumptions and the perceived importance of implementing inclusion. The assumptions of high school principal leadership may have a significant impact on the acceptance or rejection of high school students with disabilities into general education classrooms. This study will add to the body of knowledge related to making assumptions and implementing inclusion. The outcome of this study may support administrative and professional development

for high school principals that include (a) taking the approach to inclusion as education that was valuable and holding the underlying philosophy that such education was for all children (Kozloff, 1994), (b) stressing shared responsibility of all stakeholders in the education of all students (Fairbairn & Fairbairn, 1992), and (c) believing that all children can learn without exception and must be provided with the optimum in opportunity to learn regardless of ability or disability (Davis, Kilgo & Gamel-Cormick, 1998). Recognizing, reviewing and reversing negative educational assumptions were critical tasks as society exhibited cynicism about the merits and outcomes of education. In particular, the effects of educational assumptions dominating principals' leadership may be overlooked as driving forces in educational leadership.

The importance of this study was to ultimately impact the field of professional development for high school principals on the need to improve the teaching and learning for all students in inclusive classroom settings (Walther-Thomas et al., 1999). This study was undertaken with the intention of adding to the research on dominant education assumptions, inclusion importance, inclusion implementation, and high school principals as leaders. This study examined selected high school principals to study the impact of their assumptions on their perceived importance of implementing inclusion within their respective schools. This is particularly critical since IDEA 2004 emphasized inclusive educational settings for students with disabilities.

The national conference, *"High Schools That Work,"* held in Washington, DC in 2001, provided significant insight and information on national secondary

school reform efforts as well as the details of various state secondary school reform efforts. Others have emphasized that inclusive education was necessary if all children are to be successful in school and have equal access the benefits of society (Coutinho & Repp, 1999). However, despite policy mandates on inclusion, American school systems continue to lag behind in reaching targeted compliance, especially at the high school level. As Skrtic (1991) observed,

> Understanding things such as social and public policy and organizational change depends on the frame of reference one brings to bear on the subject. More important, I began to see that the act of choosing a frame of reference has profound moral and political implications for individuals and society which of course got one thinking about the way special education and disability have been framed historically. (Skrtic, 1991, p. 95).

This research was designed to help shed some light on the significant role of school leadership in ensuring that all children learn through inclusive environments. In addition, a connection between what the leaders of schools assume about the education of children including those with disabilities and the importance of implementing inclusion in their schools was explored. Principals' level of involvement in implementation of inclusion best practices may inherently be related to their, often times masked, belief systems or assumptions. Lack of leadership or administrative support may be a major barrier to changing systems especially a major initiative like inclusion (Kotter, 1996).

There may be a significant connection between principals' leadership and educational assumptions and their actions and behavior related to special education in general, and in particular their perceived importance of implementing inclusion. Much of administrators' attention has been on developing general skills and competencies of high school leaders (Sergiovanni, 2000). Not as much attention has been paid to principals' underlying belief systems or assumptions and how they impact these leaders' skills and competencies (Sergiovanni, 2000). In other words, there may be a significant need to reform our professional development programs for high school principals. Reformed professional development programs may need to explore the driving force behind educational assumptions on competencies impacting the implementation of inclusion. It was important to note that more research was needed in this area before placing the responsibility on high school principals for inclusion reform in high schools. "Effective school level leadership is an essential component in the development of inclusive programs" (Walther-Thomas et al., 1999, p. 230).

Therefore, this research study investigated facilitator and barrier educational assumptions made by high school principals and any relationship to their perceived importance of inclusion. There was a strong need for high school principals to implement inclusion because inclusive education was a realistic preparation for adult life. Inclusion provides opportunities to learn in natural settings and supports equal and fair opportunities to develop programs for high school students with disabilities. The implementation of inclusion guarantees

practice handling everyday challenges and experiences for high school students or adolescents with disabilities (Bauer & Brown, 2001).

Conceptual Framework

The conceptual framework for this study encompassed educational assumptions defined by Astuto, Clark, Read, McGree, & Fernandez (1994), as falling under five broad areas or domains of thought. Prior to discussing the framework for organizing the literature review and the methodology, the existence of some level of connectivity (see Figure 1) between principal assumptions and inclusion remained a topic for educational research.

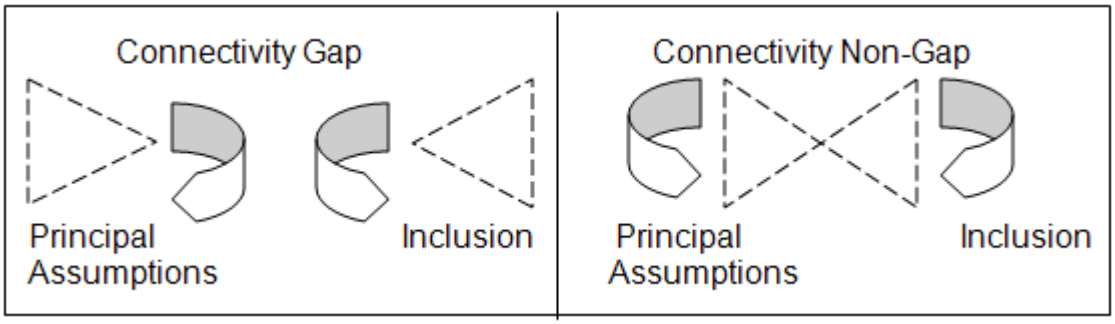

Figure 1. Connectivity (Gap/Non-Gap) of Principal Assumptions and Inclusion

Figure 1 represented a lens through which the problem is viewed and depicts the need for the gap between principal assumptions and inclusion be narrowed. The narrowing of the gap could ensure that students did not figuratively fall through. The best scenario is a no-gap school environment led by principals who actually know and appreciate the educational needs and accommodations of students with disabilities.

The work of Astuto et al., (1994) serves as a catalyst for this research. The study employs the systems change theory of Astuto et al. (1994) that

contends actions of leaders and systems are based primarily on assumptions under five major domains (See Figure 2):

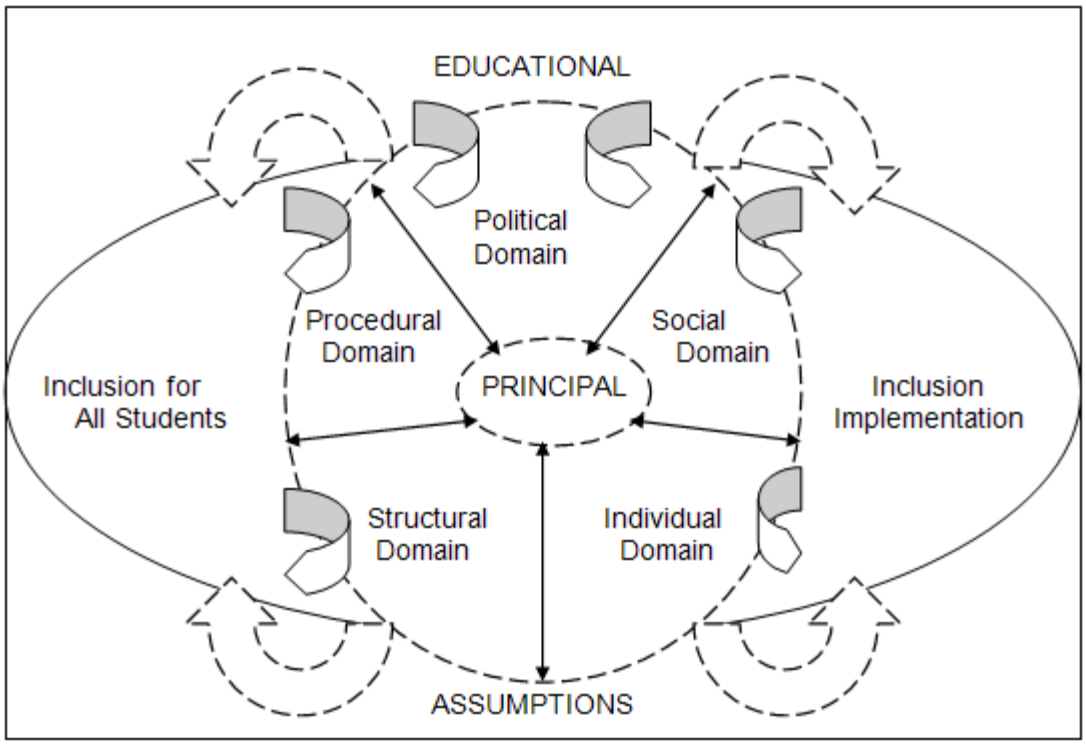

Figure 2. Principal Assumptions Affecting Inclusion & Implementation

1. Political – Relates to, or concerned with the making, as distinguished from the administration, of government policy; involves governance, hierarchies of authority, educational theory and related doctrine.
2. Social – Relates to human society, the interaction of the individual and the group, or the welfare of human beings as members of society; focuses on human relationships and communication.
3. Structural – Relates to, or affecting stability of the structure or any given framework; relates to the infrastructure of systems, organizations or bureaucracies.

4. Individual – Relating to, or distinctively associated with one person, or existing as a distinct entity; refers to the characteristics and needs of the individual.
5. Procedural – Relates to administering substantive law; includes organizational goals and processes (Astuto et al., 1994. pp. 3-20).

Studying these domains in the context of inclusion and principal assumptions and beliefs could inform the reasons for gaps or non-gaps between principal leadership and special education. It was important to understand the contexts in which high school principals hold assumptions about inclusion (Yatvin, 1996). Such assumptions may lead them to respond a certain way when implementing inclusion in their high schools (Harris, 1996). This study examined educational assumptions held by high school principals and the relationship of those assumptions to the principals' perceived importance of implementing inclusion in their respective high schools. Inclusion refers to the education of students with disabilities in general education classrooms. Assumptions referred to underlying thought patterns that establish predispositions on beliefs, actual behavior or subsequent actions. In particular, the educational assumptions may be categorized using the three broad questions:

1. Under what domains do the assumptions fall?
2. Do the assumptions create facilitators or barriers toward inclusion?
3. What is the future implication for inclusion if the barrier assumptions prevail in American thinking with respect to American schooling?

The conceptual framework focuses on the research of educational

leadership of principals (Dyal, Flynt & Bennett-Walker, 1994). Dyal et al. (1994) observed that “the school principal plays a critical role in shaping an educational climate that provides opportunities for integration between non-disabled and disabled students” (Dyal et al., 1994, p. 32). Dyal et al. (1994) expanded on this belief by citing inclusion as the ultimate responsibility of the principal:

> The principal can build a community of learners or allow classrooms, students, and teachers to continue to act autonomously. If inclusion policies are implemented in schools, the success or failure of these policies will depend in large part on the principal. (Dyal et al., 1994, p. 34)

Dyal et al. (1994) focused his writings and research on principal leadership. Astuto et al. (1994) focused their writings and research on educational assumptions. Kochhar, West and Taymans (2000) focused their writings and research on inclusion implementation. In this study, The work of Dyal et al. (1994) was used as a linkage to connect principal leadership with educational assumptions and inclusion implementation.

In summary, the framework of the study, supported by the work of Dyal et al. (1994), focused on the role of the principal in inclusive education and sustaining policies. Dyal et al. (1994) alerted the research community that research concerning the principal’s role in developing inclusive policies reflected a limited scope. Wisniewski and Alper (1994) indicated that building level administrators showed mixed support for the concept of inclusion; in general, however, they concurred with the guiding principle of including special needs students in general education classes.

Summary of Methodology

Two survey questionnaires were developed to examine such assumptions of high school principals and the perception that inclusion was important enough to be implemented in their high schools. Assumptions were categorized into political, social, contextual, individual, and procedural domains. The principals identified their educational assumptions under these five domains and then identified the importance of detailed steps and strategies designed for the implementation of inclusion. The participants were high school principals from the high schools in a Mid-Atlantic state in the United States. The state was identified as the "State" throughout the research. The "State" was selected by the researcher based on a high dropout rate, implementation of statewide site-based management of its schools, and on its participation in a national reform initiative called *"High Schools That Work."* There were 146 comprehensive, grades 9-12, high schools in the State with 146 high school principals assigned. All of the principals, in the one state's school districts, who returned the questionnaires became part of the study. There were no pre- or post-study interviews conducted. The information returned on the questionnaires comprised what was reported in the study. The researcher surveyed principals of diverse high school student populations in 23 county school systems and one city school system. Diversity in this study involved high school principals who were educational leaders in schools with African-American, Hispanic, and White high school student populations.

The State was selected as the setting because of its comprehensive high

school reform effort over the last decade. The use of site-based management for all of its schools was designed to help increase student achievement and school productivity. In addition, a reform initiative was instituted by the system in a effort to help decrease a high dropout rate. The reform effort was funded by the U. S. Department of Education initiative entitled, *"High Schools that Work."* The reform program seemed to be intended to improve delivery of instruction services to all high school students. The reform effort was aimed at all high school students. It was assumed by the researcher that any comprehensive high school national reform program would have inclusion on its agenda. The national conference, *"High Schools That Work,"* first held in Washington, DC in 2001 and in subsequent years provided significant insight and information on national secondary school reform efforts as well as the details of the State's secondary school reform movement. However, there was no mention of inclusion on the agenda. In spite of this, the State was purposefully selected by the researcher to be the first to have its high school principals in the study based on the needs of high school students to achieve on exit assessments, consistent participation in the high school reform effort, geographic location, and site-based management organization throughout the system.

The *Dominant Educational Assumptions Questionnaire (DEAQ)* was the first researcher-developed instrument (See Appendix A) of two researcher-developed instruments specifically developed for this study (Astuto et al., 1994). The DEAQ was developed by the researcher from the fifty-two dominant educational assumptions that Astuto et al. (1994) described in *Roots of reform:*

Challenging the assumptions that control change in education. The authors maintained that specific educational assumptions became either barriers or facilitators to successfully implementing inclusion best practices in educational, administrative or legislative environments. The authors categorized the educational assumptions into twenty-six pairs of opposing assumptions falling under the five domains described earlier: political, social, structural, individual, and procedural. The second instrument (See Appendix B), *Inclusion Implementation Importance Questionnaire (IIIQ),* was researcher-developed using completion checklist items extracted from *Successful inclusion: Practical strategies for a shared responsibility* (Kochhar, West, & Taymans, 2000) and aligned across core administrative indicators. The study examined the relationship between dominant educational assumptions held by high school principals with their beliefs about the importance of implementing inclusion in their respective high schools. The database of high schools for the research study was drawn from the State's list of high schools.

Research Questions

Facilitator and barrier educational assumptions held by high school principals and the perceived importance they place on implementing inclusion were analyzed to answer the following research questions:

1. Does gender of high school principals predict their educational assumptions regarding the contextual domains of schooling as described by the *Dominant Education Assumptions Questionnaire (DEAQ)*?

2. Does gender of high school principals predict their assumption of the importance of implementing inclusion in his/her high school?
3. Does school size, percent of school population on Free and Reduced Meals (FARM), or the size of the African-American, Hispanic, and White student population predict a principal's assumptions regarding the contextual domains of schooling as described by the *Dominant Education Assumptions Questionnaire (DEAQ)*?
4. Is there a relationship between a principal's facilitator score on the *Dominant Educational Assumptions Questionnaire (DEAQ)* and his/her score on the *Inclusion Implementation Importance Questionnaire (IIIQ*)?
5. Is there a special or significant relationship across descriptors?

These null hypotheses were investigated:

1. There *is* no relationship between gender of high school principals as a predictor of their educational assumptions regarding the contextual domains of schooling as described by the *Dominant Education Assumptions Questionnaire (DEAQ)*.
2. There is no relationship between gender of high school principals as a predictor of their assumption of the importance of implementing inclusion in his/her high school.
3. There is no relationship among school size, percent of school population on FARM, or the size of the African-American, Hispanic, and White student populations as predictors of a principal's assumptions regarding

the contextual domains of schooling as described by the *Dominant Education Assumptions Questionnaire (DEAQ)*.

4. There is no relationship between a principal's facilitator score on the *Dominant Educational Assumptions Questionnaire (DEAQ)* and his/her inclusion implementation Importance score on the *Inclusion Implementation Importance Questionnaire (IIIQ)*.
5. There is no special or significant relationship across descriptors.

Delimitations of the Study

The study involved only high schools having a student population of 9th, 10th, 11th and 12th grade students. If some high schools had 7th and 8th grade students, the 7th and 8th grade student data was not included in the study. In addition, the study only involved the responses that were returned to the researcher. To enhance reliability, the research study controlled for those high school principals who were new to their buildings or who were on extended leave. In these cases, the principals were eliminated from the study. The responses were drawn only from high school principals in comprehensive day programs with grades 9-12. All high school principals meeting the above criteria from the State were sent questionnaires. Responding to the questionnaires was on a volunteer basis. The locations of the school systems included the largest city, largest county, smallest county and the capital city in the State. The school systems are encompassed in city, rural, and suburban locations in the State. The high school principals reflected on their performance and actions for the 2003-2004 school year. The questionnaire completion request did not default to

the assistant or vice principal or substitute lead administrator assigned to the local high school.

Reservations focused on whether the high school principals would respond at all and whether they would respond in a timely manner. Friendly reminders, including self-addressed, stamped envelopes, and imprinted administrative incentives (leather-bound portfolios, ink pens and pads) were sent out to the high school principals. The time limitations of this research study, with respect to beginning the actual research, commenced in July 1, 2004 and ended in October 31, 2004.

The high school principals must have been principals in their respective high schools for no less than thirty calendar days. Thirty calendar days served as a purposeful amount of time allotted by the researcher for principals to become actively engaged and organized in the rudiments of administering a high school.

Limitations of the Study

Limitations are inherent in self-reported data. For example, issues of bias and honesty were concerns. The study was limited only to administering two questionnaires, recording responses, and analyzing results only from high school principals in one state. Careful distinctions were made between junior high and high schools for some high schools have combined junior and high school grades. Only data from 9th, 10th, 11th, and 12th grade student data were included in the study.

The direct work of the research study was limited to one key researcher.

While the strengths of the researcher may rest with descriptive statistics and qualitative research, the research itself was significant enough to take an additional look at high school principals and their assumptions about inclusion.

Protection and Concerns of Human Subjects

No study purpose superseded the protection of and concern for the human subjects involved in this research. Confidentiality and safety were critical elements of this research. No names addresses, telephone numbers, email and website addresses were requested on the return-envelopes and survey form packets. The sending address on the return, stamped envelopes was that of the researcher. All records were stored in a locked file cabinet that was only accessible to the key researcher. The work of the research study was limited to one key researcher. Only aggregate data were reported. At the conclusion of the study, all records were destroyed. Any follow-up to this study would use new data.

Individual high school principals were mailed stamped, return-envelopes and survey form packets. Introductory messages, directions, and appreciation tokens were included in the packets. Only those high school principals willing to mail back completed surveys were included anonymously in the research study as volunteer subject participants.

The Study Information Sheet (SIS) (See Appendix H was mailed to the persons in the sample population along with the questionnaire packets containing directions and sample questionnaire items. Each information sheet was carefully written for clarity by and support for the participant if he or she chose to respond.

Definitions of Terminology

It seems that adequately defining inclusion as it relates to practices and applications may be more difficult than other more familiar terms like "mainstreaming," used primarily in school systems or districts (Soffer, 1994). According to Sailor (2002), each of three concepts known as mainstreaming, integration, and most recently, inclusion, referred to a discrete set of assumptions and practices. Each had its cluster of local policy guidelines, implementation, fair hearings, findings, court cases, instructional practices, curricula, recommendations, and assessment procedures and practices. The two concepts of integration and inclusion are focused on the extent to which specialized supports, services and practices would be provided in immediate proximity to same-age, general education peers (Sailor, 2002). Inclusion, integration and mainstreaming are defined broadly with additional, related terminology defined in order of occurrence in the research on inclusion. For the purposes of this study, the term "inclusion" was used. The following are brief definitions of some of the major keywords found in this study:

1. Inclusion – Inclusion may be defined as "integrated opportunities" presented in a "child's day to meet his individual learning needs: physical, social and instructional" (Tiegerman-Farber & Radiewicz, 1998, p. 229).
2. Integration - Integration refers to the extent to which students with severe disabilities were clustered for their educational day in environments such as special schools development centers, institutions, and other placement situations far removed from contact with general education peers (Sailor,

2002).

3. Mainstreaming – Mainstreaming, the oldest of terms related to including students with disabilities with students without disabilities, was defined as allowing students to sit in general education classrooms until it was time for the students to be pulled out for special education classes; the placing of disabled children in regular school classes (Fuller, 1996).
4. Assumption – Assumptions are defined as assertions or thoughts about some characteristic of the future that underlies the current operations or plans of an organization or system (Diekar, 2007, 1993).
5. Theory – A belief, policy, or procedure proposed or followed as the basis of action, as in, for example, *"Her method is based on the theory that all children want to learn"* (http://www.merriam-webster.com, 2005). Theory was defined in this study as "the result of contemplation especially, an analysis of sets of facts in their ideal relationships to one another. Theory was made up of general or abstract principles of any body of fact, real or assumed" (Spady & Bell, 1999, p. 6).
6. Administrative Theory - Administrative theory was defined as a "dynamic which tends to move all organizations, institutions, and societies, universally, toward solving their problems and anticipating or adapting to changes in their internal or external environments" (Spady & Bell, 1999, p. 6).
7. Special education – Lewis & Doorlag (2005) viewed special education as actual classroom instruction that meets unique educational and

exceptional needs of students with disabilities (Lewis & Doorlag, 2005). In addition, Kochhar, West and Taymans (2000) defined special education as “specially designed instruction, at no cost to parents or guardians, to meet the unique needs of a child with a disability” (Kochhar, West & Taymans., 2000, p. 5). The authors also state that “the 1975 special education law, P.L. 94-142, defined a free, appropriate public education as special education and its related services that (a) are provided at public expense, under public supervision a direction, and without charge, (b) meet the standards of the state educational agency, (c) include preschool, elementary school, or secondary school education, and (d) are provided in conformity with the individualized education program (IDEA, 1997, Section 602 (25)” (Kochhar, West & Taymans, 2000, p. 5). Werts, Tompkins and Culatta (2003) viewed special education from a more legal perspective with emphasis on the rights of students with disabilities having primary focus to their opportunity to obtaining a free, publicly supported education in appropriate educational environments; not taking on the form of separate education, with pull-out resource programs and increasingly isolated one-to-one instruction (Werts, Tompkins & Culatta, 2003).

8. General education - General education has evolved as occurring in a classroom that has students without disabilities. General education was where all students, with or without disabilities, should be taught (Wade, 2000). Wade (2000) offered a description that could define general education by referring to a classroom where there is ”avoiding singling out

or ‘spotlighting’ individual students in front of the class, and the use of cooperative rather than competitive exercises” (Wade, 2000, p. 161). Jenkins, Pious & Jewell (1990) believed that a goal for general education and special education should be to work cooperatively within the general education classroom to provide instruction for all students regardless of label. In this model, special education teachers and other support specialists provide instruction to students with disabilities in the general education classroom rather than in their own separated classrooms. (Jenkins, Pious & Jewell, 1990).

9. Disability – “Disability could be defined as the extension of the variability in physical and mental attributes beyond the present-but not the potential-ability of social institutions to routinely respond” (Smith & Hutchison, 2004, p. 14).
10. Educational leadership – Educational or school leadership may be related to “school effectiveness [that] stresses the importance of what goes on in the classroom” and “is seen to be about a culture within which teaching and learning will prosper” (Bush & Coleman, 2001, p. 24). Such leadership may refer to “leadership orientations and practices that have been demonstrated to have a positive impact on student learning directly or indirectly through school conditions or the actions of others ” (Firestone & Riehl, 2005, p.15).
11. Principal – Person accorded highest rank or office; most important, consequential or influential within a school (such as a high school

(http://www.merriam-webster.com). The principal leads, guides, oversees, and directs the school's programs. The principal was known in some schools as the chief administrative officer or the CAO (Hall, 2007). The principal collaborates with staff, students and parents, sets high expectations, establishes interventions, priorities, launches initiatives, and monitors the instructional program for all students.(Hall, 2007). Buswell, Schaffner and Seyler (1999) suggested that roles and responsibilities could be delineated for principals or head administrators in inclusive schools as summarized in the following points:

a. Frame inclusive education in terms of general education reform and recommended practices. In this way, the likelihood increased that the people would understand and embrace the importance of broadening instruction approaches and curricula to encompass a diverse learner.
b. Reframe teachers' roles as those of inclusion facilitators or of people who assist children to e successful in general education classrooms.
c. Ensure that multiple opportunities in service and training are available and that access to resources was a priority to identify or develop staff at the district level who have the skill and experience to troubleshoot when challenges occur.
d. Coach classroom teachers on the implementation of effective strategies.
e. Hire teachers and support staff with an understanding that they will accept an inclusive schooling paradigm.

f. View transition strategies for students from one year to the next as a priority (Buswell, Schaffner & Seylar 1999).

12. High School - A school organized, especially in the United States, to include grades 9–12. (http://www.merriam-webster.com). A secondary educational institution having a campus and housing a population of students in grades 9 to 12, ranging in ages from 14 to 22. The curriculum is comprehensive and includes special education, gifted and talented education, and often a specialized focus such as music and performing arts, international baccalaureate studies, science and technology, etc. (Taylor, 1999). The academic program is conducted during the daytime hours and extra-curricular classes during early morning (before school) and evening (after school) hours.
13. School Services - Schools and school districts may vary in the level of school services they provide, federal law requires every public school in the country to provide adequate and appropriate services for students with disabilities. Federal laws require public schools to provide students with disabilities a free, appropriate education in the least restrictive environment and special services, based on the disability and its effects, also are ensured (Wishnietsky, 2001). These school services, based on the needs of the students with disabilities, according to Wishnietsky (2001), any or all of the following summarized headings:
    a. Transportation
    b. Audiology

c. Recreation

d. Psychological services

e. Physical therapy

f. Occupational therapy

g. Speech & language therapy

h. Assistive technology

i. Social work services

j. Other disability-related services (Wishniesky, 2001)

Kochhar, West and Taymans (2000) observed that “decisions [school service] about least restrictive placement, resources, and supports must be made with consideration of the impact of the placement on the student and the classroom environment” (Kochhar, West & Taymans, 2000, p. 29).

More detailed definitions of terminology may be found in Chapter 2.

CHAPTER TWO

REVIEW OF THE LITERATURE

Recent U.S. Policies Concerning Inclusion

The laws that define the governance of education in United States (U. S.) schools are framed by various domains of thought, including political, societal, individual, structural, and procedural domains (Astuto et al., 1994). Today, the inclusion of students with disabilities in general education is possible thanks in part to the numerous special services and resources made available by law (Lewis & Doorlag, 2005). For example, students with disabilities would not be as advanced as they are today without laws requiring their participation that included landmark legislation (Edelman, 2003). The laws were the *Education of All Handicapped Children Act of 1975* and more recently *Individuals with Disabilities Education Act of 2004*. Laws, policies, and practices currently on record have mixed with known and unknown assumptions that have forged underlying principles of education for all students. If these assumptions are held by principals, key school leaders, who may or may not hold facilitator assumptions, then the underlying policies may have a negative impact for all of our students, non-disabled or disabled (Glanz, 1998). With facilitator assumptions being held by such key school leaders as principals, both the general, non-disabled population and the special population of students with disabilities, may even learn and benefit from inclusion (Bianco-Mathis, Nabors & Roman, 2002).

There continues to be room for debate on the accomplishment of

inclusion, or inclusive education. If American society considers the implementation of inclusion, or inclusive education, as a service, then the debate may be framed around the delivery of special education services and the quality of such delivery. The delivery of inclusive educational services can be broad, comprehensive and/or facilitative. The quality of delivery may be significantly valued and in compliance with the law regardless of cost or time expended. However, some debate in American society may focus on the belief or assumption that by providing a space to house students with disabilities or by providing the opportunity for students with disabilities to simply be in the same space as general education students is all that is needed to comply with our national mandates. This type of belief or assumption may create barriers to the real reform needed in inclusive education. For example, inclusive education is not a place (e.g., classroom, cafeteria, gym), or a state of mind (e.g., caring) (Giangreco, Cloninger & Iverson, 1993). It is a concept that requires implementation to meet federal mandates and to satisfy standards of equality in U. S. schools. Facilitator assumptions place the burden of quality schooling on all aspects of society. Society is not to look from within itself or be bound in self-worth, but rather look from without to gather all people into the societal circle. Therefore, the strength of the societal circle becomes dependent on the role of educational systems. Assumptions of equality help to ensure that inclusion remains a viable part of the educational focus of America.

Two U. S. Presidents, former President Bill Clinton and President George W. Bush, helped to set the stage for inclusive education as the standard

for the nation (Bush, 2001, p. 6). Such a standard for America is a quality delivery model that has evolved in policy and reform discussions, that is, the inclusion of all children in all educational experiences in all schools. This drive towards inclusion has been supported by educational policy reform. As a policy reform effort, mainstreaming dominated much of the research, teaching, and policy literature of special education that applied to severe disability for most of the decade of the 1980's (Sailor, 2002). Halvorsen & Neary (2001) indicated that the primary thrust of two major movements---first, mainstreaming of children with disabilities and later, integration of children with disabilities---in reform policy was to educate students with severe disabilities in proximity to their general education peers with opportunities and to interact with them, share experiences, and so on. Sailor & Rogers (2005) believed that no assumptions were made concerning placement in general education classrooms under the rubric of integration. For the most part, placement in special classes in regular schools with time together at lunch, recess, and special occasions were desired outcomes of integrated education (Sailor, 2002).

Former President Clinton, in his educational agenda, focused on moving the nation's educational system toward quality instead of mediocrity. Mediocrity, or worse, poor quality, was described in the 1983 report, The report, *A Nation at Risk,* released by a blue-ribbon commission on education, the National Commission on Excellence in Education (1984), stated that, "the educational foundations of our society are presently being eroded by a rising tide

of mediocrity that threatens our future as a nation and a people" (http://www.ed.gov/pubs/NatAtRisk/risk.html, 2002). The Report suggested what needed to happen with American education to benefit all Americans by expressing, "If only to keep and improve the slim competitive edge we still retain in world markets, we must dedicate ourselves to the reform of our educational system for the benefit of all" (http://www.ed.gov/pubs/NatAtRisk/risk.html, 2002). That Report released in 1983 under President Ronald Reagan's administration has been followed by a multitude of reports, all sending the same message – U. S. schools must be improved.

In 1994, Clinton forged ahead with his goal and Congress passed his legislation entitled, *Goals 2000: The Educate America Act,* set in motion an aggressive education plan for the nation. Goals 2000 focused on every child in America with the intent in educating each child to the fullest extent possible with in an ambitious time frame (Finnegan, 1996). The Goals 2000 described below seem clearly intended to support all students and their educational needs. In his 1997 (Clinton, 1997) State of the Union address, Clinton noted that one of the major goals of his presidency was to lead a "national crusade" to improve education by the turn of the century. For the year 2000, Clinton announced that the proposed goals were:

1. Every child will start school ready to learn.
2. The high school graduation rate will increase to at least 90 percent.
3. American students will leave grades 4, 8, and 11 having demonstrated competency over challenging subject matter including English,

mathematics, science, foreign languages, civics and government, economics, art, history, and geography; and every school in America will ensure that all students learn to use their minds well, as they may be prepared for responsible citizenship, further learning, and productive employment in our nation's modern economy.

4. The nation' teaching force will have access to programs for the continued improvement of their professional skills needed to instruct and prepare all American students for the next century.
5. U.S. students will be first in the world in science and mathematics achievement.
6. Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise rights and responsibilities of citizenship.
7. Every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.
8. Every school will promote partnerships (Ryan, 2005) that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.

Reference:

(http://www.cnn.com/ALLPOLITICS/1996/resources/sotu/transcripts/index4.html)

Under Goals 2000, the assumption was that all students would be included in quality, productive, and appropriate schooling. Although students with disabilities

were not singled out, inclusion would be a positive addition to the implementation of quality programs to educate all students.

It seemed clear that Clinton, during his administration, set the stage for America to become the first country in the world to make equal rights and equal opportunity a guarantee for its 49 million citizens with disabilities through the legislation of the Americans with Disabilities (ADA) Act (Clinton, 2005). Thanks to America's legislative efforts over the last two decades, we may be recognizing more and more that our country gains when everyone can participate fully as a citizenry (Clinton, 2005).

President George W. Bush maintained the Goals 2000 effort and included full participation of students with disabilities. Calling his effort *No Child Left Behind Act of 2001(NCLB)*, he signed it into law on January 8, 2002 (H.R. 1, 2001). This law changed the role of the federal government in kindergarten through grade 12 by asking America's schools to describe their success in terms of what each student accomplishes. This law represented a major education reform plan and contained the most sweeping changes to the Elementary and Secondary Education Act (ESEA) since 1965 when it first became law.
NCLB was strongly endorsed, through bipartisan approval, by the U. S. House of Representatives' Education and Workforce Committee. The Act was aimed at giving students a chance, parents a choice and America's schools a charge to be the best in the world. The law gave flexibility to state and local officials in order to improve student performance and to ensure that unique needs of students are met. In addition, NCLB contained four basic education reform principles:

stronger accountability for results, increased flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work (No Child Left Behind (NCLB) Act of 2001.

President Bush continuously and consistently asserted that actions to improve the public education system and expand access to college were critical goals in his administration. Therefore, a strategy to meet these goals had been to concentrate heavily on the reform of America's high schools. The No Child Left Behind Act had already begun to show results in elementary reading and math scores (Comer, 2004), but President Bush also wanted to ensure that all high school students will be better prepared to enter higher education or the workforce. He also emphasized that today's middle and high school students did not have the chance to benefit from the reforms of the No Child Left Behind Act in elementary school, and many of these students need additional help to graduate from high school and enter college or the workforce prepared to succeed (Wright, Wright & Heath, 2006). Any debate on the spirit or the intent of this law focuses on how to implement inclusion as a service delivery model rather than whether to implement inclusion or not. By claiming that inclusive education means equal access to education for all children, the political debaters frame their debates on the delivery of services and the quality of the delivery. Lawrence (2004) clearly makes the point that children should be our focus in education. He contends that under the pressure of such variables as test scores, accountability, and school ratings, we are forgetting what is in the best interest of each and every child. Because of this, many decisions about

schooling are made for political reasons and may not be what is in the best interests of children (Lawrence, 2004). The debate about the spirit or the intent of governing special education is non-existent if principals do not know the law. Protz (2005) contends that school administrators must have knowledge of special education law and the competence to ensure compliance with it to ensure that students with special needs are being properly served within the classroom (Protz, 2005).

Conceptual Framework

Inclusion Defined

Clearly defining inclusion provides a strong backdrop for analyzing the impact of any dominant educational assumptions about the concept of inclusion and the perceived importance of implementing inclusion. Inclusion was defined for this study using an approach beginning with broad, general references from the literature to a more specific, well-connected link to assumptions, especially those made by principals. It seems that adequately defining inclusion as it relates to practices and applications may be more difficult than other more familiar special education terms like mainstreaming or integration (Soffer, 1994). This study is driven by the belief that the assumptions of high school principal leadership may have a profound impact on the acceptance or rejection of high school students with disabilities into general education classrooms.

According to Sailor (2002), each of three concepts, known as mainstreaming, integration, and inclusion, refer to a discrete set of assumptions and practices and each had its cluster of local policy guidelines,

implementation, fair hearings, findings, court cases, instructional practices, curricula, recommendations, and assessment procedures and practices (Hall, 1997). The two concepts of integration and inclusion are focused on the extent to which specialized supports, services and practices would be provided in immediate proximity to same-age, general education peers (Sailor, 2002). Inclusion, integration and mainstreaming are defined broadly with additional, related terminology defined in order of occurrence in the research on Inclusion. Lewis & Doorlag (2005) settled on a definition of inclusion within the context of integration of students with disabilities with those in general education in the following manner. Gordon, Meadows, & Dyal (1995), observed inclusion as proving to be a complex and controversial issue in education, with considerable debate about what it actually means (Gordon, Meadows, & Dyal, 1995).

Inclusion can be facilitative and supportive or it can create barriers and be disruptive to school reform in the implementation of inclusion. Inclusion has become something of an international buzzword making it difficult to trace the growth of its use over the last two decades (Benjamin, 2002). The inclusion concept is comprised of a set of principles, values and practices which involve the social transformation of education systems and communities (Armstrong, Armstrong & Barton, 2000). At the same time, the notion of inclusion can be interpreted in ways which challenge exclusionary and unjust values and practices (Armstrong, Armstrong & Barton, 2000). Pfeiffer & Reddy (1999) shed light on the challenges in supporting inclusion:

> Inclusion, and particularly ‘full inclusion’, has become a controversial issue in the education of children with disabilities. The definition of inclusion can vary from selective placement of special education students in one or more ‘regular’ education classes to full-time placement of students with disabilities in the regular classroom. (Pfeiffer & Reddy, 1999, p. 126)

Pfeiffer & Reddy (1999) point out that “proponents of inclusion give three general reasons in support of inclusive education” (Pfeiffer & Reddy (1999), p. 126). These general reasons are -

1. Federal and state legislation calling for children with disabilities to be educated in the least restrictive environment, which many have interpreted as calling for inclusive settings.
2. Belief that inclusion results in social, behavioral, academic, and developmental benefits for both children with disabilities and other, non-disabled children in the classroom.
3. Philosophical beliefs about the right of full access to services for individuals with disabilities (Pfeiffer & Reddy, 1999, p. 126).

Janney, Snell, Beers, & Raynes (1995) noted that “inclusion should not be thought of as a way of fitting students with disabilities into the mainstream. Instead, inclusive education means creating a mainstream where everyone fits” (Janney et al., 1995, pp. 425-439). Janney et al. (1995) also stated the following on inclusion

> Inclusion involves creating a mainstream where everyone fits and learns. Inclusion affects the location of students, the supports provided, the roles

school staff fill, and the ways teachers interact with each other in inclusive schools:

1. All students attend their neighborhood school.
2. Students with disabilities are members of general education classrooms with their age peers; their numbers reflect the natural proportion of students with disabilities.
3. Special education supports follow students into the mainstream.
4. Inclusion is planned individually to enable active and meaningful participation in learning and activities. Planning addresses classes and schedules, accommodations and modifications, and any related services (Janney et al., 1995, pp. 425-439).

Inclusion, inclusive schooling, inclusive education and inclusive philosophy may be paraphrased in the following way:

1. At its core, inclusion means that students attend their home school along with their age and grade peers.
2. Inclusive schooling environment is one in which students with the full range of abilities and disabilities receive their in-school educational services in the general education classroom with appropriate in-class support.
3. In an inclusive education system, the proportion of students labeled for

special services is relatively uniform for the schools within a particular school district and reflects the proportion of people with disabilities in society at large.

4. Inclusion is not a place or a method of delivering instruction; it is a philosophy of supporting children in their learning that under girds the entire system.
5. Inclusion is part of the very culture of a school or school district and defines how student, teachers, administrators, and others view the potential of children.
6. The inclusive philosophy of supported education espoused is truly grounded in the belief that all children can learn and achieve (Pfeiffer & Reddy, 1999, pp. 73-85).

Sapon-Shevin (1999) wrote about the right of all children to belong. The author stated that:

> Inclusion means we all belong; it means not having to fight for a chance to be part of a classroom or school community; it means that all children are accepted. Although the concept of all children should be fairly self-evident, it is still difficult for many individuals to grasp. But, of course, you don't mean a child like Matthew?' someone will ask. Although children will require different levels of support and resources, the concept of inclusion does mean all children---not just those who are clean, or who have agreeable parents, or who come to school ready to learn. All means all. (Sapon-Shevin, 1999, p. 11)

Inclusion has become the central ingredient in effectively implementing the systemic, overall program of inclusive education for all students. Reif and Heimburge (1996) stated:

> Inclusive education provides the maximum opportunity for students with disabilities to be included fully with their non-disabled peers in all aspects of school life, using whatever supports facilitation of social interactions, scholastic achievement and full membership in the school community. (Reif & Heimburge, 1996, pp. 49-50)

The authors summarized that inclusive education does not mean a continuum of meaningless education placements but rather is dependent upon the teaching and technology necessary to enable all children to receive an individualized and appropriate education in typical, age-appropriate classroom and learning environments (Reif & Heimburge, 1996, p. 40). It is about extending the comprehensive ideal in education (Benjamin, 2002, p. 15). Ainscow (1991) describes inclusive education in the following way:

> It [inclusive education] does not refer to a fixed state or set of criteria to be used as a blue-print, but rather seeks to challenge deficit thinking and practice which are ‘still deeply ingrained’ and too often lead many to believe that some pupils have to be dealt with in a separate way. (Ainscow, 1991, p. 16)

Slee (1999) states that “inclusive education ought to suggest a process of cultural reconstruction; whereby the aim is to have ‘othered’ children fit the schools we provide with a minimum of fuss without disrupting the institutional

equilibrium" (Slee, 1999, pp. 127).

Halvorsen & Neary (2001) indicated that one definition of inclusion seems unattainable due to a myriad of issues:

> Debates among educators and advocacy groups regarding the efficacy of and legal basis for inclusion as well as about student readiness for inclusive placement and the cost of support for inclusion are clouded by a multitude of varying definitions of inclusive education. Some define it as simply attending the same school site as typical peers; others speak of students being included for the first period; others contend it means that students have exactly the same schedule and activities as non-disabled students for 100 percent of the school day. (Halvorsen & Neary, 2001, p. 88)

Friend & Bursuck (1996) define inclusion as "the maximum opportunity for students with disabilities to be included fully with their non-disabled peers in all aspects of school life, using whatever supports are necessary to facilitate social interactions, scholastic achievement and full membership in the school community" (Friend & Bursuck, 1996, p. 41). Inclusion is depended upon the implementation of quality teaching and advanced technology necessary to enable all children to receive an individualized and appropriate education in typical, age-appropriate classroom and learning environments (Reif & Heimburge, 1996). To define further, Lipsky and Gartner (1997) surmised that:

> Inclusion is the provision of services to students age-appropriate general education classes, with the necessary support service and supplementary

aids (for the child and the teacher) both to assure the child's success - academic, behavioral and social - and to prepare the child to participate as a full and contributing member of the society." (Lipsky & Gartner, 2007, p. 29). Participation of all children is key to the definition of inclusion set forth by Booth and Ainscow (1998) who state inclusion is “a process of increasing the participation of pupils in, and reducing their exclusion from, school curricula, cultures and communities” (Booth & Ainscow, 1998, p. 97). Haas (1994) simplified the definition of inclusion by maintaining that “inclusion simply means less exclusion”. (Haas, 1994, p. 18)

Sailor (1989) suggested what was to be beneficial to school leaders on any level a specific six-point definition of inclusion that was recognized as an operational definition and therefore warranted further development. Sailor’s six points were:

1. All students receive education in the school that they would attend if they had no disability.
2. A natural proportion (i.e., representative of the school district at large) of students with disabilities occurs at each school site.
3. A zero-reject philosophy exists so that typically no student will be excluded on the basis of type or extent of disability.
4. School and general education placements are age- and grade-appropriate so that no self-contained special education classes will exist.

5. Cooperative learning and peer instruction are the preferred instructional methods.
6. Special education supports exist within the general education class and in other integrated environments (Sailor, 1989, p. 156).

Inclusion provides students with disabilities educational and support services from a general education teacher's perspective. Inclusion is not to be defined as having students with disabilities "thrown" into general education without appropriate teacher training, administrative guidance, or system support (Soffer, 1994, p. 24). Inclusion necessitates having to work collaboratively with all stakeholders to develop and articulate a clear, shared vision through careful planning and providing of related and current resources (Boyd, 1992, p. 29). Inclusion provides opportunities for working to create school environments that support all children despite complexities in maneuvering through outdated educational methods and systems (Winzer, 1993, p. 77).

Heward (2005) writes that "inclusion means educating students with disabilities in regular classrooms; the LRE [least restrictive environment] principle requires that students with disabilities be educated in settings as close to the regular class as possible in which an appropriate program can be provided and the child can make satisfactory educational progress" (Heward, 2005, p. 71).

Integration Defined

Integration as a term grew out of published research findings beginning about 1980 that drew attention to the growing extent to which students with severe disabilities were clustered for their educational day in environments such

as special schools, development centers, institutions, and other placement situations far removed from contact with general education peers (Sailor, 2002). While inclusion had to do with full membership and conjoint participation with peers at all levels of education, integration had principally to do with proximity and opportunities for social interaction, (Blenk, 1999). Coutinho & Repp (1999) made a point that all learners fare well in schools that "accommodate individual differences and value integration and value integration procedures" (Coutinho & Repp, 1999, p. 98).

Mainstreaming Defined

Mainstreaming is the oldest of the three concepts and has been primarily concerned with the amount of time and specific circumstances under which students with mild or moderate disabilities would be in a general education classroom (Blenk, 1999). Mainstreaming was defined operationally as allowing students to sit in general education classrooms until it was time for the students to be pulled out for special education classes. The special education classes could be in session all day and then at the end of the day, the students with mild to moderate disabilities would return to the general education classroom for end-of-the-day school dismissal (Blenk, 1999). Including and accommodating students under mainstreaming seemed superficial and did not reflect providing students with the core curriculum (Sailor, Kleinhammer-Tramill, Skrtic & Oas, 1996). Regarding the lack of reflection in the core curriculum under mainstreaming, Yell (1998) continued his research and concluded the following regarding the current practices of mainstreaming:

1. Mainstreaming is not required if a student with disabilities will not receive educational benefits from a regular classroom.
2. Mainstreaming is not required if any marginal benefit would be significantly outweighed by benefits obtained only in a separate instructional setting.
3. Mainstreaming is not required if the child is a disruptive force in the regular education classroom.

Hines & Johnston (1996) shared their opinion on mainstreaming and inclusion:

> Inclusion is not synonymous with mainstreaming. While mainstreaming is viewed as a benchmark where students 'earn' their way back into the classroom, inclusion establishes the student's 'right' to be there in the first place. Services and supports are brought to the regular classroom as needed. The current inclusion movement challenges educators to look beyond mainstreaming to find inclusive strategies to meet student's individual needs. Inclusion calls for a more complete merger of regular and special education. (Hines & Johnston, 1996, p. 81)

Also, the "inclusion movement" has forced U.S. education to reconsider one of its basic issues (Lewis & Doorlag, 2005):

> Is education designed to serve only those who learn quickly and easily when placed in the standard instructional environment, or is the goal to educate all students, even those who learn with difficulty? (Lewis & Doorlag, 2005, p. 438)

Each of the three concepts discussed above, beginning with mainstreaming, continuing with integration, and evolving into inclusion, has represented incremental progress toward gradual localized emergence of democratic practices and processes in the use of distributive resources (Skrtic, Sailor & Gee, 1995). Both Sailor (2002) and Skrtic et al. (1995) attempted to clarify the terms associated with the variations in equitable or distributive resources specifically related to mainstreaming, integration, and inclusion.

Figure 3, *Variations in Equitable or Distributive Resources for Mainstreaming, Integration, and Inclusion*, depicts a comparison of these commonly used terms, inclusion, integration and mainstreaming, but also varying or differing terms. As shown in Figure 3, each of three concepts known as mainstreaming, integration, and inclusion, all refer to a discrete set of assumptions and practices and each had its cluster of local policy guidelines, implementation, fair hearings, findings, court cases, instructional practices, curricula, recommendations, and assessment procedures and practices. The two concepts of integration and inclusion are focused on the extent to which specialized supports, services and practices would be provided in immediate proximity to same-age, general education peers (Sailor, 2002). Inclusion, integration and mainstreaming are defined broadly with additional, related terminology defined in order of occurrence in the research on Inclusion. Both Sailor (2002) and Skrtic (1995) help to provide some clarity to the variations in equitable or distributive resources specifically related to mainstreaming, integration, and inclusion.

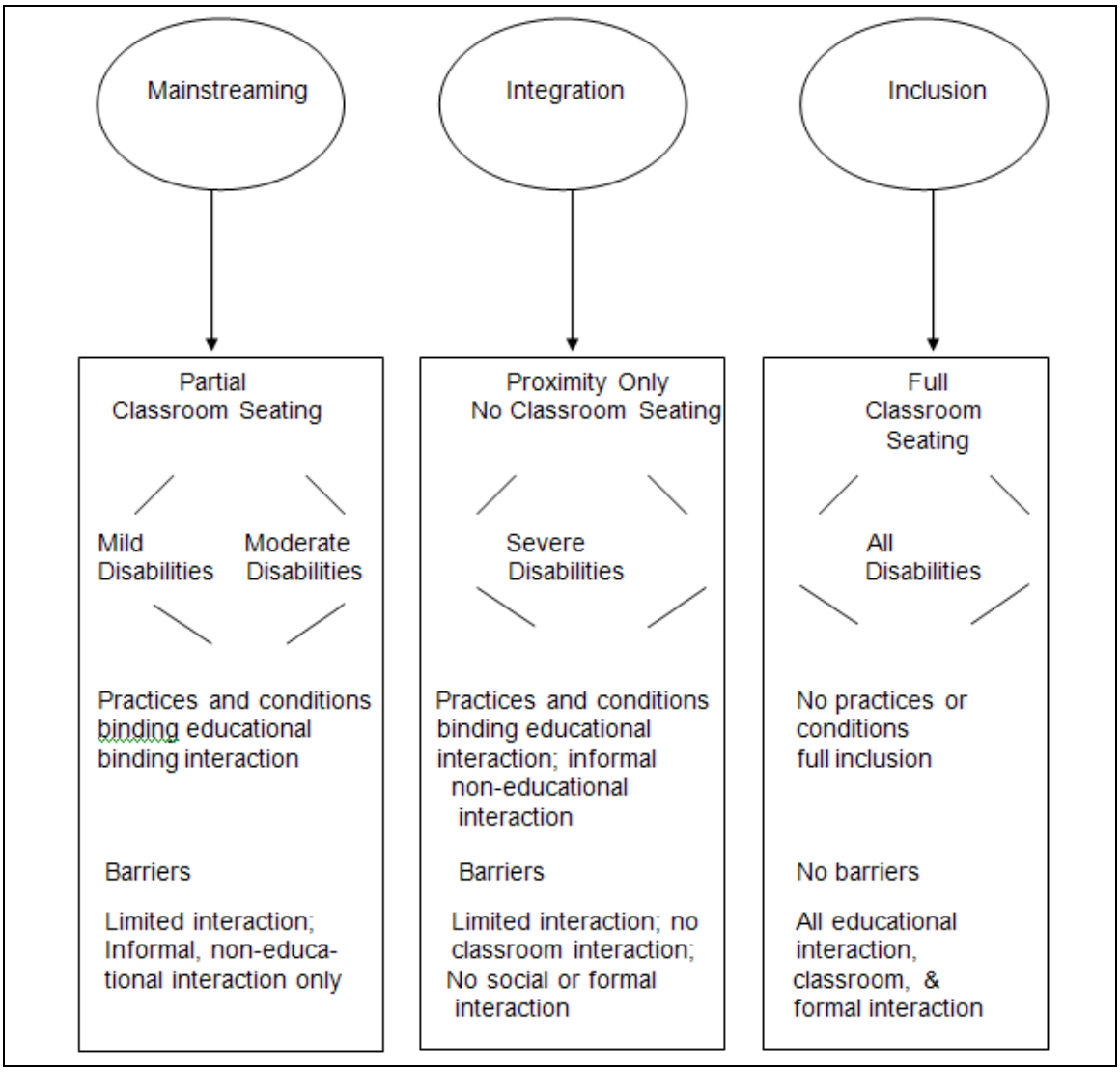

Figure 3. Variations in Equitable or Distributive Resources for Mainstreaming, Integration, and Inclusion.

Halvorsen & Neary (2001) narrowed the variations down to one operating definition referring to inclusive education and inclusion as interchangeable terms (Halvorsen & Neary, 2001):

> Inclusive education, according to its most basic definition, means that students with disabilities are supported in chronologically age-appropriate general education classes in their home schools and receive the

specialized instruction delineated by their individualized education programs (IEPs) within the context of the core curriculum and general class activities. (Halvorsen & Neary, 2001, p. 12)

Table 1

Five Basic Principles of Inclusion

Principle 1	Right to benefit from an education appropriate to individual needs.
Principle 2	Right to be educated to the extent possible with non-disabled peers.
Principle 3	Right to least restrictive environment.
Principle 4	Increase in the number of less restrictive alternatives.
Principle 5	Ensure both social and educational benefits.

(Adapted from Kochhar, West & Taymans, 2000, pp. 28-30)

Inclusive education employs the principles of inclusion (See Table 1) as it provides meaningful education placements and accommodations for students with disabilities by looking at the total school environments from within rather than from somewhere outside of the school. Skrtic, Sailor & Gee (1995) states:

> Inclusive education or inclusion model of special education programming, which is premised on restructuring the separate, general and special education systems into a new unitary system in which depending on the particular reform proposal, some, most, or all students with disabilities are educated in general education classrooms on a full-time basis. (Skrtic, Sailor & Gee, 1995, pp. 142-157)

Inclusive education requires the ongoing collaboration among key stakeholders such as parents, general education teachers, special education teachers, support staff and personnel, school boards, school officers and administrators (Alper, Schloss, Etscheidt, & Macfarlane, 1995). Critical to the implementation and success of inclusive education is ensuring that school and system stakeholders act on the assumption that inclusion is a valuable, underlying philosophy by which all students are educated (Fairbairn & Fairbairn, 1992).

The availability of educational services to all students within individual Schools is a key component of inclusive education. This availability may be ensured, regardless of students' disabilities or abilities, at the neighborhood school they would attend if they were not disabled. An additional key component of inclusive education is the provision of meaningful and accommodating educational programs found in each public school regardless of physical and programmatic accessibility issues for all students within the public school's geographic boundaries. Giangreco, Baumgart & Doyle (1995) identified some common characteristics of inclusive education:

1. Enacting and modeling principles of inclusion.
2. Attention to affective needs of all students.
3. Attention to varying cognitive learning styles of all students.
4. Cooperative, collaborative activities planned and designed for all students.
5. Developing classrooms as interdependent learning communities.

6. Heterogeneously grouped classrooms where individual need are met through inherently individualizing learning activities. (Giangreco, Baumgart & Doyle, 1995, p. 148).

Finally, a clear definition of inclusive education may not eliminate the legal definition defined in American law and policy. Ironically, the term inclusion is not used or defined in *the Individuals with Disabilities Education Act (IDEA)* or the subsequent reauthorization in 1997 and 2004. Instead, the IDEA legislation signals a challenge to America mandating that each state "must establish procedures to assure that, to the maximum extent appropriate, children with disabilities are educated with children who are not disabled…" (IDEA. 1997). As in the past, the IDEA Reauthorization of 2004 (See Table 2) requires that public schools provide a free, appropriate public education in the least restrictive environment to persons with disabilities until high school graduation or age 22, whichever comes first. The law provides federal financial assistance to state education agencies (SEAs) and local education agencies (LEAs) to guarantee special education and related services to eligible children with disabilities (IDEA 2004).

Inclusive schooling is a narrower, more refined concept than inclusive education. However, both may be used interchangeably. Schooling becomes a natural component of the broad system of education. Schooling is the vehicle that enables education to take place. "Inclusive schooling stresses interdependence and independence, views all students as gifted, and values a sense of community" (Falvey, Givner & Kimm, 1995, pp. 1-12). Additional

Table 2

Description Summary of IDEA 2004

Areas of concentration	Area descriptions of IDEA 2004
Requirements of the law	Ensures that all children with disabilities have available a free, appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment and independent living.
Definitions in the law	Specific disability categories are defined in the law; covers children with educational disabilities that require special services from specially trained teachers.
Who is covered	Covers children with educational disabilities that require special educational services ages 3-21 or until graduation. States have the flexibility to also serve infants and toddlers.
Services provided	Offers educational services that are remedial to children and available to all mainstream students (e.g., PE, Art, field trips).
Funding	Schools receive federal funding to provide remedial services to provide for children in elementary and secondary schools.
Evaluation/ Documentation	School district responsible for identifying and evaluating children with disability (elementary and secondary children)
Accommodations	Individualized Family Services Plan (IFSP) and Individualized Education Plan (IEP) are developed with parents, teachers, and other specialists.
Classroom Placement	Placement must be in the least restrictive environment (LRE). This may be special classroom, resources, or regular classrooms (Elementary and Secondary children).

(Adapted from the Postsecondary Education Consortium (PEPNet), University of Tennessee, 2005)

authors seemed to recognize that “creating inclusive schools is not a special education issue…restructuring must be part of the building agenda for school improvement for all learners” (Schnorr, Black & Davern, 2000, p. 54).

Udvari-Solner and Kluth (2007) provided a description of inclusive schooling as that which propelled a critique of contemporary school culture and that which encouraged practitioners to reinvent what could be and what should be in order to realize more humane, just, and democratic learning communities (Udvari-Solner & Kluth, 2007, p. 40). The authors made a point that “Inequities in treatment and educational opportunity are brought to the forefront thereby fostering attention to human rights, respect for differences and value of diversity” (Udvari-Solner & Kluth, 2007, p. 40).

Kluth (2003) agreed with others that inclusive schooling was “something that supports and benefits all learners” (Kluth, 2003, pp. 71-75). Kluth (2003) suggests the following characteristics of inclusive schools:

1. Committed leadership
2. Democratic classrooms
3. Reflective educators
4. Supportive school culture
5. Engaging and relevant curricula
6. Responsive instruction (Kluth, 2003, p. 71)

“If schools create more humane, just, and democratic learning communities, then all students will be valued and seen as important members of the school” (Kluth, 2003, p. 72).

As noted previously, schooling is meant to respond effectively and appropriately to meet all individual student needs. While the past 25 years have seen dramatic changes in thinking about educating students with disabilities, practice still has not caught up with theory (West, 2000). Educational systems and individual schools may continually look for ways to respond to and support all children in both theory and practice, but they are falling short of their goals. Society’s educational systems are to adjust its mission to match the future of all of our children. While public opinion is negative toward our schools, our society should focus on and highlight the positive and constructive things that are happening to students in public education (Lawrence, 2004). Therefore, the mission of education is to be responsible in driving a service delivery model of quality for all of its children. Schooling, including inclusive schooling, takes a committed investment by all stakeholders if all children are to learn (Clark, Dyson & Millward, 1995). Assumptions that support the claim that it takes all stakeholders to make a significant, educational difference in the lives of all children are critical assumptions for inclusion. Under these types of assumptions, it is not the students who need the primary assessments but rather the schools, school districts, and school structures and processes. There must be continuous monitoring and evaluations of the schools' structures and processes in order to increase student achievement for all

students (Armstrong & Moore, 2004). The unbiased assessment of all children is an acceptable goal. There needs to be an acceptance of systemic change or a commitment to change or an elimination of barrier assumptions about readjustments in order to meet the educational needs of all children. Such best practices may then lead America to adopt one universal assumption as discussed in Chapter 5 that inclusion could be accepted as the driving force in American education for this new century. Therefore, twenty-first century school leadership may be actively engaged in driving education toward supportive and facilitative visions, missions, goals and objectives for all children in all learning environments (Armstrong, 2003).

Integrated education seemed to be more equitable than the isolated education of the past, but it did not go far enough to ensure equal access to education for all children (Sailor, 1989). The term “inclusion” began to appear in 1990 and referred specifically to placing students with all ranges and types of disabilities in general education classrooms with appropriate services and supports provided primarily in that context (Blenk, 1999). Where integration had principally to do with proximity and opportunities for social interaction, inclusion had to do with full membership and conjoint participation with peers at all levels of education (Blenk, 1999).

Educational Domains and Assumptions Affecting Inclusion

Educational Leadership and Inclusive Education

School principals are the most important leaders in American education to spearhead this drive toward inclusion scattered in rural and urban, large and

small, educational institutions (Pellicer, Anderson, Keefe, Kelley, & Cleary, 1998).
.
As educational leaders, school principals have tremendous opportunities to make dramatic differences in the lives of all students within school jurisdictions. It could be argued that teachers really make a difference, particularly on an individual basis. However, the range of impact that school principals have on school-age children is more far-reaching within the boundaries of their respective school cultures (Kowalski & Reitzug, 1992). Snowden and Gorton (2002) stated:

> Principals influence cultures of inclusion. The evolution to a culture of inclusion must go beyond simply mainstreaming students into general classes; but any evolutionary process has challenges and takes time, and getting the same results for all students is no easy task. (Kowalski & Reitzug, 1992, p. 21)

Walther-Thomas et al. (1999) did contend that principals play critical roles in setting the tone for inclusion and developing a collaborative culture in their schools. Continuing with the focus of inclusion as a culture theory, Kugelmass (2004) indicated that students, teachers, and staff members must be encouraged to look past differences and see similarities of students – to replace the special education culture of separation with a culture of inclusion, while still taking into account the individual needs of students with disabilities (Kugelmass, 2004).

Educational leadership is what guides administrative theory undertaken by the principal or chief administrative officer (CAO). Augustine (1998) summarized effective leadership qualities in general that may be aligned to the effective educational leadership needed for inclusion reform. Effective leaders have

1. Integrity – Exhibiting strong ethical standards, personally knowing what one stands for, portraying a person of character who sets a moral compass or ethical direction in all that is undertaken.
2. Vision - Knowing where he or she is going and what is to be accomplished along the way.
3. Competence – Seeking and grasping the necessary knowledge and skills related to the project, program, or proposal at hand in order to successfully provide effective leadership.
4. Courage – Willing to pursue difficult and lofty goals despite the risks involved, inspiring confidence among followers, and claiming failure as not a viable option.
5. Perseverance – Having the drive to endure in the face of uncertainty and daunting odds.
6. Motivation – Inspiring oneself, other individuals and followers to greatness beyond what could have been imagined.
7. Selflessness – Demonstrating being a team player who is not afraid to give credit to others (Augustine, 1998, pp. 5-9).

Smyth (2002) stated that “if schools are to be the critical and inquiring communities necessary in a democratic society, then the leadership within them needs to conduct its affairs educationally and pedagogically instead of in a bureaucratic and authoritarian manner” (Smyth, 2002, p. 5). Mohrman & Wohlstetter (1994) indicated that leaders within a model inclusive school may be more closely involved and connected to the site-based team (Mohrman &

Wohlstetter, 1994). The authors defined such groups stationed solely at schools as “site-based planning teams on which teachers hold the majority of positions…chaired by principals and include administrators, parents, and students in the high schools” (Mohrman & Wohlstetter, 1994, p. 117).

Components of inclusive education include the availability of educational services to all students, regardless of disability, at the neighborhood school (Giangreco, Cloninger, & Iverson, 1993). An additional component of inclusive education is the ongoing collaboration among key stakeholders such as parents, general education teachers, special education teachers, support staff and personnel, school boards, school officers and administrators (Alper, Schloss, Etscheidt, & Macfarlane, 1995). For example, “effective principals can foster collaborations among teachers for the benefit of the entire school and all of its students” Alper et al., 1995, p. 203).

Analyzing educational assumptions, both positive and negative, held by school principals, may shed much needed light on the question of what education is doing to help students with disabilities learn in general classroom settings. The answer to this question holds the key to determining how strong the educational structure is to support our thoughts and actions for implementing inclusion (Coutinho & Repp, 1999). This is especially true in the current era of high school reform where major reports do not address inclusion (Quint, 2006).

Reform of inclusive education should be on the American high school reform movement agenda (Marsh & Codding, 1999). However, often inclusion is pushed to the side to focus on other major elements of reform (NCSL, 2008). A

"reform movement rooted in a nested set of assumptions that does not constrain the proposition, let alone the implementation, of changes required in our schools" is needed (Astuto et al., 1994, pp. 3-20).

The work of Astuto et al. (1994) served as a catalyst for this research study. The authors did not indicate which educational leaders were who held the cited dominant educational assumptions, but this researcher chose high school principals for the focus of the study. These dominant educational assumptions were extrapolated to determine how inclusion was implemented. Effective research may discover a correlation between educational assumptions held, opinions about inclusion reported and the perceived importance of implementing inclusion. However, there may be an additional realm to research between making assumptions and implementing inclusion. That realm is perceived importance. Whether or not the high school principal perceives it to be important to even implement inclusion in his or her respective high school may be a critical piece. Data analysis of the results could determine the interrelatedness among dominant educational assumptions and perceived importance of implementing inclusion. As stated previously, inclusive education benefits all children but has struggled to become the predominant form of education in America. Identifying the barriers or facilitators related to dominant educational assumptions of school leadership is worth investigative research.

Role of Principals and Their Assumptions

Beginning research in high schools is significant because high school is the last stop for students before success or failure in the real world. The

successful transition of all students from education into employment or higher education may depend largely on whether the education successfully engaged them in comprehensive curricula, rigorous thought, simulated application, and appreciation of diversity. In order for students to be successful in the real world, their education may need to reflect the demands and realities of that world. Learning in vacuums, or in constrained, contrived or isolated environments may do little to support the maximum potential of all students.

Although the subjects of the book's research were not revealed, Astuto et al. (1994) did state that they sought "the major assumptions that policymakers, practitioners, and scholars might hold (implicitly or explicitly) about the best way to train scholars and to educate children" (Astuto et al., 1994, p. 3). They also "recorded conventional, neo-orthodox, and non-orthodox theoretical positions, data-based research findings, and reports of ordinary and exceptional practice" (Astuto et al., 1994, p. 3). The researchers clearly indicated the "linkage of individually powerful assumptions suggested that original concern about the extent to which a set of dominant assumptions was constraining education reform probably was justified" (Astuto et al., 1994, p. 3). Therefore, the results of the research found in Astuto et al. (1994) presented an opportunity to investigate further the connection, if any, among assumptions and inclusion importance. This research may have major impact (or at least some significant) impact in addressing the issues in identifying effective and comprehensive professional development for high school leadership. Staff developers, especially those in special education leadership, could realistically take steps to research the

thinking of high school principals. Perhaps knowing dominant educational assumptions and beliefs about importance and doing something with the knowledge may hold the key to understanding why implementing inclusion is not a standard educational practice.

Changes in our schools may somehow be directly related to the expertise and vision of the school leadership. According to the findings of the research conducted by Dyal et al. (1994), the school principal plays a critical role within the concept of inclusion in shaping an educational climate that provides opportunities for interaction between non-disabled and disabled students (Dyal, 1996). The principal is in a key position to build a community of learners. Such a community of learners would include all classroom activities and instructional services and would not afford the opportunities for teachers and students to continue to function autonomously, indifferently and separately (Dyal et al., 1994).

The study conducted by Dyal et al. (1994) on views of principals regarding inclusion targeted selected principals (Dyal et al., 1994). The study was designed to examine how principals in the State of Alabama perceived the concept of inclusion. The researchers specifically addressed definitive requirements for constructing an inclusive school environment (Dyal et al., 1994). They examined the principals' attitudes, assumptions, beliefs and values and found that the principals' leadership and vision to be vital parts of an inclusive school environment (Dyal et al., 1994).

Villa & Thousand (1995) suggested the importance of the principal in the implementation of inclusion:

> As is true of the classroom teacher, one of the most important roles of the principal is to model an accepting and welcoming attitude toward all students in the school, conveying the message that each educator and student is valued for his or her unique contribution to the school community. Another critical role of the building principal is to demonstrate support of the collaborative teaming by setting an expectation that teachers will collaborate. Building principals will be actively involved by providing incentives for collaboration, promoting training on efficient team planning, and arranging for the time necessary to plan. (Villa & Thousand (1995, p. 87)

Creating an inclusive school environment becomes a major issue under the constructivist theory of school leadership. Under the constructivist theory, school leaders guide the school to “function as a community that is self-motivating and that views the growth of its members as fundamental” (Lambert, Walker, Zimmerman, Cooper, Lambert, Gardner, & Szabo, 1992, p. 18). Lambert et al. (1992) view leadership as a "reciprocal process that enables members of a school community to construct meaning that leads toward a community of purpose" (Lambert et al., 1992, p. 21). Such leadership may be "less a role to be assumed by some and more a function to be assumed by all” (Lambert et al, 1992, p. 23). Dimmock & Walker (2002) also viewed leadership as a reciprocal process among the adults in the school. The authors summarized

this theory as having “purposes and goals that are developed from among the participants, based upon [their] values, beliefs, individual and shared experiences” (Dimmock & Walker, 2002, p. 10). The constructivist theory holds that leadership may lead to common goals of schooling for all Lambert et al., 1992, p. 34). In other words, constructivist theory promotes constructivist learning. Education, under this theory, is seen as a goal based solely on the needs of the learner and not on the needs of schools, systems or society. The needs of learners are articulated by the students themselves as well as by their parents and other stakeholders. The constructivist leader takes into account the individual needs and goals of the learner and provides an arena for which stakeholders attempt to make a difference in the learning process. Those entrusted with the care of the learner assume that all needs be met regardless of constraints or difficulties. Learning is viewed as basic and fundamental; therefore, the assumption is that there is no room for failure in reaching high learner standards. All learners fare well in schools that "accommodate individual differences and value integration and value integration procedures" (Coutinho & Repp, 1999, p. 98). “Creating an inclusive system of education for all children will require the cooperative efforts of many key actors…parents, teachers, special educators. local school board members, local administrators, and state legislators” (Walther-Thomas et al. 1999, p. 191).

Community of Leaders

The above description of the fundamental goal of inclusive learning closely aligns itself to the communities of leaders theory. Under this leader

ship theory, the principal is seen as a "leader among leaders, who facilitates the growth of others" (Sergiovanni, 2000, p. 43). The greatest potential for success for all is when constructivist learning is the goal of the communities of leaders. Leaders may help students construct meaning from personal values, beliefs, and experiences. Wheatley (1992) concluded that both the constructivist theory and the communities of leaders theory may lead to a common goal of schooling for all. According to Wheatley (1992), school leaders may believe the following:

1. *Leadership is manifest throughout the community.*

   This view assumes that being a school leader is not a role in isolation of the community. All learners through a well-constructed learning process may access the benefits of society, which is composed of many diverse communities. However, if school principals assume that they have no responsibility to communities, they will not hold or conduct conferences, meetings, or forums to listen or respond to stakeholders form communities.

2. *Leadership engages both children and adults in a common learning community that provides growth and development.*

   This view assumes that leadership has responsibility to work with both children and adults as a team contributing input to the learning process. However, if school principals assume that children do not need to be involved in their learning experience except for being the recipients of the

knowledge, then the most important stakeholder is completely omitted from the learning process.

3. *Leadership operates at the heart of the concept of community.*

In this view the whole is only important if the parts (i.e., the individuals) are satisfied and serviced. If school principals assume that the parts do not matter, then the whole, (i.e., the education process) will no longer continue.

4. Leadership is a facilitating role that guides meanings and actions toward common purposes.

If school principals assume a dictatorial role rather than a facilitative role, then building consensus through collaboration is eliminated. The effective delivery of educational services to students becomes impossible.

5. *Responsible leadership accepts the responsibility to understand and undertake the challenges to provide education to all learners.*

Some school principals may assume that understanding and undertaking challenges, such as in the implementation of inclusion, should be kept to a minimum to avoid chronic fatigue or burnout. If this is the case, then there will be learners that will be chronically shut out of the learning process (Wheatley, 1992, p. 116).

School reform movements across the board could create opportunities to ensure that all learners are educated despite the institutional and personal challenges to inclusion reform. Although numerous high schools throughout the United States are engaged in a variety of general education

reforms and a smaller number practice inclusion, few are committed to implementing general education and inclusive education reforms simultaneously (Fisher, Sax, & Pumpian, 1999). There has been documented evidence about the positive impact of the two reform movements, general education reform and inclusive education reform, being complementary to each other. With respect to high school reform, general education reform (Sizer, 1992) and inclusive education reform have been shown to be complementary education innovations (Villa & Thousand, 1995).

A question evolving from inclusion reform efforts may be, *How can schools be restructured so that the inclusion of every student in the mainstream of general education is a necessary condition for the achievement of excellence by all?* Another question could be, *How are educational environments created that allow all children to excel, not some children or most of the children, but all children?* Because every child is important and unique, to do anything less than educate every child could be viewed as an universal injustice. Jorgensen (1997) thought that the view of inclusion was a simple view, not complicated (Jorgensen (1997). Schools were viewed as places that facilitate respect for every child and for what he or she can do (Jorgensen, 1997). Schools need to “raise their [children’s] level[s] of performance as high as possible” and to help them “transition from school to outside of school" (Jorgensen, 1997, p. 27).

As early as 1965, schooling was thought not to meet the needs of all children. Dimmock & Walker (2002), in one of their case studies in administration, wrote:

> There is little doubt on the basis of the facts and figures set out that a proportion of our children are being badly served in their education. Initially handicapped through no fault of their own by limited intellectual ability, they are placed in a classroom situation where the curriculum and methods are oriented to the needs of the academically normal majority. (Dimmock & Walker, 2002, pp. 38-40)

While that statement was made over thirty years ago, Americans are still debating how best to educate its children in all school settings. There remains the issue of answering persistent questions regarding outcomes of educational systems.

After in-depth research, Ackerman & Hebert (1997) compiled a number of educational questions by investigating the tensions among educational leaders around critical issues (See Table 3). These questions relate to the perceptions, values and beliefs of educators as they attempt to reconcile the issues of fairness or equity of inclusiveness or inclusion. The questions posed by Ackerman & Hebert (1997) and paraphrased in Table 3 stem from seemingly irresolvable tensions within irreconcilable conditions and purposes that frequently coexist within the context of a school (Ackerman & Hebert. 1997). The researchers stated that the following questions arise as much from the fabric of our democracy as from the challenges of educating children en masse (Ackerman and Hebert, 1997). These questions focus on contemporary issues and concerns in education. The contemporary issues and concerns are closely aligned to Astuto et al.'s (1994) educational assumption domains. The questions drive to

the core of inclusion reform and may be placed under facilitator or barrier categories. A question asks, how to respect the multiplicity of needs, while at the

Table 3

Educational Issues and Questions

ISSUES	QUESTIONS
1. Justice	How can we be just to each child, as an individual and as a learner, and create a just and disciplined school as well?
2. Teaching	How can we assure our children and the community that every staff member is performing effectively?
3. Purposefulness	How can we produce measurable learning products and develop work processes as well?
4. Resourcefulness	How can we encourage constant growth and improvement in our school and acknowledge the realistic limitations?
5. Change	How can we foster improvement and change, and respect and value each staff member and citizen as well?
6. Ownership	How can we honor the perspectives and purposes of multiple constituencies and work toward unified goals that will benefit all children?
7. Autonomy	How can we honor teacher creativity and autonomy and share purposes, curricula, and equitable resources?

(Ackerman & Hebert, 1997)

same time have unified goals to benefit all children? This question evolves from the issue of ownership. Who owns the schools?

Those constituencies who have the economic, mental and physical capacity to support schools may argue that they may have the final word on defining “all” as in all children reaping the benefits of society. The issue of justice may question whether there are incentives or mandates to address all in the

education of children in schools or school systems. The barrier assumptions to inclusion becomes evident when any school or school system relinquishes the responsibility of including all children in its educational plan. Wishnietsky (2001) spells out the role of the principal in leading the administrative team in developing such an educational plan:

> When a school's administration is advised that a student has a disability or chronic illness, personnel must evaluate the student's disabilities and develop a plan that will satisfy any medical requirements. This plan known as an individual education plan, is developed by school personnel working with sociologists, psychologists, medical specialists, parents and students. Each student's needs are assessed, and the individual education plan defines how the school will deliver the services and assistance the requires in order to have equitable access to all school programs. (Wishnietsky, 2001, p. 116)

The educational assumptions of principals running schools may have a major impact on resolving inclusion issues and concerns cited above. Thomas (1997) wrote about principals making a difference in inclusive education reform:

> Principals make an impact on inclusive reform by communicating a vision for teacher collaboration, demonstrating that they value teacher collaboration, leading faculty planning for development of collaborative approaches, providing resources including time to collaborate, and recognizing student and teacher accomplishments. (Thomas, 1997, p. 3; Thomas & Loxley, 2007)

Taking a closer look at principals and their roles in educating all children regardless of the educational environment (e.g., public, charter, private) logically leads to an examination of the ideal principal. As instructional leaders, principals articulate school missions, promote an instructional climate, manage curriculum and instruction, supervise teaching, and monitor student progress. Sergiovanni (2001) matches principal behaviors with principal proficiencies to depict an ideal conception of the principalship. The ideal conception of the principalship for addressing inclusion issues and concerns, answering questions, and maintaining a facilitative approach to inclusion best practices is a principal who "articulates beliefs persuasively, effectively explains decisions, checks for understanding, and behaves in ways that reflect these beliefs and decisions" (Sergiovanni, 2001, p. 49). Therefore, the implementation of inclusion has an advantage under this ideal conception of the principalship. Sergiovanni (2001) described this ideal principalship as one who "conveys opinions succinctly and distinguishes between facts and opinions when communicating priorities" (Sergiovanni, 2001, pp. 88-89) Therefore, inclusion would survive under this principalship because the principal would clearly distinguish and prioritize actions needed to reach the goal of education for all children, that is, inclusion.

The Commission on No Child Left Behind (2006) published a set of recommendations that supported the ideal conception of the principalship. These recommendations were in support of both teachers and principals who were engaged in teaching and leading in all communities. All of the recommendations supported inclusion in that all supported raising the achievement level for all

students within one community of diverse learners with no non-accommodating emphasis on disability, categorization or segregation. In other words, principals and teachers, along with the school community, the centralized office and the school board, would promote policies, practices, and decisions that recognized diversity in accord with the core values of a democratic and civil society and within the mission of teaching and learning. The mandates of the reauthorization of IDEA 1997 are rooted firmly within this recommendation and thus provide the necessary foundation to build inclusion best practices in our high schools. Schools, especially high schools, have been criticized for not fulfilling the needs of students and the requirements of society (Fisher, Sax & Pumpian, 1999). There has been "an incredible amount of criticism for failing to meet the needs of today's and tomorrow's youth" (Leithwood, Jantzi & Steinbach, 1999, p. 9). The schoolhouse as a target has been a safe one for politicians in need of a platform and for other so-called reformers. Because schools are depended on politicians who are often the same ones that criticize schools and school systems, school systems are left in a quandary as to how to maintain some bargaining leverage (Leithwood, et al., 1999). Therefore, within the high school, the success of reform and the protection of the high school's credibility may become the critical responsibility of the high school principal (Visher & Hudes, 1999). The high school principal may become the protector of the capital investment, that is, today's high school students growing into tomorrow's citizens. Abernathy (2007) makes reference to the relationship of capital and education in this theory of social capital:

> Social capital in the raising of children is the norm, the social network efforts, and the realistic but robust self-concepts required for them to benefit from the opportunities, demands and rewards provided by good schools. (Abernathy, 2007, pp. 28-29)

Equipping students with the right attitudes and dispositions is what inclusion purports to do for children with and without disabilities. This involves setting the stage for all children to feel, achieve and excel in schooling; it is one in which school leadership may make a significant impact on the construction of inclusive educational environments. It is well documented that administrative leadership sets the direction, tone, and pace for innovation and lasting change (Fullan, 2007). Exploring the dominant educational assumptions held by principals of high schools and the relationship of those assumptions made in perceiving the importance of providing an appropriate education for all students, is the focus of this research.

REVIEW OF THE LITERATURE ON INCLUSION

Best Practices for Inclusion

Inclusion best practices are defined as schooling designed to equitably accommodate students with diverse abilities and interests within a heterogeneous student population and to actively engage and involve all learners, special and general, in all learning environments to meet the demands of advanced educational and technological career and vocational options (McGregor & Vogelsberg, 1998). The development of inclusion practice within a school has to be under close scrutiny regarding how existing practices may be

acting as barriers to learning (Ainscow, 1999). Providing close scrutiny refers to the assertion that “attention has to be given to helping practitioners to develop a reflective attitude to their work such that they are continually encouraged to explore ways of overcoming such barriers” (Ainscow, 1999, p. 76).

Inclusion best practices involves a complete paradigm shift from the way we think and feel about special education. The approach to inclusion best practices involves making an effort to increase the participation of pupils in, and reducing their exclusion from, school curricula, cultures, and communities (Booth & Ainscow, 1998). Students with disabilities in an inclusive educational setting are taught, monitored and evaluated from within the general classroom environments with general education teachers at the helm of meeting the students’ needs. Arguments against inclusion have addressed difficulties of providing appropriate special education practices in the general education classroom. Schnorr, Black & Davern (2000) expound on the difficulty of providing special education in general education:

> One of the barriers to including students with disabilities in high schools is that special education often represents a separate department or team in the school structure. Special education typically operates outside the school’s curricular departments in separate resource rooms and self-contained classes. The first step is to develop a commitment to serve all students in general education classes with typical peers and appropriate supports and services. (Schnorr, Black & Davern, 2000, p. 138)

With each new reform thrust, however, the person with disabilities comes

to be viewed as more like everyone else and less in need of shelter, protection, and otherwise seemingly patronizing ways to provide assistance (Sailor, 2002). Such a view sees inclusion best practices as part of an educational system that recognizes all of the children at one time and encourages the whole regardless of the number of broken parts (Sailor, 2002).

Within educational systems, inclusion best practices may be successfully implemented if educational leaders determine that inclusion is important enough to implement. Halvorsen & Neary (2001) maintain that inclusion best practices should be successfully implemented and sustained within school systems, districts and individuals schools (Halvorsen & Neary, 2001, pp. 63-69). As educational leaders perceive the importance of including students with disabilities in regular classrooms, the roles of faculty and staff may shift as indicated in Figure 4.

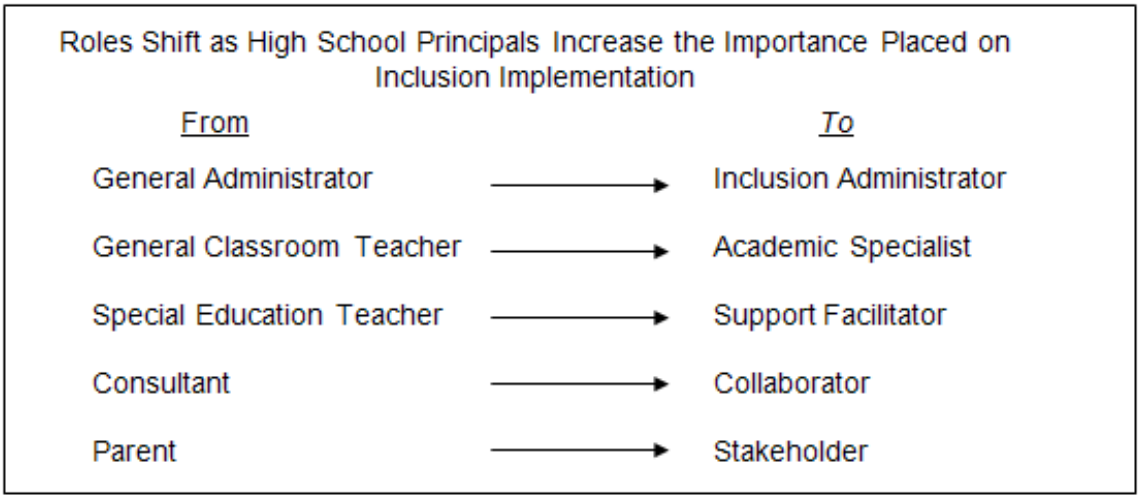

Figure 4. Shifting of Roles (Adapted from Ferguson & Ralph, 1996)

It may or may not be evident that leadership within these roles or entities ensures the successful implementation of inclusion best practices. The following four

examples (Model 1 High School, Model 2 High School, Model 3 High School and Model 4 School District) represented the successful implementation of inclusion best practices.

Model 1 High School, USA

Jorgensen (1999) summarized an inclusion best practices model high school in the following manner:

> Model 1 is a school of inclusion. It is our strong belief that all students can learn and that as much as possible, all students should be given the opportunity to stretch themselves academically across the school's curriculum. Mixed ability grouping is utilized in most classroom settings. This means that students who have historically been tracked into lower level courses and students coded with learning disabilities are also asked to meet high standards, but are given additional time and the support of a teacher when necessary. (Jorgensen et al., 1999, p 121)

The principal of *Model 1 High School* developed a table (See Table 4) of "cultural indicators of inclusive, reform-minded schools and traditional schools in which students are tracked or segregated in special education classes. Also worth noting is that *Model 1 High School* operated with a curriculum that was inclusive in nature. The student-centered curriculum accommodated student differences of all types, including disability and thus seemed to replicate an inclusion model.

Model 2 High School, USA

The following summarized a high school having an inclusion model that highlighted the infusion of key school elements (Fisher, Sax & Pumpian 1999) -

> *Model 2 High School* has infused two important elements into its curriculum: reading for all students and social justice. Each of these elements has had a direct impact on inclusion in the school. The focus was on reading has led to an organizational structure that breaks down the traditional barrier between special and general education. Because an overwhelming majority of students in the school (more than 75%) require additional reading instruction, the general school population has, in essence, been infused into curriculum goals that would typically have been followed only for students in special education at the high school level. (Fisher, Sax & Pumpian, 1999, p. 19)

Table 4

Inclusive versus Traditional High School Cultural Indicators (Adapted from Fisher, Sax & Pumpian, 1999)

Inclusive High School	Traditional High School
Innovation & risk taking	Status quo & safe compliance
Inquiring	Accepting
Trust	Suspicion
Coaching	Telling
Active learning	Passive learning
Heterogeneity	Homogeneity
Personalized education	Assembly-line education
Exhibitions of performance	Tests of memory
Global consciousness	Self-centeredness
Holistic, interdisciplinary learning	Subject-focused learning
High expectations for all	Challenge for only the elite
Empowerment	Subservience
Flexibility	Rigidity
Democracy & justice	Authoritarian control

(Adapted from Fisher, Sax & Pumpian, 1999)

Model 2 High School incorporated social justice into its curriculum with a major emphasis on disability as an indicator of social justice.

Model 3 High School, USA

Fisher, Sax & Pumpian (1999) summarized this model inclusive high school in the following description:

> All students at *Model 3 High School* are expected to meet high standards in terms of both content and performance. Teachers, parents, and community members have established 15 expectations for students.

These expectations, or performance standards, guide the curriculum and instruction for all students at the school. The standards were established to ensure that all students were challenged to reach their potential and contribute in meaningful ways to the community. (Fisher, Sax & Pumpian, 1999, p. 55)

Inclusive education reform in inclusive lesson planning took place at *Model 3 High School* through triangular support efforts (See Figure 5) of administration and staff making school wide connections with curriculum modification, specialized support staff, and instructional and assistive technology.

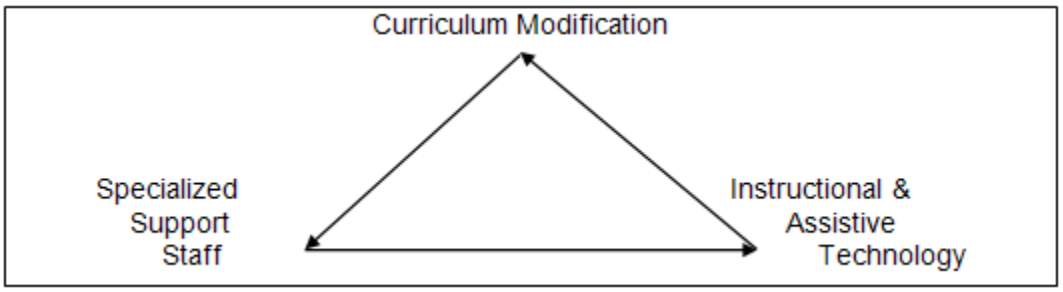

Figure 5. Triangle of Support (Adapted from Fisher, Sax & Pumpian, 1999).

An English teacher at Model 3 High School described this inclusive education reformed high school in the following way (Fisher, Sax & Pumpian, 1999):

Model 3 is a completely new school. The buildings may look old, but what happens in the classroom is totally cutting edge. We help students make connections across subject matter. We aren't traditional teachers; we are more like "conductors of learning". (Fisher, Sax & Pumpian, 1999, p. 55)

The principal therefore could certainly then be envisioned as the head embracing and leading school-wide inclusive education reform.

Model 4 School District, USA

Model 4 School District was an inclusion best practices model for a school district that supported inclusion and is attempting to adopt inclusion best practices. Sage (1997) found that the *Model 4 School District's* written and disseminated assumptions were supportive of inclusion as indicated below:

1. All people can learn.
2. Diversity is valued.
3. Educational expectations include academic and social goals and adaptations, accommodations, services, and placement in the least restrictive environment appropriate to their individual needs while monitoring the impact (See Figure 6) of such educational goals, adaptations, accommodations, services, and placement on the students with disabilities (Sage, 1997, p. 153).

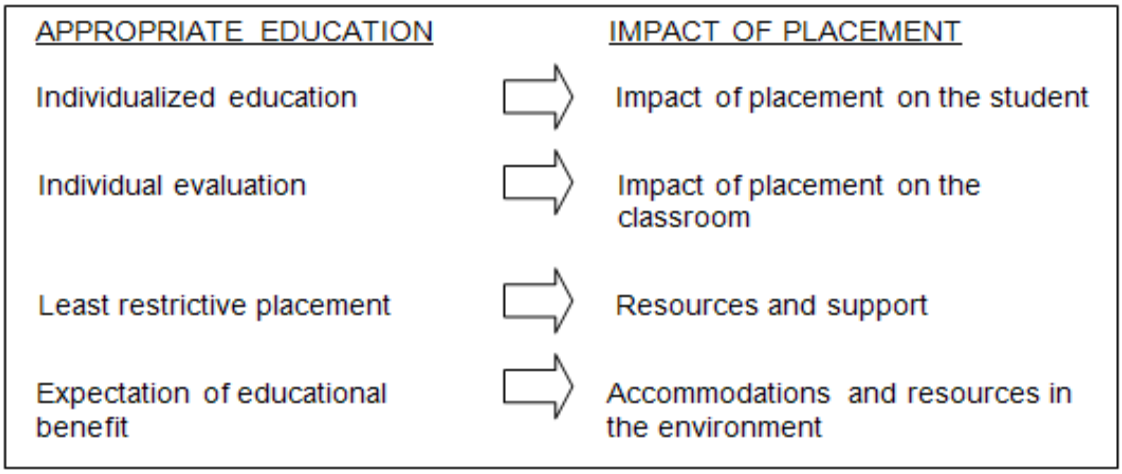

Figure 6. Appropriate Education & Impact of Placement in Successful Inclusion *(Adapted from Kochhar, West & Taymans, 2000, p. 29).*

The *Model 4 School District's* mission statement was reflective of an inclusion model. The mission statement read:

> The *Model 4 School District* accepts the responsibility to challenge all students to reach their fullest potential and assure that they acquire the knowledge, skills and attitudes necessary to become responsible citizens. We will encourage all students to embrace a positive attitude toward their education and exemplify the premise that all students can learn. (Sage, 1997, p. 153)

Sage (1997) points to the building principals as key figures in building level high school inclusion reform under the *Model 4 School District* in the following high school scenario:

> As of 1996-1997 *Model 4 School District* enrolled 924 students in grades 10-12. During the previous several years, the building principal consistently raised questions and encouraged discussion about such practices as ability grouping, labeling difficult-to-teach students, interdisciplinary instruction, block scheduling, and inclusion. As a result of the efforts of many individuals and teams of people involved in creating new opportunities for *all* students in the building, the school today looks very different from the high school that existed just five or six years ago. (Sage, 1997, p. 144)

The building principal recalled that the "change process began with a good deal of discussion…talking with the school community about education goals, fundamental beliefs about teaching and learning, and reform efforts was

essential" (Stoll & Fink, 1996, p. 146). The teachers in this high school gave the building principal much of the credit in leading the reform effort toward inclusion as illustrated by a teacher's comment below (Sage, 1997):

> I give the principal credit for leading and supporting inclusion. She was always there for us. If we had a problem, we could go to her. She listened and offered advice. She let us try ideas and we could change if we needed to. I wouldn't go back to a separate special education model. I believe that some students need direct one-on-one instruction, but an inclusive model doesn't preclude that. The kids like being in a regular classroom and they don't see themselves in the same way they did. They feel better knowing they can be successful in the regular classroom. (Sage, 1997, p. 147)

Review of the Literature on Educational Assumptions About Inclusion

The following variables were part of aggregated data:

1. Gender – The gender of the high school principal may make a significant difference in the assumptions held through all five educational domains. One or more of the domains may be related to gender based secondary administration.
2. School size – The size of the high school may make a difference in the principal's assumptions about inclusion. The larger the school, based strictly on student population, the least number of facilitator assumptions that are evidenced.

3. Student population ethnicity – Assumptions of principals may be based on the diversity of ethnic groups making up the total student population.
4. Type of school community – Whether the high school is in a rural, urban, suburban or city jurisdiction, may determine the number of facilitator or barrier assumptions made by principals.
5. Economic/poverty level– Economic/poverty level of a school is determined in the State by how many students in a school are on *Free And Reduced Meal* (FARM) plans. There may be a relationship between assumptions held and FARM percentages.

Research on Measurement of Assumptions and Beliefs

Measurement of Assumptions

Assumptions are defined as assertions or thoughts about some characteristic of the future that underlies the current operations or plans of an organization or system (Dieker, 2007, p. 79). Boyd (1992) believes that without exception, all of our assumptions are products of our imagination, expressions of our mind's ability to take things for granted, to suppose, without proof, that things are so. Boyd (1992) clarifies

> Behind each of our acts we can find the assumptions we are making about the particular situation to which we are responding. Change our assumptions and our view of the situation, and the way we respond also changes. Our assumptions shape our perceptions and behavioral responses. (Boyd, 1992, p. 18)

Kochhar, West & Taymans (2000) asked “What are the new assumptions about learners with disabilities?” (p. 48). The authors’ response to this question recognized that “it is important that teachers understand the assumptions that underlie recent educational approaches for students with special learning needs” and “a clearer understanding can assist them in their inclusion efforts” (Kochhar, West & Taymans, 2000, p. 48). Substituting “teacher” for “principal” in the response, it is worth taking a closer look through this research.

Dominant educational assumptions are defined as critical thought processes of leaders in shaping educational leadership, educational policy, individual freedom, school structure and procedures and society in general (i.e., principals) (Astuto et al., 1994). “In the context of school principals, dominant educational assumptions shape both implicitly and explicitly, their genuine commitment to all children” (Watson & Ashton, 1995, p. 51).

The Dominant Education Assumptions Questionnaire (DEAQ) as a Research Instrument and its Domains

The analysis of the impact of dominant educational assumptions was framed by information gathered from literature written and research conducted by the authors Davis, Kilgo and Gamel-Cormick (1998), Dewey (1915); Falvey (1995); Giangreco, Cloninger and Iverson (1993); Oakley and Krug (1994); Reif and Heimburge (1996); Stainback and Stainback (1996), and Villa and Thousand (1995). The educational assumptions fall under five domains labeled political, social, structural, individual, and procedural. The educational assumptions will be analyzed using the three questions:

1. Under what domains do the assumptions fall?
2. Do the assumptions create facilitators or barriers toward inclusion?
3. What is the future implication for inclusive education if the barrier assumptions prevail in thinking with respect to American schooling?

A discussion of the third question on future implications of selected assumptions will be reviewed in Chapter 5 after all assumptions have been analyzed as supportive or destructive to inclusion.

An outline (Appendix C) is provided to assist in maintaining organization of the numerous assumptions found within the contexts or domains of schooling. The following discussion explores more fully the debate between inclusion and assumption barriers and facilitators in terms of five assumption domains (Astuto et al., 1994). Fully understanding assumption barriers and facilitators provides a foundation upon which to build the research (See Appendix D for a listing of educational assumptions and their respective domains).

Assumption (Barrier) 1a. “The purpose of schooling in a democracy is to allow children and youth to progress and develop on the basis of their own ability and talent, that is, meritocratically” (Astuto, 1994, p. 8). This assumption is a barrier assumption to inclusive education. This assumption seems to have an underlying theme that says children are to go only as far as they can go "on the basis of their own ability and talent" (Astuto et al., 1994, p. 8). Therefore it may be assumed under this assumption that if children cannot see, they stay blind to whatever gifts and talents they may possess. The blind children may simply need assistance during their schooling to learn Braille. However, under this

assumption, there would be no need to buy special scanners, Braille books, talking computers, etc. This assumption places the burden to learn on the learners and is not supportive of inclusive education because it minimizes education's responsibility to meet children where they are and to take them as far as they are capable of going. Assumption 1a infers that there are boundaries to democratic schooling. Allowing children to progress and develop on the basis of their own abilities and talents might possibly sound good upon first glance. However, after analysis using the paradigm of inclusive thinking, this assumption is not good for even non-disabled children. The term, "meritocracy," is introduced as being an end result of this assumption and as being the only basis for schooling. Meritocracy means changing a system or whole structure of society to support only those that have high ability, intelligence and talents. This is a destructive philosophy. Carried too far, meritocracy may have the potential to damage or inhibit potential for those that are disabled. There would be no need to include the persons with disabilities in society because their skills would be deemed useless under meritocracy. These persons would be viewed as not contributing much to the continued existence and/or growth of society. Further study of this assumption within the definition of meritocracy yielded examples such as age. Under meritocracy, being 18-years old has nothing to do with the voting age. What matters with respect to age, under meritocracy, is whether the 18 year old is at least a high school graduate. In other words, is he or she wise enough to vote. Since most 18-year olds have not finished high school, they would simply not be included in the voting population. This assumption supports

exclusion, especially if your ability is not considered by others to be worthy of merit.

Assumption (Facilitator) lb. “The purpose of school in a democracy is to extend the benefits of the society to all children and youth by preparing them to access those benefits” (Astuto et al., 1994, p. 9). This assumption is a supportive assumption of inclusive education. John Dewey, the educational philosopher, wrote at the turn of the 20th century that schools are for all children (Dewey, 1915). Dewey wrote very clearly that changes were occurring in society and especially in education and that these changes demanded a response from a democratic people. He sent a message to Americans that their response to societal changes be based on the promise that those in need of an education should be able to fully participate in getting an education. Dewey emphasized that the education of the masses benefits everyone (Dewey, 1915). The assumption lb is supportive of inclusion in not only its wording but in its inference. The assumption infers that all children should access all societal benefits. This vision supports and empowers children with disabilities. It is a vision of an outreached hand extended from the school door that says to all children to enter and become prepared to access unlimited resources. This assumption not only supports inclusion but welcomes it as part of what schooling in a democracy may truly be. This assumption enhances and supports inclusion because it uses the word, "all" in its definition. Steven Kukic, former Director of Special Education, Utah State Office of Education says, "all means all" in his professional assumption of inclusive education (Kukic,1997, pp. 6-9). In other words,

education must be a universal benefit, not a burdensome option, for all children in America.

Assumption (Barrier) 2a. "The test of the efficacy of an education system is its instrumental contribution to the goals of society" (Astuto et al., 1994, p. 10). There is no mention of or reference to children in this assumption. This assumption refers to an educational system that exists primarily to benefit the institution rather than the individual. The educational system under this assumption is valuable if it is instrumental in contributing directly to the goals of society rather than making the goals of education the first priority. This assumption is not supportive of inclusive education because it is concerned with contributions to society rather than education contributing to the well-being of individual children. There is no inference to children being a part of this assumption despite the mention of an education system. This assumption is vague and general. What can the goals of society be if those goals do not include the effective schooling of children? Kunc (1992) would seem to reject that this assumption is facilitative with his thoughts on when inclusive education is fully embraced…when the idea is abandoned the that children have to become normal in order to contribute to the world (Kunc, 1992).

Assumption (Facilitator) 2b. The test of the efficacy of an education system is the extent to which it meets the entitlement of all children to access the benefits of their society (Astuto et al., 1994, p. 10). Inclusive education is supported in this assumption. Children are entitled to access the benefits of their society. This assumption seems to clearly support valuing an education system

on what the system does for its children. The test is not to be based on how instrumental children can be to a society. All children need to be served and serviced by the best society offers.

Assumption (Barrier) 3a. “Achievement in school rests predominantly in the hands of the individual student” (Astuto et al., 1994, p. 12). This assumption presents a barrier to inclusion because all of the responsibility of school achievement rests with the individual student. Children are responsible for their own success or achievement under this assumption. This presumes that the institution does not have responsibility for ensuring that children learn or are successful in school. There is clearly a lack of support that is needed for inclusive education. Certainly not all parents would have the resources to find quality schooling. There would be tremendous inequity in the education delivery models across the nation, if parents, not educational institutions, had the responsibility of educating their own children. Many students with disabilities would not have their needs met if left up to themselves or their families.

Assumption (Facilitator) 3b. “Individual achievement in school is influenced markedly by the adjustment of the school to the student client (Astuto et al., 1994, p. 12). Inclusion is supported in this assumption because it places emphasis on the role of the school in adjusting to the students’ needs. This assumption does not specify that the student must be of a certain ability level. The school, under this assumption would adjust services and programs to the student regardless of ability or disability. It does not require the student be only able-bodied. The school is to adjust to and make accommodations for the

students with disabilities. The school takes on an institutional role and makes the necessary modifications and responds appropriately to include all students.

Assumption (Barrier) 4a. “Educational achievement is enhanced by high standards, competition and comparative assessment of students, schools and school districts” (Astuto et al., 1994, p. 13). This assumption sounds positive and seems to be what every school system in America wants to strive for, that is. high standards, high assessment scores and high comparative rankings. However, if this assumption generated an educational program, there would be very little tolerance for inclusive education. This may be why education has had such a slow climb to success, as measured by national standardized test evaluation of skill mastery, for all children in America. Special education students, the largest group of students benefiting from inclusive education, tend to be the outcasts when systems are trying to reach high standards in education or are trying to be ranked comparatively with other school districts or other local schools. This assumption is just not inclusive enough to meet the needs of all children. It infers that only top performing students are important, with no inhibitors, disabilities or around to interfere with the progress of such students in schools and school districts.

*Assumption (Facilitator) 4b. “*Educational achievement is enhanced by conditions of cooperation that reflect trust, confidence, support and challenge among and between teachers and learners” (Astuto et al., 1994, p. 13). The conditions of cooperation alone would benefit inclusion. In addition, if one adds trust, confidence, support and challenge, among and between

teachers and learners, there is an exceptional climate for inclusion.

Assumption (Barrier) 5a. “Additional resource investments in public education will not increase system performance and are unnecessary in supporting major reform in schools” (Astuto et al., 1994, p. 15). This assumption is held by those who feel Americans have invested too much into education for minimal results. This assumption holds that putting more money in public education will not increase system performance. It assumes that money and resources do not have a sustaining effect on major reform in schools. Unfortunately without money or resources, education cannot sustain itself, let alone inclusive education.

Assumption (Facilitator) 5b. “Additional resource investments in public education will increase system performance and will affect the rate and scope of major reform in schools” (Astuto et al., 1994, p. 15). This assumption supports the thinking that additional resources invested in public education does increase student performance. Documentation supports that invested resources directly affects the rate and scope of major reform in schools. Schools that support inclusion have had to endure major cutbacks in their programs because of misguided assumptions that imply money and resources do not matter or make a difference in institutional objectives of reform in inclusive education. Assumption 5b places children in public education as the beneficiaries of additional resource investments, investing in America's future must mean investing on behalf of all of America's children.

Assumption (Barrier) 6a. “The viability of the American public school system is so low that external agencies must design and control the needed reform*”* (Astuto et al., 1994, p. 18)*.* The premise of this assumption is that American’s evaluation of American public school system is dangerously low. However, this is an extreme position. This assumption indicates a need for a national takeover of American public schools…according to, for example, a principal making this assumption about his or her high school. The principal would know a takeover is imminent. It supports agencies coming into schools to define the elements of education. As a result, the agencies may or may not find inclusion cost effective. It takes money to educate all children. It is a definite role and responsibility of the United States Department of Education to influence education policy, but the actual control and operation of schools is intentionally delegated to cities, counties, states, municipalities, school boards, and other entities (Wishnietsky, 2001). This is why there are many persons, from parents to politicians, who feel that private and corporate America should come into school systems to universally align and design and uniformly control and mandate the needed reform (Wong & Shen, 2001). However, with this assumption, there is no guarantee that inclusion would be part of external agendas for much needed reforms.

Assumption (Facilitator) 6b. “The viability of American public schools is exhibited by current performance in relation to past performance and by international comparisons of student achievement” (Astuto et al., 1990, p. 18). This assumption takes a broad view of research on American education. It

promotes comparisons between current performance and past performance as well as global comparisons of student achievement. If this research-based approach is taken to evaluate viability of American public education, the outcome may show that our special populations fare better in the future than in years past. “It may be helpful to remember that the public schools we cherish today did not exist in the beginning when the right to a public education was still in the making” (Wishnietsky, 2001, p. 129). This assumption takes a comprehensive, broad look at education and because of the broad view, inclusion would be accepted as a viable best practice.

Assumption (Barrier) 7a. “Society uses education to contribute to the maintenance and stability of the social, economic and political order” (Astuto et al., 1994, p. 24). This assumption views stability as what is wanted in American education. However, stability is actually closely associated with stagnation, no growth or death. A vibrant, vital educational system is always on the move and is alert to trends and growth. This type of educational system shakes loose stereotypes and pre-conceived ideas that constrain thinking. This assumption of stability does not conjure up thoughts of movement and growth. There is no room within this assumption for a progressive, actively engaging concept like inclusive education. This assumption only lends itself to maintaining the status quo.

Assumption (Facilitator) 7b. “Society uses education to contribute to the improvement, growth and transformation of the social order” (Astuto et al., 1994, p. 24). Growth and schooling seem to be highly correlated in this assumption. When schools are actively engaged in increasing the extent of schooling to

include all children, there is a considerable amount of growth. This growth can be academic, social, or technical. Schools can raise an effective rate of return on investments. The more society invests in education, the higher the success rate of children. This assumption is inclusive and aggressive in its approach to contributing to society. Therefore, it supports educating all children in order to transform society into an equitable and beneficial social order.

Assumption (Barrier) 8a. "Schooling supports and promotes a common cultural Heritage" (Astuto et al., 1994, p. 26). This assumption suggests that everyone is as alike as possible. Under this premise, schooling may go as far as supporting a common cultural heritage. However, there is uncertainty whether a common cultural heritage in America actually exists. Diversity exists in America and it calls for schools to be on the cutting edge of promoting understanding and acceptance of all cultural heritages. Students with disabilities are not be part of a common thread. Commonality is shortsighted. This vision does not view inclusion as being viable in an educational organization.

Assumption (Facilitator) 8b. "Schooling supports and promotes an understanding and appreciation of the diverse cultural traditions in American society" (Astuto et al., 1994, p. 26). This assumption promotes the concept that education must demonstrate understanding and appreciation of diverse cultural traditions in American society. Therefore, under this assumption, education has a broad lens. The framework of schooling accepts inclusion with full participation of children with special needs or disabilities.

Assumption (Barrier) 9a. "Schools can effect only marginal, values-added

gain in the education of students from differing economic and cultural backgrounds” (Astuto et al., 1994, p. 27). The word "only" sets this assumption up to become barrier to inclusion. Schools can certainly do more than effect “marginal, value-added gains” to the lives of children. Schools have the advantage of touching and changing the lives of students through education regardless of differing economic and cultural backgrounds (Astuto et al., 1994, p. 27).

Assumption (Facilitator) 9b. “Schools can interrupt the deterministic relationship of educational performance and socioeconomic status through in-school interventions*”* (Astuto et al., 1994, p. 27)*.* Inclusion is supported because it represents taking bold steps to stop pre-determined fates for children. This supports the notion that education can make a difference in every child's life regardless of socio-economic status, ability or disability. Educational interventions are good under this assumption. Simple acceptance of the plights of children with the intention of providing no in-school or out-of–school intervention is not good. All children should be included in educational settings and programs in order for schools to work with achievement results and build on educational outcomes.

Assumption (Barrier) 10a. “Factors such as poverty, minority status, and coming from atypical families place students at risk of failure in school” (Astuto et al., 1994, p. 29). There seems to be a flavoring of stereotypical thinking in this assumption. This thinking is constrained and hinders the possibilities that are hidden from children in public education. If we believe poverty, minority states and dysfunctional families impede student progress, then it will. With resources

and support, there is a possibility that children with disabilities can break the cycle of current non-supportive educational settings and situations. However, plans to break the cycle are negotiated with this assumption. Having to negotiate plans to break the cycle is a barrier to inclusion.

Assumption (Facilitator) 10b. “Regardless of socioeconomic status, ethnicity, or family background, most families value and support the education of their children*”* (Astuto et al., 1994, p. 29). Inclusion is supported because this assumption states that regardless of situation and circumstances like disabilities, there is value and support in the education arena. This assumption means that regardless of socioeconomic status, ethnicity, atypical families, all children can be successful in school. The important point of this assumption is that families want their children to succeed. However, it is even more important to assume that institutional organizations hold themselves responsible for providing educational services to all children.

Assumption 10b is the one that should be held by schools that are implementing inclusion. Such institutions are supportive of all families and want all of their children to succeed in school.

Assumption (Barrier) 11a. “To fulfill their educational mission, schools must cooperate with social and welfare agencies or form inter-sector organizational arrangements to provide child and youth services” (Astuto et al., 1994, p. 32).Schools must be in cooperation with social and welfare agencies. It does not place the educational system at the center of cooperative agreements. Agencies may cooperate with schools and stand ready to accept the challenges

set forth by the schools and school systems. If not the case, then inclusive education is a hindrance to schools that have to cater to social and welfare agencies for help. These agencies are in a better position to provide support for inclusion, if the schools' assumptions do not set up roadblocks to inclusion.

Assumption (Facilitator) 11b. “A uni-sector approach is required to provide a successful, comprehensive program for the education, nurturance, protection, growth and development of children and youth” (Astuto et al., 1994, p. 53). This assumption is comprehensive in its scope of services to children and youth. It encompasses a sense of equity for all children and youth. There is a combination of approaches, a uni-sector approach with a sense of broad-base support for inclusion combined with the comprehensive programming approach. According to Harris-Murri, King & Rostenberg (2006), inclusion is an important component of the movement toward educational equity; however, establishing a school environment that embraces inclusion is not always easy (Harris-Murri et al., 2006).

Assumption (Barrier) 12a. “The formalization of power relationships, specification of work responsibilities, and the implementation of organizing processes, consistent with these principles, establish the conditions for coordinated work” (Astuto et al., 1994, p. 36). What is described in this assumption is known as bureaucratic red tape. In educational organizations, bureaucratic red tape would stifle inclusion by causing barriers to programmatic changes needed to support reform. Bureaucracy is not known for assisting programs to sustain themselves. Barriers tend to accumulate to most any

program that attempts to cut through the red tape. A rigid structure of bureaucratic pitfalls would make inclusive educational practices difficult to survive. Inclusion needs to thrive in an equitable and accommodating environment. The layering of bureaucracy delays inclusive education from reaching its intended audience, that is, all children and youth with and without disabilities.

Assumption (Facilitator) 12b. “Democratic structures that promote individual responsibility, shared activities and implementation of processes consistent with principles of social justice and individual growth and development establish the conditions for coordinated work” (Astuto et al., 1994, p. 36). This assumption facilitates the implementation and operational aspects of inclusion. It supports individual responsibility, as well as institutional responsibility, that are both needed to help implement inclusion. In addition, there would be shared activities rather than dictated mandates. Social justice could be promoted rather than promote discriminative injustice. Under this assumption, individual growth and development would dominate over bureaucratic bloat and wastefulness.

Assumption (Barrier) 13a. “Goals, specification of task assignments, and decision making grounded in impersonality promote fairness, reduce interpersonal conflict and optimize organizational control” (Astuto et al., 1994, p. 40). Organizational control is supported under this assumption. However, organizational control constrains inclusion. In order to effectively implement Inclusion, there needs to be a merger of individual needs and collaborative efforts to work with service providers and professionals. A focus on the

organization, rather than the individual, as found in this assumption, is a barrier to inclusion. Looking at inclusion coldly and without empathy impedes the process and progress of inclusive education.

Assumption (Facilitator) 13b. “Norms and ethics of professional practice and decision making grounded in values of social justice and responsibility promote equity, tolerate conflict, and optimize individual control” (Astuto et al., 1994, p. 40). There is a blending values and ethics in order to support inclusion. Inclusion is also supported through social justice and responsibility, and equity and tolerance. “Inclusion is basically an equity issue; it is an expression of belief that all students, including those with disabilities, have an equal right to participate in the educational experience” (Lewis & Doorlag, 2005, p. 438). School systems that implore equity, values and ethics, empower leaders to make inclusive decisions affecting both general and special populations. “As high schools seek ways to help all students attain challenging academic standards and other valued outcomes, the issue becomes not only one of excellence, but one of equity” (Schnorr, Black, Davern, 2000, p. 64). This assumption embraces inclusion because it values and respects all learners and all teachers in general and special education. Inclusion, under this assumption, would call for employment or certification requirements for both general and special education teachers who are able to teach students with and without disabilities in inclusive classrooms (Wade, 2000). This assumption has all of the ingredients necessary to sustain inclusion, including norms, ethics, practices, principles, justice, responsibilities, equity, tolerance and freedom.

Assumption (Barrier) 14a. “Performance standards and assessment strategies ensure high quality organizational outcomes” (Astuto et al., 1994, p. 44). This assumption infers that performance standards and assessments can be used as instruments to ensure high-quality outcomes. However, if the performance standards and assessments do not include accommodations, then some students with disabilities may not contribute to the high-quality organizational outcomes. If this happens, the students with disabilities will be excluded schooling. This assumption does not mention how the performance standards and assessments are used to reach quality outcomes. It does not use wording that suggests the performance standards and assessments needed to accommodate all children.

Assumption (Facilitator) 14b. “Improved organizational processes ensure high-quality organizational outcomes” (Astuto et al., 1994, p. 44). The suggestion in this assumption is that standards and assessments in school organizations do not ensure high quality outcomes because teachers and learners are part of the process. Teachers and learners are left out of the equation. This assumption implies that when performance standards and assessments are incorporated into instructional strategies, they will ensure high-quality organizational outcomes. This assumption is supportive of inclusion because its emphasis is on outcome processes that involve supporting teachers and learners. Due to improved organizational processes, standards would not be used to eliminate or diminish the desired outcomes of inclusive education. The responsibility for high

performance is placed on the educational institution to ensure high quality outcomes for its students.

Assumption (Barrier) 15a. “Individuals are motivated to achieve institutional objectives by incentives” (Astuto et al., 1994, p. 50). Incentives tend to be popular in today's society. McGregor’s Theory X supports this assumption (Cole, 2003). McGregor’s Theory X contends that people will not work unless coerced or motivated through incentives (Cole, 2003). Educators may not work toward inclusion unless coerced or motivated to do so. However, if the institution chooses not to be inclusive, then the people will not work toward inclusive objectives. Why this assumption is a barrier to inclusion rests with the institutional objectives. If the institutional objectives do not embrace implementing inclusion, the educators will not be motivated to work toward ensuring that schooling is inclusive. In modeling Theory X, individuals are only included if and when the institution guides them to inclusion and with no incentives, inclusion is a non-existent issue within the organization or institution (McGregor, 2005).

Assumption (Facilitator) 15b. *“*Individuals are self-motivated to achieve institutional objectives unless blocked by the organizational environment*”* (Astuto et al., 1994, p. 50). The organizational environment referred to here is the educational environment. The notion in this assumption is that human nature is driven to work independently and to be self-motivated Wrightsman (1992). stated that “increasingly we make such [human nature] assumptions about our neighbors our colleagues and even our close friends” (Wrightsman, 1992, p. 32). Individuals are capable of motivating themselves. They are also capable of

achieving institutional objectives even when the organizational environment puts up barriers. Inclusive education does not need to rely on institutional objectives. According to this assumption, there is a possibility that individuals would be self-motivated to be inclusive and the inclusive, caring side of human nature would lead individuals to overcome the exclusive, selfish side.

Assumption (Barrier) 16a. "Competition stimulates individuals to higher levels of individual achievement" (Astuto et al., 1994, p. 53). Competition has a strong tendency to dissuade individuals with disabilities from competing with persons from the general population, and even from the special population. Competition may have a negative effect on inclusion. The competitive playing fields may vary significantly. This may be true because the expected end result of competition is to win or compete as in a rivalry. Inclusion would take a step backwards if this assumption was present in educational institutions.

Assumption (Facilitator) 16b. "Cooperation provides the nurturance, support and collegiality that stimulate individual achievement" (Astuto et al., 1994, p. 53). This assumption promotes cooperation and supports inclusion. Inclusion grows in an environment of nurturance, support and congeniality. This is especially true if the expected outcome is to stimulate individual achievement. Individual achievement, regardless of ability or disability, is of extreme importance in inclusive education. Cooperation, like integration and facilitation, creates a productive environment for inclusion. Individual achievement is the goal for both general and special education. Inclusive education is the environment

that ensures individual achievement for all children and youth, regardless of ability or disability.

Assumption (Barrier) 17a. "*Outstanding educators demonstrate high levels of technical skill*" (Astuto et al., 1994, p. 55). Technical skill, as the overall need of educators, tends to be a barrier assumption for inclusion. In this age of increasing technology, educators are required to have high levels of technical skill. However, more is needed than just technical skill if inclusion is to be supported. For example, skill in human relations and interpersonal communication are just as important for educators to possess as technical skill. Inclusive education is an important issue and incorporates multi-faceted sets of skills and competencies for teachers and administrators. There seems to be no question that American education is multi-faceted and diverse, beginning with the variations in public, private, charter, religious or home school education choices available to parents and their children (Wishnietsky, 2001). However, the acquisition of technical skills is not the only skill needed to function in a technologically advanced organizational institution or school system.

Assumption (Facilitator) 17b. "Outstanding educators demonstrate high levels of professional expertise" (Astuto et al., 1994, p. 55). Inclusion is supported because professional expertise will include the skills necessary for outstanding educators to exhibit in an inclusive organizational setting or school system. High levels of professional expertise would never leave some children out of the learning loop or the schooling organization. This assumption may lead to another assumption; that is, an outstanding educator is an inclusive educator.

This related assumption is a strong, underlying support and facilitator assumption of inclusion.

Assumption (Barrier) 18a. “Competitive work environments characterized by systematic programs of teacher evaluation and in-service training increase the abilities of teachers to teach” (Astuto et al., 1994, p. 57). This assumption is not supportive of inclusion if the competition is detrimental to persons with disabilities or special needs. The nature of competition may demand that the playing field be equal and not accommodating. If this nature of competition is allowed to prevail then persons with disabilities or special needs may be eliminated from the competition. Therefore, teachers in competitive work environments may not encourage accommodations if students with disabilities are viewed as having the potential to effectively compete. Without the threat of losing incentives, teachers need the opportunity to collaborate and build consensus about what is best for all students, with or without disabilities. Teachers need to determine how best to include all learners in systemic learning processes. Unfortunately, competitive thinking may not support in-service training that includes the professional and theoretical ingredients, elements, components or modules of inclusion.

Assumption (Facilitator) 18b. “Collaborative work environments characterized by opportunities for individual and collective learning designed by the primary work groups increase the abilities of teachers to teach” (Astuto et al., 1994, p. 58). This assumption welcomes inclusion in an educational environment where there is individual and collective learning characterized by collaboration, not competition. It supports an open and expansive work environment that more

readily assists teachers in their ability to teach all students. In addition, this assumption supports general and special educator teams, who collaborate to bring educational and societal benefits to all children.

Assumption (Barrier) 19a. “People are the means of production within the organization” (Astuto et al., 1994, p. 59). This barrier assumption 19a falls short of assessing the true value of people or individuals within an organization. This assumption is too simplistic for a tremendous undertaking such as inclusive education. Educators or persons in general would need to exhibit extensive knowledge and genuine empathy toward all people, especially children, if they are simply the means of production within an organization. Children are much more than means of production. Because this assumption is so simplistic, barriers to inclusion may begin to evolve.

Assumption (Facilitator) 19b. “People are the initiators of action and shapers of a work environment that fosters individual and collective achievement” (Astuto et al., 1994, p. 60). The notion here is that educators are conduits for change. When educators initiate action and shape policy that supports inclusion, then inclusive education has a greater possibility of working and continuing to work successfully. Inclusion will flourish better and grow in both a work environment and school setting. When individuals achieve within an organization, such as students with disabilities in a school, the organization becomes stronger, and therefore creates significant productivity.

Assumption (Barrier) 20a. “*Assignment of teachers and students reflects organizational needs for operational efficiency and classroom needs for*

instructional simplicity" (Astuto et al., 1994, p. 64*).* There seems to be a suggestion that instruction may be organized solely for the purposes of efficiency or simplicity. Implementing inclusive education may be complex, but is necessary in order to include all children in the American educational system. Inclusion is worth the challenge of its implementation and organizing schooling around such implementation. However, this assumption favors simplicity for operational and instructional efficiency. Implementing inclusion would only complicate the organizational needs. Implementing inclusion takes quality effort in order to ensure that all reap the benefits of high levels of operational performance and multiple layers of instructional quality.

Assumption (Facilitator) 20b. "*Assignment of teachers and students reflects organizational needs for operational flexibility and classroom needs for instructional complexity"* (Astuto et al., 1994, p. 64). There is support for flexibility being the lead ingredient in inclusive thinking and action. Being flexible in implementing inclusion means making complex decisions and solving complex problems. Inclusion is worth the challenge. This is especially true if teachers, administrators and all other stakeholders seek adequate and appropriate ways and means to achieve operational flexibility. Operational flexibility tends to help handle any complex instructional issue related to implementing, sustaining, and expanding inclusive education.

Assumption (Barrier) 21a. "*Curriculum is constructed around a common core of knowledge that reflects a common cultural heritage"* (Astuto et al., 1994, p. 67). There is a central core of curriculum expectations that reflects a common

culture. To be diverse or divergent in nature is not the thinking behind this assumption. This assumption would leave little or no inclination to include characters, images, figures or representations in the development of curriculum that did not match common images or common expectations. Inclusive education recognizes differences and does not expect only common attributes. The desire to support only common attributes found in a curriculum, reflected from a common culture, is at the core of this assumption. Sharing this common image of schooling would not include the attributes of inclusion because this is a barrier assumption.

Assumption (Facilitator) 21b. "*Curriculum is constructed around diverse knowledge that reflects a pluralistic cultural heritage"* (Astuto et al., 1994, p. 67). Divergent thinking is supported here and divergent thinking, in turn, supports inclusion. A curriculum addressing issues of diversity is a direct result of divergent thinking. Also, the initiation and continuation of inclusive education is a direct result of divergent thinking. A curriculum developed for inclusive education is constructed around diverse needs and varied learning and teaching strategies that reflect a pluralistic cultural perspective. Wishnietsky (2001) in his research discovered that there were distinct educational categories of public, private, nonsectarian, religious, charter, home schools in which a broad range of diversity was found among these educational categories, respective stakeholders, and the students within (Wishnietsky, 2001).

Assumption (Barrier) 22a. "*The life space for teaching and learning fits the time allocations and the daily routines imposed on teachers and students"*

(Astuto et al., 1994, p. 70). This assumption is about timing and not about educators or students. There may be a tendency to believe that it may take too much time to include all students, especially if making accommodations for students with disabilities or special needs is time-consuming. For example, dates, times, and the processes of schooling are the most important priorities of the organizational environments. This assumption does not support inclusion because inclusion is not a type of education that can be jotted down on a calendar and forgotten. Inclusion is about children, not calendars. Routinization does not support emergencies or special situations that accompany inclusive education. In contrast, flexibility does support special cases and the need for special, immediate, or permanent accommodations. This assumption is similar to a nice, neat program with no room to expand to include the humanistic, not just procedural, needs of all teachers of all students.

Assumption (Facilitator) 22b. "*The life space for teaching and learning fits the demands of personal, interactive relationships between teachers and students"* Astuto et al., 1994, p. 71). This assumption supports the personalization of school processes that, in turn, supports inclusion. Personalization and interaction provide opportunities for inclusive education to sustain itself within a school organization. Ideally, inclusion may impact on all children and all teachers and embraces all aspects of teaching and learning environments. This assumption, tends to ensure that relevance and interaction exist for all children within the school organization.

Assumption (Barrier) 23a. "*Planning is a management function that*

employs rational processes and formal techniques to project courses of action toward a desired future state for the organization" (Astuto et al., 1994, p. 72). The vital, human factor is left out of this assumption. Planning is not void of participation by stakeholders in the planning process. The organization is the central focus in assumptions that present barriers to inclusion. The organization in this assumption is not supportive of any process that it perceives as holding back or taking more time than allotted. Supporting inclusion under this assumption means opening up the planning process to include those with disabilities or special needs. Modifying the planning in this way may be viewed as too personal and not a management function.

Assumption (Facilitator) 23b. "*Planning is a participatory organizational process that involves teachers, parents, students and administrators in discussing, imaging and debating desirable alternative states for the immediate and long-term future"* (Astuto et al., 1994, p. 72). This assumption supports inclusion because making this assumption reacts to the needs of individuals to participate through discussion, visioning, debating and decision-making. Clark (1994) says that planning processes may include opportunities to engage in thoughtful, provocative conversations with large numbers of participants and stakeholders in the organization. The planning view of Astuto et al. (1994) is an alternative process that supports inclusive education.

Assumption (Barrier) 24a. "*Decision processes require administrators to seek advice from professional staff and others, develop consensus and select options consistent with the school's goals, purposes and processes"* (Astuto et

al., 1994, p. 74). This assumption indicates that administrators may be the only group who holds the key to implementing options in education. Many administrators may begin their administrative careers by seeking help from various sources instead of facilitating and engaging professional teaching and support staff to identify instructional strategies and educational options (McGregor & Vogelsberg, 1998). This assumption has administrators holding the key and not sharing with other stakeholders. This assumption relates to a constrained view of leadership and would impede the facilitation of inclusion. The responsibility for leading inclusion reform would be limited only to the administrator in charge, the principal. Making this assumption may guarantee that the most significant barrier to inclusion would be the school principal, who stands to drive reform and not stifle it.

Assumption (Facilitator) 24b. "*Decision processes require professional staff to identify and select a range of alternative options consistent with principles of teaching and learning and the value referents on which the school community is based"* (Astuto et al., 1994, p. 74). Inclusion is supported because it infers that every stakeholder is an equal partner in processing a varied range of alternatives, options and strategies through school and community organizational structures. This assumption incorporates openness and flexibility. It is accommodating and unconstrained. Control is decentralized in order for inclusion to successfully be implemented under professional and participatory processes.

Assumption (Barrier) 25a. "*Standardized testing documents student achievement and informs decisions about students' programs of learning"* (Astuto

et al., 1994, p. 75). There is an assumption that there is only one medium by which to document student performance and productivity and that is by standardized testing. Student achievement and programs of learning are assumed to be measured and prescribed only by standardized testing instruments. This assumption does not take into consideration the need to make assessment a collaborative effort among the teacher, student, and parent. Students in need of inclusive education may stand to lose out on valuable programs of learning because they may not have fared well on standardized tests or in standardized assessment programs. If the assumption continues that test scores are the only acceptable assessment indicators, inclusion may disappear entirely. Such an assumption may be unfair to students with disabilities. Special education students under such an assumption would be omitted from the standardized test sessions. There would be limited or no actions made for the physically disabled to take standardized tests. The only exception would be to test that certain physically disabled students who were smart enough to help increase school-wide test scores. This assumption does not assist educators to move beyond relying on mere test scores and on to constructing programs to understand and improve student learning competencies and skill mastery. Under this assumption, administrators promote the educational cycle as including only teaching and testing and not other tasks such as accommodating, teaching, testing, re-teaching, and re-testing. It is important to note that inclusive education may include statewide and standardized assessment programs but students with or without disabilities are

not limited or constrained by the practice of this sole source assessment.

Assumption (Facilitator) 25b. "*Assessment is a collaborative effort between teachers and students to understand student learning and open possibilities for student growth"* (Astuto et al., 1994, p. 75). This assumption supports inclusion in its approach to relating diagnostic outcomes and prescriptive plans to improve student learning competencies and skill mastery levels. Assessments are not to be the only determining factor to measure whether students are successful in their school performance. There needs to be varied assessment instruments to map out a broad field of educational options to increase school performance. It is inequitable practices to use only assessment scores on standardized testing to determine programs of learning without some aspects of conferences, collaboration, and consensus.

Assumption (Barrier) 26a. "*The quality of the school's work is determined by measuring the extent to which it promotes achievement on standardized tests"* (Astuto et al., 1994, p. 77). This assumption does not acknowledge the fact that accommodations and adjustments are an integral part of the support needed for inclusive education. There is no mention of the role of any school or educational institution on making accommodations and adjustments to ensure the continuous progress or achievement on standardized tests. Further, this assumption makes no mention of the school's responsibilities, professional roles, parental involvement, or stakeholders' support in realizing positive student outcomes. This assumption is direct in stating that the only point that matters in assessing the quality of schooling is achievement on standardized tests. This assumption is

not accommodating in its approach to the quality of schooling and therefore presents a barrier to inclusion.

Assumption (Facilitator) 26b. *"The quality of the school's work is determined by regularized assessments of educational processes, professional practices and student outcomes by professional staff; student, parents, and other stakeholders"* (Astuto et al., 1994, p. 77). This assumption supports inclusion because it places emphasis on the assessment of the processes of schooling and professional strategies rather than placing the burden and responsibility on the student to measure up to any established standards. Schools and school districts differ in economic, social, and environmental cultures. Therefore, there may be a positive matching of educational services with students' needs. For example, students under this assumption are not burdened with having to find ways to measure up to a neighboring community of affluent dwellers. Educational processes that function under this assumption are more apt to promote the inclusion of all children in the procedural effort to help them achieve success. The principals of such schools would hopefully realize and accept their roles and responsibilities to ensure positive student outcomes.

The Inclusion Implementation Importance Questionnaire (IIIQ) as a Research Instrument and its Parameters

The second survey instrument, *Implementing Inclusion Importance (IIIQ)* was designed to provide information on whether the high school principals believed the importance of implementing inclusion regardless of their assumptions about inclusion. In other words, the study's plan was to determine if

having a high barrier score on the DEAQ would identify a lack of importance in implementing inclusion. The categories of the IIIQ statements were as follows:

1. *Knowledge of students with disabilities.* Does the principal know his/her student population in terms of those in general education, special education, overall needs special accommodations, and both special and general education teacher competency and skill sets for teaching students in special education.
    a. It is important to know the percentage of students with disabilities in the vocational-technical education classes.
    b. It is important to seek to identify students with disabilities who might benefit from vocational-technical education.
    c. It is important to know the percentage of students with disabilities participating in work-based and transition services and activities and seek to identify those students with disabilities who could benefit from such experiences.
    d. It is important to know the numbers of students with disabilities who are participating in nonacademic and extracurricular school activities with their non-disabled peers and seek to identify students who could participate.
    e. It is important to know the numbers of students with disabilities who are participating in guidance counseling and seek to identify students who could benefit.

2. *Training in special education and inclusion.* Principal has had both comprehensive and specialized training and professional development in inclusion, inclusion implementation in secondary schools, and the concept of special education in general, including what to do when student emergencies arise, especially for students with individual disabilities.
    a. It is important to be trained and knowledgeable of the emergency procedures or actions that may be needed by a student with a disability, including medical, behavioral, or other emergency.
    b. Belief in the Value of Including Students with Disabilities.
    c. It is important to believe that to the maximum extent possible, students with disabilities belong in classrooms and other school and community settings with students who are not disabled.
    d. It is important to believe that social inclusion is an essential element of successful full inclusion and that students must feel that they belong.
    e. It is important to believe that students with disabilities placed into general education classrooms may be as equally involved in cooperative learning and peer instruction as are all students.
3. *Commitment to caring about all children.*
    a. It is important to be committed to the development of a caring high school community that fosters mutual respect and support among personnel, parents, and students.

b. It is important to be committed to the belief that students without disabilities can benefit from friendships with students with disabilities.
c. It is important to actively intervene in student behaviors that violate the belief that all students must demonstrate respect for each other and that all students belong.
d. It is important to create a school environment and culture of support and commitment to inclusion and the development of inclusive practices (Janney & Snell, 2004).
e. It is important to celebrate the successes of inclusion by rewarding excellence in teaching of diverse classrooms, team teaching, special education consultation, and creative accommodations.

4. *Commitment to planning systemically for inclusion.*
   a. It is important to have a school inclusion plan that addresses how I will intervene to fill absolute gaps in support services, as in cases in which needed support services in students' IEPs are not currently available at my high school.
   b. It is important to have knowledge of support and related services and community resource agencies.
   c. It is important to inform parents of the reasons for their child's placement in general education classrooms, including information in advance of such placement decisions, explanation of student expectations and student performance.

d. It is important to be knowledgeable of parents' due process rights and procedures available to parents for requesting due process hearings.
e. It is important to establish a mediation process as a voluntary and informal method of dispute resolution involving parental disagreements with my school's IEP team.
f. It is important to provide resources for ongoing in-service training of my teachers to prepare them for team teaching, special education consultation, and general accommodation of students with disabilities in their classrooms.
g. It is important to provide resources for technical assistance to teachers and related service personnel to support and guide their inclusion efforts.

5. *Engaging parents and students in the process of implementing inclusion.*
   a. It is important for me to administer student and parent satisfaction questionnaires related to placement and supports.
   b. It is important for me to review parent problem-solving and mediation strategies to determine if changes are needed.
   c. It is important for me to "reinvest" any parental involvement evaluation results, or utilize the results for improvement of inclusive practices and to further dialogue about such improvement and future needs.

A high facilitator score on the DEAQ may be a critical indicator in helping to strengthen inclusion implementation in the high school environment. The IIIQ, developed from the work of Kochhar, West & Taymans (1996), consisted of 26 statements. All of the statements related to what principals would be expected to do in their leadership role in implementing inclusion. Each statement asked for a negative or positive response. High positive scores meant the principal participants felt implementing inclusion was an important task for them to do as leaders of their respective high schools. The statements were divided into key responsibilities similar to the DEAQ domains but not as distinct. The key responsibilities took into account the high school principal as leader.

CHAPTER THREE

METHODS

Overview and Purpose of Methodology

The methodology selected for this research was designed to reach the core of what the participants thought or believed in the form of assumptions. Particular assumptions held by anyone can be difficult to retrieve if the person is unwilling to disclose or does not feel free to express him or herself. While assumptions are personal, they can drive public opinion when acted upon in a public or professional arena. Just how much of a driving force personal assumptions, classified by the researcher as dominant educational assumptions were for the study participants, became the major focus of this study. To identify assumptions held by school principals, it was decided that the best choice of methodology used in this study would be that of survey research.

Because the researcher could not find survey research instruments designed to assess the educational assumptions of high school principals, the decision was made to develop a survey instrument in the form of a questionnaire. In addition, research did not yield any survey instruments that assessed the perception of high school principals on the importance of implementing inclusion in their respective high schools. The researcher decided to develop such survey instrument in the form of a questionnaire. It was thought that the development of a dual set of questionnaires would better meet the methodological goals of the study.

The goal of this particular methodology, survey instrument design, was to discover whether a particular behavior was held by a sample population of a larger population of school leaders. The particular behavior is making assumptions, either positive (facilitator) or negative (barrier). The terms “facilitator” and “barrier” to describe the predisposition of assumptions supporting inclusion was directly related to Astuto, Clark, Read, McGree & Fernandez’s (1994) use of the terms to describe 26 facilitator assumptions and 26 barrier assumptions (Astuto et al., 1994, p. 3). Specifically, the behavior is making positive or facilitator assumptions about inclusion or making negative or barrier assumptions about inclusion. Inclusion is a term used in school settings, including classrooms that allow students with disabilities access to education alongside students without disabilities. Members of the sample population were a sample of high school principals in a single Mid-Atlantic American state, known in this study as the “State.”

This research focused on one aspect of leadership involving principals' dominant educational assumptions about the special education concept of inclusion. The study went further in attempting to identify whether the principals’ assumptions about inclusion reflected the importance they assigned to implementing inclusion in their respective high schools. In other words, the research examined whether there was a relationship between assumptions held by a sample of high school principals and the importance they assigned to implementing inclusion in their respective high schools. Specifically, the research reflected high school principal leadership through surveying principals’ individual

educational assumptions and their perceived importance of implementing inclusion.

The work of Astuto et al. (2000) served as a catalyst for this research study. Though the authors did not indicate who the particular educational leaders were in their work, this study chose principals and their dominant educational assumptions. These dominant educational assumptions were purported to affect the way inclusion was implemented. Effective research may discover the correlation between educational assumptions held, opinions about inclusion reported, and the perceived importance of implementing inclusion. However, there may be an additional realm to research between having assumptions and implementing inclusion. That realm is perceived importance. Whether or not the high school principal perceived it important to implement inclusion in his or her respective high school may be a critical issue. Data analysis of the results could determine the interrelatedness among dominant educational assumptions and perceived importance of implementing inclusion.

Therefore, the purpose of this survey research was to first, develop survey instruments to specifically examine the following key issues linking leadership and inclusion, and second to pilot test the instrument. The key issues that were the focus of this investigative research were (a) the educational assumptions held by a sample of high school principals; (b) the importance of inclusion being implemented as indicated by the sampled principals; and (c) the relationship between educational assumptions held and the importance of implementing inclusion. The development of the survey instruments, in the form

of questionnaires, focused on one aspect of leadership involving principals' dominant educational assumptions about inclusion. The development of the other instrument, also in the form of a questionnaire, focused on a second aspect of leadership involving principals' belief in the importance of implementing inclusion in their high schools.

The first researcher-made questionnaire was given, by the researcher of this study, an original title of *Dominant Educational Assumptions Questionnaire* or *DEAQ* as it will be referred to throughout this study. This survey instrument, designed by the researcher, was based on the work of Astuto et al., (1994) on dominant educational assumptions. High school principals were selected by the researcher to study with respect to their dominant education assumptions held about inclusion. The second researcher-made questionnaire was given, by the researcher of this study, an original title of *Inclusion Implementation Importance Questionnaire* or *IIIQ* as it will be referred to throughout this study. This second survey instrument, designed by the researcher, was based on the work of Kochhar, West & Taymans, (2000) on implementation indicators for the implementation of inclusion in schools. In summary, the survey instruments, *DEAQ* and *IIIQ,* were designed to examine the relationship between assumptions held by high school principals and their beliefs about the importance of implementing inclusion in their schools.

Design and Epistemology

The study used a non-experimental design in the form of survey design. The study involved the development of two questionnaires to provide a

quantitative description of assumptions about inclusion held by a sample population from a larger population of secondary school leaders. Survey research can give the researcher a much clearer lens to make generalizations (Creswell, 2003). In this case, the results of the survey research gave the researcher the opportunity to make generalizations about high school principals and their assumptions about inclusion and their subsequent implementation.

Epistemology, or theory of knowledge, is a branch of philosophy concerned with the nature and scope of knowledge. Epistemology deals with sources of knowledge, both objective, empirical data as well as subjective data, such as beliefs and assumptions. Using a model developed from Plato's philosophy helped place the high school principals' assumptions into a theoretical perspective: According to Plato (Vlastos, trans.1971), knowledge could be described as a subset of that which is both true and believed or assumed as illustrated in Figure 7.

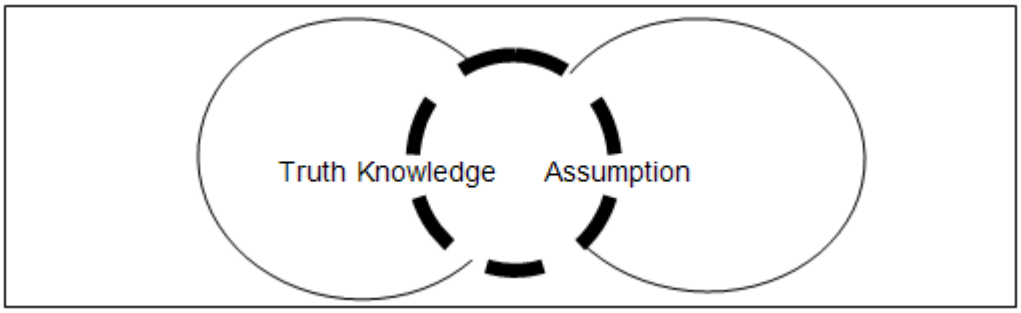

Figure 7. The Subset of Knowledge between Truth and Assumption. (Adapted from Vlastos, 1971)

The outcome of the survey research helped to identify answers to the following epistemological questions. The answers then helped to address issues

and concerns for professional development efforts in leadership (high school principal) and special education (inclusion).

Plato's model of epistemology (Vlastos, 1971) asked three questions to give some meaning to the theoretical concept of knowledge. Answering these questions, provided below, as they related to this study gave meaning to what knowledge was actually being researched:

1. *What is knowledge?*

   The study highlighted what knowledge the high school principals had about inclusion. Specifically, were they aware that inclusion is a concept to be implemented in their high schools? Did they have enough knowledge to make any assumptions about inclusion?

2. *How is knowledge acquired?*

   The study may support professional development on inclusion for high school principals as a major part of systemic training on special education concepts for administrators. How do high school principals acquire knowledge on inclusion?

2. What do people know?

   Simply, the study determined what assumptions sampled high school principals held about inclusion.

Research Questions

Facilitator and barrier educational assumptions held by high school principals and the perceived importance they placed on implementing inclusion were analyzed to answer the following research questions:

1. Does gender of high school principals predict their educational assumptions about the contextual domains of schooling as defined by the items on the *Dominant Education Assumptions Questionnaire (DEAQ)*?
2. Does gender of high school principals predict perceived importance of implementing inclusion in their high schools as defined by the items on the *Inclusion Implementation Importance Questionnaire (IIIQ)*?
3. Does school size, school type, percent of school population on Free and Reduced Meals (FARM), or the size of the African-American, Hispanic, and White student population predict a principal's assumptions regarding the contextual domains of schooling as described by the *Dominant Education Assumptions Questionnaire* and implementation indicators as defined by the items on the *Inclusion Implementation Importance Questionnaire (IIIQ)*?
4. Is there a relationship between a principal's facilitator score on the Dominant Educational Assumptions Questionnaire (DEAQ) and his or her score on the Inclusion Implementation Importance Questionnaire (IIIQ)?
5. Is there a special or significant relationship across descriptors?

Null and Alternate Hypotheses

The findings of the study may indicate that there is no relationship or not a significant relationship for one, more than one, or all of the research questions. Expecting to find no relationship in the variables of the research questions would

be recognized as null or alternate hypotheses. The null or alternate hypotheses would be summarized as having no relationship between the dominant educational assumptions (facilitator or barrier) held by the sampled high school principals and their beliefs on the importance of implementing inclusion. As a result of the research questions the following null and alternate hypotheses were investigated:

1. There is no relationship between gender of high school principals as a predictor of their educational assumptions regarding the contextual domains of schooling as described by the *Dominant Education Assumptions Questionnaire (DEAQ)*?
2. There is no relationship between gender of high school principals as a predictor of their assumption of the importance of implementing inclusion in his/her high school?
3. There is no relationship among school size, percent of school population on FARM, or the size of the African-American, Hispanic, and White student populations as predictors of a principal's assumptions regarding the contextual domains of schooling as defined by the *Dominant Education Assumptions Questionnaire (DEAQ)*?
4. There is no relationship between a principal's facilitator score on the *Dominant Educational Assumptions Questionnaire (DEAQ)* and his/her inclusion implementation Importance score on the *Inclusion Implementation Importance Questionnaire (IIIQ)*?
5. There is no special or significant relationship across descriptors?

Research Matrices

The research matrices offered (see Table 5) quantitative research survey tools per research question. The major focus for research questions one and two was gender and the research tools were educational assumptions and inclusion implementation indicators on the DEAQ and the IIIQ, respectively. The research tools were effectively matched with the research questions because the tools focused on the content of each research question.

Table 5

Research Question Matrix

Research Questions	Quantitative Research Survey Tool(s)
1. Does gender of high school principals predict their educational assumptions about the contextual domains of schooling as defined by the items on the *Dominant Educational Assumptions Questionnaire (DEAQ)*?	Dominant Educational Assumptions Questionnaire (DEAQ)
2. Does gender of high school principals predict importance of implementing inclusion in their high schools as defined by the items on the *Inclusion Implementation Importance Questionnaire (IIIQ)*?	Inclusion Implementation Importance Questionnaire (IIIQ)
3. Does school size, percent of student population on Free and Reduced Meal Plan (FARM), or the size of the African-American, Hispanic and White student populations predict a principal's assumptions regarding the contextual domains of schooling as described by the *Dominant Educational Assumptions Questionnaire (DEAQ)*?	Dominant Educational Assumptions Questionnaire (DEAQ)
4. Is there a relationship between a principal's facilitator score on the *Dominant Educational Assumptions Questionnaire* and his/her score on the *Inclusion Implementation Importance Questionnaire*?	Dominant Educational Assumptions Questionnaire (DEAQ) Inclusion Implementation Importance Questionnaire (IIIQ)
5. Is there a special or significant relationship across descriptors (principal gender, African-American student population, Hispanic student population, White student population, special education student population, school size, school type, FARM student participation percentage, high school assessment special education student participation, high school assessment general education student participation?	Dominant Educational Assumptions Questionnaire Inclusion Implementation Importance Questionnaire

Research Procedures

Site and Participants

The participants included high school principals from the high schools in a state in one of the Mid-Atlantic American states. Purposeful sampling was used to allow selection of “typical” persons for inclusion in the study sample. There was one high school principal assigned to each school in each county or city school system. There were 193 total high schools in the State, from 23 county systems and one city system, with 146 being labeled as comprehensive, defined as having special and general education students enrolled in grades 9-12. The sample population consisted of principals who returned both the *DEAQ* and the *IIIQ.* Only those principals willing to mail back completed surveys were included anonymously in the research study as volunteer study participants.

The State was selected as the setting because of its comprehensive high school reform effort over the last several years. The reform effort came under the U. S. Department of Education funding entitled, “High Schools that Work.” The reform program was designed to improve delivery of instruction services to all high school students. Because of this national effort, the reform program may have been aimed at all high school students, those in general education and special education. It was assumed that any comprehensive high school reform program would have inclusion on its agenda (Schnorr, Black & Davern, 2000). However, high schools have historically had the lowest rate of inclusion implementation than the elementary or middle schools (Wood, 2005). High

schools may tend to focus more on Carnegie units and graduation rates for general education students than on inclusion efforts and accommodations for special education students (Wood, 2005). Once the State was selected, the sample population of high school principals was determined.

Instrumentation Overview

The two questionnaires, the *DEAQ* and the *IIIQ*, were developed for this particular research study to (a) survey the dominant education assumptions on inclusion; and, (b) determine whether these assumptions were driving forces to implement inclusion in the principals' respective high schools. The first questionnaire, the DEAQ, was constructed from the 52 educational assumptions (matching pair sets of 26 positive or facilitator assumptions and 26 negative or barrier assumptions) found in *Roots of reform: Challenging assumptions that control change in education* (Astuto et al., 1994). The 52 educational assumptions were dominant educational with no subsets of assumptions cited. The 52 educational assumptions were further categorized into five dominant categories or domains: political, social, structural, individual, and procedural. Dominant educational assumptions held by high school principals on inclusion were the major constructs being researched. These educational assumptions for this study were constructed into a questionnaire and the results analyzed with the results of a second questionnaire on the importance of implementing inclusion. Each educational assumption was randomly assigned to the dominant educational assumptions questionnaire. The *DEAQ* was estimated to take approximately 20 minutes and the IIIQ was estimated to take approximately 10 minutes of each principal's time. Administering the DEAQ provided a look at what

dominant educational assumptions are held by a sample of high school principals. This instrument allowed the high school principals an opportunity to identify assumptions that they held. A wide range of reaction was anticipated due to the broad range of domains covered by the dominant educational assumptions.

The second instrument, *the IIIQ,* was developed using completion checklist items extracted from *Successful inclusion: Practical strategies for a shared responsibility* (Kochhar, West, & Taymans, 2000) and aligned across core administrative indicators of principal leadership. The study examined the relationship between dominant educational assumptions held by high school principals with their perception of the importance of implementing inclusion in their respective high schools.

Instrument Development

Questionnaires were developed for this study based on their value in retrieving information quickly and accurately from respondents.

As identified earlier, the first instrument, the *DEAQ*, was developed from the 26 barrier assumptions and 26 facilitator assumptions purported by Astuto et al. (2000). The second instrument, the *IIIQ,* was developed from the work of Kochhar, West, & Taymans (2000).

Content validity of the dual set of questionnaires was conducted using a team of experts from the fields of administrative leadership and special education. Each item member had a specific content area to focus on and to provide input. The feedback was summarized in Tables 4, 5, 6. The experts had

the following professional backgrounds that assured the researcher that content was valid in assessing what the survey instruments were intended to assess:

Content Expert 1 (see Table 6) – Had experience in general education, special education, inclusive education and inclusion policy and practice, and disabilities advocacy; held principalship and supervisory roles in secondary special education educational and transitional services; had experience in systemic reform in multiple school systems; served as lead author and presenter of numerous conference presentations on school administration visionary leadership and special education.

Table 6

Summary Feedback of Educational Leadership Content

Questionnaire	Feedback
Dominant Educational Assumptions Questionnaire (DEAQ)	Pairs of assumptions are randomized enough to offset patterned responses. Wording is educational and itemized under domains. Items are clearly read as assumptions.
Inclusion Implementation Importance Questionnaire (IIIQ)	Assessment items are more simplistic than those on the DEAQ. Principals can identify with the content of these items.

Content Expert 2 (see Table 7) – Had experience in educational administration and leadership on all levels of schooling with focus on special education; had superintendent experience in multiple school districts with exemplary special education programs; held principalships on elementary, middle/junior high and senior high school levels; had experience as national presenter on special education and inclusive education services within a general education environment.

Table 7

Summary Feedback of Inclusion Content

Questionnaire	Feedback
Dominant Educational Assumptions Questionnaire (DEAQ)	Relates to inclusion within special education context Refers to assumptions needed to ensure implementation of inclusion Is generic enough not to be misleading
Inclusion Implementation Importance Questionnaire (IIIQ)	Refers to identifiable tasks known as "principals only" tasks

Content Expert 3 (see Table 8) – Had experience in educational administration and leadership on elementary, middle/junior high and high school levels; held principalship on the middle/junior high and senior high school levels; had taught at multiple university levels in educational administration; served on educational boards and commissions; had experience as national conference presenter on educational leadership, special and general education, and policy and practice in education.

Table 8

Summary Feedback of Mechanics Content

Questionnaire	Feedback
Dominant Educational Assumptions Questionnaire (DEAQ)	A bit lengthy but taking into account that there are pairs, the length is decreased. Can be monotonous. Some items are wordy and the meaning cumbersome but as a whole, instrument is manageable.
Inclusion Implementation Importance Questionnaire (IIIQ)	Items are easy to read and understand Written using correct grammar Items are not easily taken out of context because of concise wording

Development of the Dominant Educational Assumptions Questionnaire (DEAQ) Matrices

A summary of special coding for the educational assumptions per domain found in the *DEAQ* was presented to assist the comprehension of opposing pair sets of 26 barrier assumptions and 26 facilitator assumptions (See Table 9). The dominant educational assumptions, found in the DEAQ, have been categorized into the five domains (political, social, structural, individual and procedural as outlined and discussed in detail by Astuto et al. (1994). (See Tables 10, 11, 12, 13 and 14).

Table 9

Summary Descriptions of Educational Assumptions Per Domain.

Summary descriptions of educational assumptions per domain	
# = Sequence of numbered barrier and facilitator assumptions	POL = Political Domain
EAC = Educational assumption categories	SOC = Social Domain
D = Domain codes	STR = Structural Domain
TYP = Type of assumptions	IND = Individual Domain
BA = Barrier assumptions	PRO = Procedural Domain

Table 10

Dominant Educational Assumptions in the Political Domain (Adapted from Astuto et al., 2000)

#	EAC	D	Description of Educational Assumption*	TYP
1a	Meritocracy	POL	Assumes education has no responsibility to meet children where they are and take them further.	BA
1b	Universality	POL	Assumes all children may have access to all benefits available in society.	FA
2a	Instrumentality	POL	Assumes an education system exists only for itself, contributing to society, and not for children.	BA
2b	Entitlement	POL	Assumes education system is valued by society and benefits it obtains, anchors and entitles children.	FA
3a	Individual Responsibility	POL	Assumes children responsible for their success and no responsibility placed on institution of schooling.	BA
3b	Institutional Responsibility	POL	Assumes the school must be responsible and may adjust schooling to the children regardless of ability	FA
4a	Competition/ Standards	POL	Assumes special education children in inclusive education environments would pull down standards.	BA
4b	Cooperation/ Support	POL	Assumes inclusive learning environment built on trust, confidence, support, challenge among all children.	FA
5a	Stable Investments	POL	Assumes additional resources in public education will not increase system performance, the major goal.	BA
5b	Increased Investments	POL	Assumes putting additional resources invested in public education will increase student performance.	FA
6a	Bankruptcy	POL	Assumes need for national takeover of public education for children not faring well in today's society.	BA
6b	Viability	POL	Assumes broad view of today's children being smarter and faring better than children in past societies.	FA

Note. *Political* relates to, or is concerned with the making, as distinguished from administration, of government policy; involves governance, hierarchies, educational theory and related doctrine (Astuto et al., 1994. pp. 3-20).

Table 11

Dominant Educational Assumptions in the Social Domain (Adapted from Astuto et al., 2000)

#	EAC	D	Description of Educational Assumption*	TYP
7a	Stability	SOC	Assumes there is no merit in thoughts of movement and growth or viability for an education system.	BA
7b	Transformation	SOC	Assumes that when schools are actively engaged in schooling for children, there is considerable growth.	FA
8a	Commonality	SOC	Assumes that schooling may promote the opinion that everyone may be as much as possible.	BA
8b	Diversity	SOC	Assumes education must demonstrate understanding & appreciation of diverse cultural tradition.	FA
9a	Determinism	SOC	Assumes schools can only effect marginal change in the lives of children with varying backgrounds.	BA
9b	Interruptability	SOC	Assumes taking bold steps in education will stop predetermined fates for children with disabilities.	FA
10a	Family Deficit	SOC	Assumes poverty, minority status and dysfunctional families impede all student progress.	BA
10b	Family Support	SOC	Assumes regardless of situation/circumstances disabilities, student progress is possible & plausible.	FA
11a	Segmented Child & Family	SOC	Assumes education systems need not be at the center of cooperative agreements for children to progress.	BA
11b	Comprehensive Child & Family	SOC	Assumes education systems must take the lead in coordinating comprehensive services.	FA

Note. *Social* relates to human society, the interaction of the individual and the group, or the welfare of human beings as members of society; focuses on human relationships and communication (Astuto et al., 1994. pp. 3-20).

Table 12

Dominant Educational Assumptions in the Structural Domain (Adapted from Astuto et at., 2000)

#	EAC	D	Description of Educational Assumption*	TYP
12a	Bureaucracy	STR	Assumes bureaucracy/rigid structure of schooling impedes survival of inclusive educational practices.	BA
12b	Democracy	STR	Assumes shared activities rather than dictated mandates would ensure the survival of inclusive educational practices.	FA
13a	Control	STR	Assumes organizational, institutional control would constrain/impede the positive growth of inclusion.	BA
13b	Empowerment	STR	Assumes that empowering schooling fosters inclusive decisions affecting combining general and special education.	FA
14a	High Standards	STR	Assumes standards and assessments are to be used as instruments to exclude the student from the educational organization.	BA
14b	Improved Processes	STR	Assumes standards be incorporated into assessment/instructional strategies to ensure inclusive education for children.	FA

Note. Structural relates to, or affecting stability of the structure or any given framework; relates to the infrastructure of systems, organizations or bureaucracies (Astuto et al., 1994. pp. 3-20).

Table 13

Dominant Educational Assumptions in the Procedural Domain (Adapted from Astuto et at., 2000)

#	EAC	D	Description of Educational Assumption*	TYP
15a	External Motivation	IND	Assumes individuals will become inclusive if the institution forces them through external incentives.	BA
15b	Internal Motivation	IND	Assumes individuals are capable of being inclusive through self-motivation/evolving of human nature.	FA
16a	Competition	IND	Assumes competition has a strong tendency to shut out children with disabilities.	BA
16b	Cooperation	IND	Assumes cooperation has a strong tendency to support and include children with disabilities.	FA
17a	Technicians	IND	Assumes more is needed than technical skill to support inclusive educational practices and settings	BA
17b	Professionals	IND	Assumes high levels of professional expertise would never leave any group of children from inclusion.	FA
18a	Evaluation	IND	Assumes competitive work environments are detrimental to persons and children with special needs through elimination.	BA
18b	Collaborative Learning	IND	Assumes that inclusion survives when there is individual and collective learning through collaborative work environments.	FA
19a	Means of Production	IND	Assumes defining people as means of production falls short of true value of all people included in the organization.	BA
19b	Initiators of Action	IND	Assumes people hold keys to making inclusion best practices succeed through human nature as action initiators.	FA

Note. (*Individual* relates to, or is distinctively associated with one person, or existing as a distinct entity; refers to the characteristics and needs of the individual (Astuto et al., 1994. pp. 3-20).

Table 14

Dominant Educational Assumptions in the Procedural Domain (Adapted from Astuto et al, 2000)

#	EAC	D	Description of Educational Assumption	Type
20a	Efficiency	PRO	Assumes instruction may be organized for the purpose of efficiency and may not include anything complex.	BA
20b	Flexibility	PRO	Assumes flexibility lends itself to inclusive thinking and action that include complexity and decision-making.	FA
21a	Commonality	PRO	Assumes curriculum may be developed around a central core of knowledge and common cultural heritage.	BA
21b	Diversity	PRO	Assumes inclusion is supported by divergent thinking and the curriculum may address issues of multi-diversity.	FA
22a	Routinization	PRO	Assumes inclusion may take too much time and cause disruption to the time allocations and daily school routines.	BA
22b	Personalization	PRO	Assumes personalization of education lends itself to any school process including time and space constraints.	FA
23a	Rational Planning	PRO	Assumes the human factor in management is not necessary to ensure a desired future state for the organization.	BA
23b	Participatory Planning	PRO	Assumes participation of stakeholders is supportive of inclusion due to the goal to meet needs of those participating.	FA
24a	Centralized Decisions	PRO	Assumes administrators must hold the key to schooling instead of facilitating and engaging other key professionals.	BA
24b	Decentralized Decisions	PRO	Assumes stakeholders are capable of working together to process ranges of options and strategies for all students.	FA
25a	Standardized Assessment	PRO	Assumes there is only one dimension to student performance and is measured only by standardized assessments,	BA
25b	Collaborative	PRO	Assumes assessment is not only factor in determining school performance; but	FA

	Assessment		assessment may be multi-faceted.	
26a	Measuring Students	PRO	Assumes accommodations/adjustments are not needed for inclusion; for assessments may test ability & disability.	BA
26b	Improving Processes	PRO	Assumes schooling or be assessed rather than having students measure up to unaccountable assessments.	FA

Note. Procedural relates to administering substantive law; includes organizational goals and processes (Astuto et al., 1994. pp. 3-20).

The DEAQ questionnaire items were randomly distributed and coded (See Table 15) to ensure the randomness of the responses made by the principals. Because the DEAQ educational assumptions were originally organized by Astuto et al. (1994) organized in opposite pair sets (a & b, a & b, a & b, etc.), the researcher randomly distributed all of the assumptions throughout the questionnaire. All 52 educational assumptions were represented under all five domains.

Table 15

DEAQ Questionnaire Item Matrix Per Domain (randomly selected and coded questionnaire items organized by assumption domains)

Domain	Code	Question #'s
Political	POL	17a, 17b, 8b, 3a, 12b, 2b, 22b, 15a, 5a, 4b, 4a, 1b
Social	SOC	16b, 19b, 19a, 26b, 26a, 21b, 13b, 13a, 12a
Structural	STR	16a, 10a, 11b, 9b, 3b, 18a, 23a
Individual	IND	7b, 2a, 6b, 25b, 24b, 1a, 6a, 10b, 14a
Procedural	PRO	7a, 11a, 18b, 23b, 24a, 20b, 15b, 9a, 5b, 8a, 11b, 25a, 10a, 22a

Note. Adapted from Astuto et al.,1994.

Development of the Inclusion Implementation Importance Questionnaire (IIIQ) Matrices

The second survey instrument, *Implementing Inclusion Importance (IIIQ)* developed from the work of Kochhar, West, & Taymans (2000), was designed to provide information on whether the high school principals believed the importance of implementing inclusion regardless of their assumptions about inclusion. In other words, the aim of the study was to determine if having a high barrier score on the DEAQ would identify a lack of perceived importance in implementing inclusion. The IIIQ consisted of 26 statements. All of the statements related to what all school principals (elementary, middle/junior, high school) would be expected to perform in their leadership roles in implementing

inclusion. Each statement asked for a negative or positive response. The statements were divided into key responsibilities, called “core indicators”, similar to the DEAQ educational domains but not as distinct. The key responsibilities or core indicators took into account the high school principal as leader. The core indicators taken from the IIIQ inclusion implementation importance statements were organized in Tables 16, 17, 18, 19, 20, and 21.

Table 16

Indicator A. Knowledge of Students with Disabilities IIIQ

IIIQ Core Indicator Summary of Importance: Principal knows his or her student population in terms of those in general education, special education, overall needs, special accommodations, and both special and general education teacher competency and skill sets for teaching students in special education.
1. It is important for me to know the percentage of students with disabilities in the vocational-technical education classes.
2. It is important for me to seek to identify students with disabilities who might benefit from vocational-technical education.
3. It is important for me to know the percentage of students with disabilities participating in work-based activities/transition services and seek to identify those students with disabilities who could benefit from such experiences.
4. It is important for me to know the numbers of students with disabilities who are participating in nonacademic and extracurricular school activities with their non-disabled peers and seek to identify students who could participate.
5. It is important for me to know the numbers of students with disabilities who are participating in guidance counseling and seek to identify students who could benefit.

Note. Adapted from Kochhar, West, & Taymans, 2000.

Table 17

Indicator B. Training in Special Education and Inclusion

IIIQ Core Indicator Summary of Importance: Principal has had both comprehensive and specialized training and professional development in inclusion, inclusion implementation in secondary schools, and the concept of special education in general, including what to do when student emergencies arise, especially for students with disabilities.
6. It is important for me to be trained and knowledgeable of the emergency procedures or actions that may be needed by a student with a disability, including medical, behavioral, or other emergency.

Note: Adapted from Kochhar, West, & Taymans, 2000.

Table 18

Indicator C. Belief in the Value of Including Students with Disabilities

IIIQ Core Indicator Summary of Importance: Principal believes in the value of including all students with disabilities in the overall school programs, practices, processes and procedures, including academic, social, physical, and affective experiences with all students with or without disabilities within the special and general education environment (Kochhar, West & Taymans, 2000).
7. It is important for me to believe that to the maximum extent possible, students with disabilities belong in classrooms and other school and community settings with students who are not disabled.
8. It is important for me to believe that social inclusion is an essential element of successful full inclusion and that students must feel that they belong.
9. It is important for me to believe that students with disabilities placed into general education classrooms may be as equally involved in cooperative learning and peer instruction as are all students.

Note. Adapted from Kochhar, West, & Taymans, 2000.

Table 19

Indicator D. Principal's Commitment to Caring About All Children (regardless of disabilities or abilities)

IIIQ Core Indicator Summary of Importance: Principal has made a conscious commitment to caring about all children regardless of disabilities or abilities and principal backs up his or her caring with words and action within the school and community environment (Kochhar, West & Taymans, 2000).
10. It is important for me to be committed to the development of a caring high school community that fosters mutual respect and support among personnel, parents, and students.
11. It is important for me to be committed to the belief that students without disabilities can benefit from friendships with students with disabilities.
12. It is important for me to actively intervene in student behaviors that violate the belief that all students must demonstrate respect for each other and that all students belong.
13. It is important for me to create a school environment and culture of support and commitment to inclusion and the development of inclusive practices.
14. It is important for me to celebrate the successes of inclusion by rewarding excellence in teaching of diverse classrooms, team teaching, special education consultation, and creative accommodations.

Note. Adapted from Kochhar, West, & Taymans, 2000.

Table 20

Indicator E. Commitment to Planning Systemically for Inclusion (Adapted from Kochhar, West, & Taymans, 2000)

IIIQ Core Indicator Summary of Importance: Principal commits to establishing in collaboration with school staff and parents, strategic indicators as goals and objectives, action planning tasks, target dates or deadlines, capacity builders or teams, and evaluation guidelines and instruments (Kochhar, West, & Taymans, 2000).
15. It is important for me to have a school inclusion plan that addresses how I will intervene to fill gaps in support services, as in cases that need support services in students' IEPs not currently available at my high school.
16. It is important for me to have knowledge of support and related services and community resource agencies.
17. It is important for me to inform parents of the reasons for their child's placement in general education classrooms, including information in advance of such placement decisions, explanation of student expectations and student performance.
18. It is important for me to be knowledgeable of parents' due process rights and procedures available to parents for requesting due process hearings.
19. It is important for me to establish a mediation process as a voluntary and informal method of dispute resolution involving parental disagreements with my school's IEP team.
20. It is important to provide resources for ongoing in-service training of my teachers to prepare them for team teaching, special education consultation, and general accommodation of students with disabilities in their classrooms.
21. It is important to provide resources for technical assistance to teachers and related service personnel to support and guide their inclusion efforts.

Note. Adapted from Kochhar, West, & Taymans, 2000.

Table 21

Indicator F. Engaging Parents and Students in the Process of Implementing Inclusion

IIIQ Core Indicator Summary of Importance: Principal systematically in collaboration with teachers, counselors and other school and system personnel, provides both parents and students opportunities to become engaged in the educational planning, programs, processes and outcomes for students with disabilities as an integral of the school-wide strategic plan (Kochhar, West, & Taymans, 2000).
22. It is important for me to administer student and parent satisfaction questionnaires related to placement and supports.
23. It is important for me to review parent problem-solving and mediation strategies to determine if changes are needed.
24. It is important for me to "reinvest" any parental involvement evaluation results, or utilize the results for improvement of inclusive practices and to further dialogue about such improvement and future needs.

Note. Adapted from Kochhar, West, & Taymans, 2000.

The IIIQ core indicators were organized by the researcher around the corresponding questionnaire items (See Table 22) constructed from the work of Kochhar, West, & Taymans (2000) that reflect what administrative tasks principals would engage in as they implemented inclusion. The indicators were included as the questionnaire items assessing whether the principals believe that the task was important or not important to the overall task of implementing inclusion in their schools.

Table 22

IIIQ Core Indicators/Questionnaire Items Matrix

Core Indicators of Inclusion Importance for Principals	Question Numbers Per Core Indicator
A. Knowledge Base on Concept of Inclusion	1, 2, 3, 4, 5
B. Inclusion Training/Professional Development	6
C. Belief in Value of Including All Students	7, 8, 9
D. Commitment to Caring About All Children	10, 11, 12, 13, 14
E. Planning Systemically for Inclusion	.7, 18, 19, 20, 21, 22, 23
F. Engaging Parents/Students in the Process	24, 25, 26

Note. Adapted from Kochhar, West, & Taymans, 2000.

Procedures for the Pilot Testing of Instruments

The survey questionnaires, DEAQ and IIIQ, were pilot tested in two phases. During Phase I, the questionnaires were administered to graduate students who were studying special education and educational leadership in a university. The graduate students responded from an administrative or instructional perspective depending on their career paths. The graduate students consented to take the surveys and to make comments throughout the instruments. Three different university classes were used covering educational leadership, special education, and strategies for inclusion. The graduate students were given adequate time to complete the questionnaires including extra time if they needed make comments if they chose. Some chose not to make comments but all students completed both questionnaires. In addition, the graduate students were asked to make comments on the directions and cover letter .The adjustments or modifications were made based on the pilot responses of the test

pilot group. The pilot responses for the *Dominant Educational Assumptions Questionnaire (DEAQ)* are found in Chapter 4. The pilot responses for the *Inclusion Importance Implementation Questionnaire (IIIQ)* found in Chapter 4.

Phase II of the pilot test consisted of a sample of actual high school principals from the selected sample school system. The two survey questionnaires were developed to examine such assumptions of high school principals and the perception that inclusion was important enough to be implemented in their high schools. Assumptions were categorized into political, social, contextual, individual, and procedural domains. The principals identified their educational assumptions under these five domains and then identified the importance of detailed steps and strategies designed for the implementation of inclusion.

Data Collection Procedures

The survey research design was cross-sectional, meaning the data was collected at one point in time as opposed to longitudinal or over time. Both questionnaires were self-administered and returned by the participants. This study's data was collected from the two questionnaire packets returned by the respondent high school principals.

The high school principals were provided with questionnaire packets including a cover letter, detailed directions, return self-addressed, stamped envelopes, the *Dominant Educational Assumptions Questionnaire (DEAQ)* and the *Inclusion Implementation Importance Questionnaire (IIIQ)* packets were mailed to the school addresses of the individual high school principals. To

encourage principals to complete the questionnaires and return them in the self-addressed, stamped envelope, each packet included tokens of appreciation: imprinted portfolios, pens and tablets.

The two questionnaires, DEAQ and IIIQ, accompanied by a cover letter (Appendix E) and DEAQ directions (See Appendix F) and IIIQ directions (See Appendix G), were distributed in what was called a survey packet to the principals by mail. The principal participants were asked to complete the questionnaires and return them in self-addressed stamped envelopes on a voluntary basis. The participants were informed that they could used as much or as little of their personal or professional time as they wished. It was strictly their decision to make. The participants were informed that they could decide not to begin the procedures of completing and the returning the questionnaires or they could begin and decide to stop at any time.

The design helped to ensure a smooth response time for the return of the participant responses. Each returned questionnaire was scored and the scores were placed on a data grid scoring sheets. Each returned questionnaire packet was re-scored three additional times for accuracy. The scores were then placed on Microsoft Excel and checked two additional times for accuracy. The Microsoft Word scores were then transferred electronically to the SPSS Analysis Sheets. The information from SPSS has been transferred to Microsoft Word to comply with the APA (American Psychological Association) requirements (See Chapter 4).

Data Analysis

Details of the study's data and statistical analysis may be found in Chapter Three. However a brief summary of the findings were:

Crosstabulation was run to determine the significance between gender of the sample of high school principals and their facilitator or barrier scores to answer the first research question. The definition for crosstabulation used in this study was a combination of two (or more) frequency tables arranged such that each cell in the resulting table represented a unique combination of specific values of crosstabulated variables. The statistical running of crosstabulations allowed the examination of frequencies of observations that belonged to specific categories on more than one variable. By examining these frequencies, relations between crosstabulated variables could be identified. Only categorical (nominal) variables or variables with a relatively small number of different meaningful values may need to be crosstabulated. In the case where a continuous variable is not included in a crosstabulation (e.g., economic status of student population), the continuous variable can be recoded into another particular range (e.g., low, medium, high).

The null hypothesis for *ANOVA* was that the mean (average value of the dependent variable) was the same for all groups. The alternative or research hypothesis was that the average was not the same for all groups. The *ANOVA* test procedure produced an *F-statistic*, which was used to calculate the p-value. If $p < .05$, the null hypothesis could have been rejected. However, in this study p

> .05 and the alternate or research hypotheses for research questions 1, 2, and 3 were rejected. At least 2 groups are different from each other.

The *t-test* is the most commonly used method to evaluate the differences in means between two groups (Creswell, 1994). For example, the *t-test* was used in this study to test whether there was a significance difference between the female high school principals and the male high school principals in their individual responses on the DEAQ or the IIIQ. After running the *t-test*, what was found was that the results were not significantly different but the females scored high more time than the males on facilitator responses. In addition and fortunately for this study, the *t-test* could be used even if the sample sizes were very small (e.g., as small as 10). The number of female and male principals in this study did total more than 10 (22 and 59, respectively). Smaller numbers are possible, as long as the variables are normally distributed within each group and the variation of scores in the two groups were not reliably different. The normality assumption can be evaluated by looking at the distribution of the data (via histograms) or by performing a normality test. The p-level reported with a t-test represents the probability of error involved in accepting our research hypothesis about the existence of a difference. This was the probability of error associated with rejecting the hypothesis of no difference between the two categories of observations (corresponding to the groups) in the population when, in fact, the hypothesis is true.

Analyzing the differences found in this study did not yield significant results or yielded low to very significant results. However, the kinds of

differences were analyzed using cumulative percentages and residual scores. Cumulative percentages, or percentile scores, indicated the percentage of subjects falling below a particular value. For example, the percentile score of 75 indicated that 75 percent of the subjects received lower scores. Residual scores were the differences between the actual y-value and the value obtained by plugging the x-value (that goes with the y-value) into the regression equation.

Themes and Data Variables

The following variables were part of aggregated data:

1. Gender – The gender of the high school principal may make a significant difference in the assumptions held through all five educational domains. One or more of the domains may be related to gender based secondary administration.
2. School size – The size of the high school may make a difference in the principal's assumptions about inclusion. The larger the school, based strictly on student population, the least number of facilitator assumptions that are evidenced.
3. Student population ethnicity – Assumptions of principals may be based on the diversity of ethnic groups making up the total student population.
4. Type of school community – Whether the high school is in a rural, urban, suburban or city community, may determine the number of facilitator or barrier assumptions made by principals.
5. Economic/poverty level– Economic/poverty level of a school is

determined In the State by how many students in a school are on free and reduced meal plans (FARM). There may be a relationship between assumptions held and FARM percentages (FARM %).

The primary independent variables in this study are gender of the principal (gender), size of student population (school size), ethnicity percentage of student population (student ethnicity), school community (school type), and percentage of student population on the free and reduced meal program (school economics). The secondary independent variables that were used to more effectively describe the student populations were the percentage of special education students with passing test scores on the statewide *High School Assessment* (HSA-SE%) and the percentage of general (regular) education students with passing test scores on the statewide *High School Assessment* (HSA-RE%)

The dependent variables are the barrier and facilitator dominant education assumptions DEAQ scores) and perception of the importance of implementing inclusion (IIIQ scores). The independent variables of gender, school size, student ethnicity and school economics may be predictors of the principals' DEAQ scores and IIIQ scores. These dependent variables are the responses that were analyzed. The DEAQ and the IIIQ scores were the outcome or what the study was actually based upon. The plan for analysis of these dependent variables is outlined in the tables below (See Table 23 and Table 24):

Table 23

Plan of Analysis of Dependent Variables

Dependent Variables	Plan of Analysis	Description(s)
DEAQ Score	Crosstabs Category Score	h. Cross with gender of principal i. Cross with low, medium & high size of White, Hispanic and African-American student population j. Cross with low, medium & high size of school k. ANOVA
IIIQ Scores	Crosstabs Category Score	• Cross with gender of principal • Cross with low, medium & high size of White, Hispanic and African-American student population • Cross with low, medium & high size of school • ANOVA

Table 24

Plan of Analysis of Independent Variables

Independent Variables	Plan of Analysis	Description(s)
Gender of Principals PRGEN	Descriptive Statistics	• Mean • Frequency • Percent • ANOVA
School Size LOW MEDIUM HIGH	Descriptive Statistics	• Mean • Frequency • Percent • ANOVA
Ethnicity of Students WHPOP HISPOP AAPOP	Descriptive Statistics	• Mean • Frequency • Percent • ANOVA
Economics of School FARM%	Descriptive Statistics	• Mean • Frequency • Percent • ANOVA
Number of Students REPOP SEPOP TOTPOP	Descriptive Statistics	• Mean • Frequency • Percent • ANOVA
Passing Test Scores HSA-RE% HSA-SE%	Descriptive Statistics	• Mean • Frequency • Percent • ANOVA

Plans to analyze, using descriptive statistics, the relationships between the results of both questionnaires include regression analysis, measures of correlation and covariance.

Controlling Researcher Bias

Because the researcher has been a high school principal, it was even more critical to control researcher bias. Thus, in order to control for researcher bias, there was no verbal contact or written or verbal follow-up contact with the study participants. The participants were free, on a voluntary basis, to choose to \participate and reflect on their own personal and professional assumptions about inclusion. The survey research design method was selected to eliminate researcher contact with the participants. This research design allowed participant freedom to respond on a volunteer bases without persuasion or guidance from the researcher.

Human Participants and Ethical Precautions

The researcher took every precaution to minimize any risks involved to the study participants. There were no calls or emails made by the researcher to the participants to clarify, review or solicit additional responses. Based on the pilot testing, a negligible amount of boredom may occur. No risks to the participants were anticipated or expected.

The data was used in completing the research study. The data was destroyed at the conclusion of the study and will not be used in future publications by the researcher or any other researcher or publisher.

Informed Consent

A *Study Information Sheet (SIS)* (See Appendix H) *was created and* served as the official informed consent document, It was approved by the Interagency Review Board (IRB) at the University level and mailed to the participants selected by the researcher to be in the in the sample population, known as participants, along with the questionnaire packets containing directions and sample questionnaire items. Each information sheet was carefully written for clarity by and support for the participant if he or she chose to respond. The text may be found in Appendix H.

Maintaining Anonymity and Confidentiality

Careful thought to details were considered to maintain confidentiality and privacy for the participants. The study participants were informed in writing that there would be no identifiable information (no name, social security number, address, school address, telephone number, school telephone numbers, email or website addresses, or special identifying survey codes) required of the participant by the researcher. There were no names addresses, telephone numbers, email and website addresses were requested on the return-envelopes and survey form packets. The only name and address on the return, stamped envelopes was that of the researcher. In addition, the high school principals were mailed a document that explained in detail the purpose of the study, what was involved in their participation, who the researcher was, and how their privacy and confidentiality were ensured. There was no request for signatures; for such signatures would be traceable back to individual high schools which would in turn

breach the privacy and confidentiality agreement between researcher and participant.

All records were stored in a locked file cabinet that were only accessible to the researcher. Only aggregate data was reported. At the conclusion of the study, all records were destroyed. Any follow-up to this study will use new data and will be subjected to the requirements and standards of the Institutional Review Board. All records were kept confidential. There was, nor will be follow-up to any of the sample participants.

CHAPTER FOUR

OVERVIEW OF RESULTS

Introduction

Two survey questionnaires were developed to examine educational assumptions of high school principals and their beliefs on whether or not inclusion was important enough to be implemented in their high schools. Assumptions were categorized into five domains: political, social, contextual, individual, and procedural. The principals identified their educational assumptions under these five domains and then identified the importance of detailed steps and strategies designed for the implementation of inclusion. The goal of the research was to determine if there was any significant correlation between the assumptions of high school principals and whether they thought implementing inclusion, an educational component of special education, was important enough to implement in their own high schools. The researcher thought it was worth examining assumptions and how they may play a role in implementing a major program in the education of all children.

Analyzing the differences found in this study did not yield significant results or yielded low to very significant results. However, the kinds of differences were analyzed using cumulative percentages and residual scores. Cumulative percentages, or percentile scores, indicated the percentage of subjects falling below a particular value. For example, the percentile score of 75 indicated that 75 percent of the subjects received lower scores. Residual scores

were the differences between the actual y-value and the value obtained by plugging the x-value (that goes with the y-value) into the regression equation. To date, no studies have addressed this.

Research Questions

Facilitative and barrier educational assumptions held by high school principals and the perceived importance they placed on implementing inclusion were analyzed to answer the following research questions:

1. Does gender of high school principals predict their educational assumptions about the contextual domains of schooling as defined by the items on the *Dominant Education Assumptions Questionnaire (DEAQ)*?
2. Does gender of high school principals predict perceived importance of implementing inclusion in their high schools as defined by the items on *the Inclusion Implementation Importance Questionnaire (IIIQ)?*
3. Does school size, percent of school population on Free and Reduced Meals (FARM), or the size of the African-American, Hispanic, and White student population predict: (a) principals' assumptions regarding the contextual domains of schooling as described by the *Dominant Education Assumptions Questionnaire(DEAQ)* and (b) principals' perceived importance of implementing inclusion in their high schools as defined by the items on the *Inclusion Implementation Importance Questionnaire (IIIQ*)?

4. Is there a relationship between a principal's facilitator score on the *Dominant Educational Assumptions Questionnaire (DEAQ)* and his/her score on the *Inclusion Implementation Importance Questionnaire (IIIQ)*?
5. Is there a special or significant relationship across descriptors?

Data Collection

Data collection was conducted using researcher-developed instruments of dominant educational assumptions and inclusion best practices. The educational assumptions instrument was framed from the work of Astuto et al. (1994). The inclusion implementation importance instrument was taken directly from the work of Kochhar, West, & Taymans (2000). Study participants were a sample of high school principals in comprehensive high schools in one of the Mid-Atlantic American states referred to throughout this study as the "State." Data was subjected to several levels of descriptive statistical analysis. Analysis of the data indicated statistical relationships among educational assumptions and domains, specific descriptors, and indicators of the importance of implementing inclusion. Findings provided empirical support for strengthening and redefining professional development and systemic reform in educational leadership and special education for high school principals (Visher, Teitelbaum, & Emmanuel, 1999).

Descriptive Characteristics of the Study Population, Sample and Settings

Study participants included a sample of self-selected (chose independently to participate) high school principals from 146 comprehensive high

schools throughout the State. Out of the 193, 146 high school principals made a choice to participate or not to participate in the study (See Figure 8).

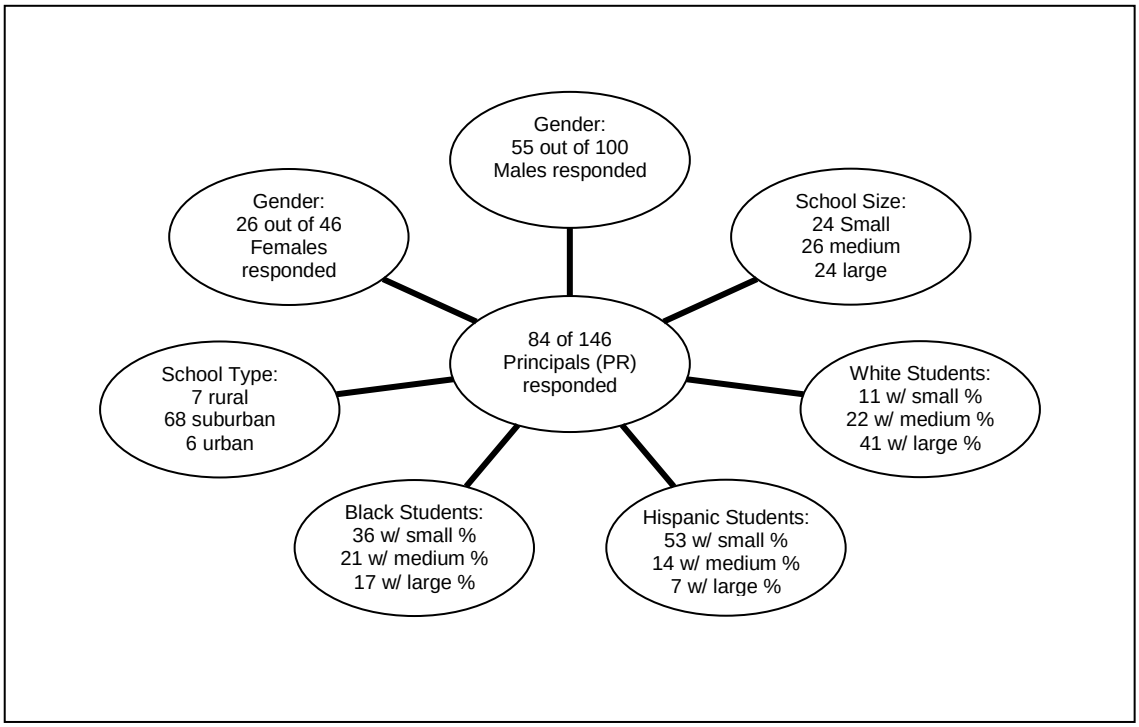

Figure 8. Descriptive Characteristics of the Study Population

Out of the 146 (46 females and 100 males), 81 principals chose to complete and return the questionnaires and who were considered given the opportunity to be surveyed by the researcher using the two questionnaires. There were 81 of the high school principals who returned the survey questionnaires, including 26 females and 55 males. Of those 81 high school principals responding, 7 were from rural schools, 68 from 68 from suburban, and from urban school districts. Of those responding, 24 were from schools classified as small, 26 medium, and 24 as large. Of those responding, 36 were from schools that had a small (0-200 students) African American student

population, 21 had medium (200-500 students), and 17 had large (greater than 500). Of those responding, 53 were from schools that had a small (0-50) Hispanic population, 14 had medium (51-250 students), and 7 had large (greater than 250). Of those responding, 11 were from schools that had a small White population, 22 had medium, and 41 had large population of White students.

The 81 study respondents were high school principals from a State's entire educational system. The system includes 24 individual school districts known as counties. Each county had its individual superintendent and central and area offices within each county. Each of the 23 county school districts and one city school district had varying numbers of high schools to accommodate the population of high school age students.

The respondent high school principals came from comprehensive high schools, technical high schools, evening schools, and middle/high schools. A comprehensive high school meets during the day, has grades 9-12, and offers a variety of academic programs including general education, special education, advanced placement, and vocational-career-technical courses. A technical high school meets during the day, has grades 9-12, and offers courses relating to vocational, trade, skilled, or paraprofessional employment. An evening high school meets during the evening, has grades 9-12, and offers courses to support and supplement the comprehensive high school program that meets during the day. A middle-high school meets during the day, has grades 7-12, and offers a variety of academic programs including

general education, special education, advanced placement, and vocation-career-technical courses.

The values across the State for some of the key descriptor variables were summarized below and displayed in Table 25.

Table 25

Descriptor Variables of the Principal (PR) Sample

Descriptor Variables & Percentages	Low	Medium	High
Percentage of schools with students on FARM	1.9%	23%	67.4%
Size of AAPOP in relation to TOTPOP	1	363	1815
Size of HISPOP in relation to TOTPOP	0	79	842
Size of WHPOP in relation to TOTPOP	1	835	1880
Size of TOTPOP in three ranges	2	1277	4537
RE student population	77.1%	89%	100%
SE student population	0%	11.3%	23%
RE students taking HSA	4.5%	55%	95.3%
SE students taking HAS	0%	13%	52.8%

Code: PR= Principal(s), FARM = Free and reduced meals, AAPOP =African American student population, HISPOP = Hispanic student population; WHPOP = White student population, TOTPOP = Total student population, SE = Special education, RE = Regular education, HSA = High school assessment.

The percent of school population on Free and Reduced Meals (FARM %) ranged from a low of 1.9% to a high of 67.4% with the average per school being 23%. The size of the African-American population within the schools ranged from a low of one to a high of 1815 with the average number per school being

363. The size of the Hispanic population within the schools ranged from a low of zero to a high of 842 with the average number per school being 79. The size of the White student population within the schools ranged from a low of one to a high of 1880 with the average number per school being 835. The percentage of regular education students with in a total school population ranged from a low of 77.1% to a high of 100%, with the average per school being 89%. The percentage of special education students within a total school population ranged from a low of 0% to a high of 23%, with the average per school being 11.3%. The percentage of regular education students taking the high school assessment ranged from a low of 4.5% to a high of 95.3%, with the average per school being 55%. The percentage of special education students taking the high school assessment ranged from a low of 0% to a high of 52.8%, with the average per school being 13%.

Summary of the Research Design, Instrumentation and Data Analysis

Descriptive research was utilized. The term descriptive research is used to refer to quantitative studies of relationships among variables where there has been no manipulation of either the dependent or independent variables. The dependent variables are educational assumptions and beliefs on the importance of implementing inclusion of principals. Since the empirical data for this study will be derived from data collected about the principals from schools within the selected state, this choice of design is appropriate. Descriptive research is intended to describe existing relationships among variables. This information may be used for practical decision-making, prediction, theory

building, and theory testing. The category of descriptive research, which was utilized, is called ex-post facto. In ex-post facto research, there is a clear intention to obtain evidence relative to a causal hypothesis concerning the relationship being studied. The evidence of the causal relationship, however, is at best only temporal; variation on the independent variable occurred or is assumed to have occurred before variation on the dependent variable. It should be emphasized that the researcher does not manipulate the independent variable. This study focused on the impact of school characteristics, racial distribution and social economical status of the students on the educational assumptions and beliefs on the importance of implementing inclusion of principals in their respective high schools, as measured by the DEAQ and the IIIQ.

Instrumentation

Two questionnaires were developed for this particular research study to (a) survey the dominant education assumptions on inclusion; and, (b) determine whether these assumptions were driving forces to implement inclusion in the principals' respective high schools. Dominant education assumptions held by high school principals on inclusion were the major constructs being researched.

The first questionnaire (See Appendix A) was labeled by the researcher as the *Dominant Education Assumptions Questionnaire (DEAQ*). This questionnaire (DEAQ) was derived from the work of Astuto et al. (2000) on assumptions being held by key leaders in education having a driving force or an undocumented significance in shaping educational landscapes. The second

questionnaire (See Appendix B) was labeled by the researcher as the *Inclusion Implementation Importance Questionnaire (IIIQ).* This second questionnaire (IIIQ) was derived from the work of Kochhar, West, & Taymans (2000) on the implementation of inclusion in the local school by key school personnel, including the local school principal. The DEAQ was estimated to take approximately 20 minutes and the IIIQ was estimated to take approximately 10 minutes of each principal's time. The DEAQ instrument allowed the high school principals an opportunity to react in writing on any assumptions that they held. A wide range of reaction is anticipated due to the broad range of domains covered by the dominant educational assumptions. Each educational assumption was randomly assigned to the dominant educational assumptions questionnaire (DEAQ). Administering the DEAQ provided a look at what dominant educational assumptions were held by a sample of high school principals. These educational assumptions were constructed into a questionnaire and the results analyzed with the results of a second questionnaire on the importance of implementing inclusion.

The second instrument, *Inclusion Implementation Importance Questionnaire (IIIQ),* was developed using completion checklist items extracted from *Successful inclusion: Practical strategies for a shared responsibility* (Kochhar, West, & Taymans, 2000) and aligned across the five domains. The study examined the relationship between dominant educational assumptions held by high school principals with their perception of the importance of implementing inclusion in their respective high schools. The

database of high schools for the research study was drawn from the high schools in the State.

The study sample is described using the mean, standard deviation and range for continuous scaled variables and frequency and percent for categorical scaled variables. Correlation and regression analyses are utilized to describe existing relationships among the variables.

Data Collection

Data collection was conducted using researcher-developed instruments of educational assumptions and inclusion best practices (Sapsford & Jupp, 1996). Two survey questionnaires were developed to examine such assumptions of high school principals and their beliefs about whether inclusion was important enough to be implemented in their high schools. Assumptions were categorized into political, social, contextual, individual, and procedural domains. The principals identified their educational assumptions under these five domains and then identified the importance of detailed steps and strategies designed for the implementation of inclusion.

Results of the Pre-Pilot Testing of Survey Instruments

The research study involved both pre-pilot testing and pilot testing The study was organized into two phases, Phase I, the pre-pilot testing, and Phase II, the pilot testing. There were two instruments developed from the literature to determine if there were any significant relationships with the responses made by the study participants. Phase I focused on the pre-pilot testing of the *Dominant Educational Assumptions Questionnaire (DEAQ)* and the

Inclusion Implementation Importance Questionnaire (IIIQ). The goal of the pre-pilot testing was to improve the instruments or make them better. The goal of the pre-pilot testing was to improve the instruments in the areas of content, format, and mechanics. The content was focused on to strengthen the content validity or to see whether the instruments measured what they were intended to measure. The content of the *Dominant Educational Assumptions Questionnaire (DEAQ)* included two types of assumptions, facilitative or barrier, made by high school principals with five educational domains, political, social, structural, individual, and procedural. The content of the *Inclusion Implementation Importance Questionnaire (IIIQ)* contained positive responses on the importance of implementing inclusion. Eighty-six graduate students studying and working in special education, educational leadership, or vocational rehabilitation, including teachers and administrators, served as the pilot testers. The graduate students used their experiences and knowledge from employment and academic studies to pilot test the instruments. Their feedback on the instrument contributed to the instruments' content validity.

The graduate students responded from an administrative or instructional perspective depending on their current career path. The graduate students consented to take the surveys and to make comments throughout the instruments. Three different university classes were used covering educational leadership, special education and strategies for inclusion. The graduate students were allowed the same amount of time to complete the instruments with an extra 10 minutes to make comments if they chose to. Some chose not to make

comments but all students chose to complete the instruments. In addition, the graduate students were asked to make comments on the cover letter and on the directions. The adjustments or modifications were made based on the pilot responses of the test pilot group. The pre-pilot responses for the *Dominant Educational Assumptions Questionnaire (DEAQ)* are found below (See Figure 9). The pre-pilot responses for the *Inclusion Importance Implementation Questionnaire (IIIQ).* (See Figure 10.)

Phase I: Pre-Pilot Testing of Instruments

The *Pre-Pilot Testing* helped to measure construct validity, which makes sure the principals who took these instruments would understand them. Phase II was the pilot testing itself using the DEAQ and the IIIQ with high school principal sample population. The DEAQ constructs were the dominant educational assumptions. The DEAQ content related to education, educational leadership and inclusion. The IIIQ construct was inclusion implementation. The IIIQ content was related to special education, educational leadership and inclusion.

Figure 9 and Figure 10 present the feedback generated by the pre-pilot testers in Phase I, on DEAQ and IIIQ, respectively.

Phase I: Pre-Pilot Testing Feedback Matrix for the DEAQ
A. Dominant Educational Assumptions Questionnaire (DEAQ) Pilot Survey Feedback
I put a little mark next to questions that were either worded in the negative, or that I had difficulty understanding. Wording in the negative tends to be a problem for many people including me. Many of these questions cannot be answered with a simply or no. Maybe you should give the option of ranking importance on a scale of 1 to 5.
It was very difficult to read this question. Tenses and grammar hurt the readability.
If I think is necessary for inclusion but do not ensure inclusion, I will respond "no."
I would decrease the use of questions containing "and." Sometimes people only believe the 1st or 2nd part of the statement and this may skew your results.
Some wording was confusing, led to too much interpretation. How does having a grad student with no experience in this realm help with your research? I have idealistic, maybe not realistic, ideals.
Too wordy and unclear, Use plain English. I didn't understand half of the questions. Too much Edus (BS) jargon. Questions unclear – Use simpler wording! Don't assume that everyone knows those terms. Include a glossary of terms.
Item#7 - It was not clear if you meant physical space constraints that could, for example, impede access of a handicapped student at a school facility. I think you have done a great job in formulating questions that are wide in scope in terms of areas of interests covered. Wish you all the best. –Respondent
I think "Greetings H.S. Principal" sounds rather like an alien. "I am making a very special request of you to help me complete my studies" sounds awkward. Timing?
You should give an option for N/A and for something in the middle of agree/disagree.
Define technical skill. I think of technical skill to be computer skill. Well stated-very clear. A lot of questions.
The should be a third answer choice apart from a straight "yes" or "no."
Areas in which I have placed question marks are those in which I think there is a gray area. I don't feel I can give a straight "yes" or "no" to the question because the statement may need a little clarification or perhaps the change of a single word may make the difference. Some of the assumptions seem to be correct if worded differently.
A few foggy questions-but overall sounds good.
While this may sound trite or unwarranted, I think that the font that you employ in your letter detracts from the professionalism or its content message. Also, your tone is not as sophisticated as your audience. But the instructions are clear.
The word "assume" is really annoying. Do not use it.

Figure 9. Written Feedback on the DEAQ from the Pilot Survey Participants

Phase I: Pre-Pilot Testing Feedback Matrix for the IIIQ
B. Inclusion Implementation Importance (IIIQ) Pilot Survey Feedback
Very easy to follow.
It is not clear at all by what you mean by "disabilities." There is a wide range of physical, emotional, behavioral and learning disabilities, and my responses to each question would depend on what type of student disabilities you were referring to. For example, I might feel very comfortable including a student with mild dyslexia in a regular service class, but very uncomfortable including a student with severe behavioral problems and physical limitations in a regular or advanced English course.
For questions that contain 2 parts it was difficult to answer question 3, 4, 5. Ex. #3. While it is important for me to know the percentages of students with disabilities participating in work based and transition services, it is not important to me as an administrator to work to identify. It is not important that this be done but I set policy and leave this implementation to others. Ex #2. While not important to me to do, it is important that this be done by others. Ex #6. I answered "yes" although could have answered "no" as an administrator I can't know all things. If I know what staff have specific information in this area on specific students then I would answer "no."
Much clearer writing.
Answers are too predictable.
Hope this helps. Good luck!
Written better. Not as frustrating.
What if I assume one, but not the other? This could be a problem in several items.
No comments. All the best. –Respondent
These questions lead the reader to say "yes" to everything. You wish at least to offer distracters or a Likert Scale to judge relative importance.
This one was easier for me to read and complete-maybe because it is shorter. Good luck.
My reason for not putting a definite answer on #7 and #9 is that I believe in both cases the extent of the student's disability should determine their involvement in a regular classroom setting both in terms of learning and other classroom activities.
I answered affirmatively to each question. Perhaps more variety would strengthen your ultimate agenda. Then again, I am not a high school principal.
It was too complex and time-consuming.
The issues are important to me, I do not reward "excellence," I certainly would support and encourage.
People with disabilities must and can function in school, work places and communities if given most of all the opportunity, understanding, accommodations and most of all an informed public. Also, special trained teachers, parent training and involvement.

Figure 10. Written Feedback on the IIIQ from the Pilot Survey Participants

The results of the feedback responses from the pre-pilot testing were used to

critique and to make revisions on the DEAQ and IIIQ questionnaires. The results were summarized and organized in outline format (See Figure 11).

A. Feedback on Mechanical Changes
   1. Overall satisfactory or unsatisfactory feedback
   2. Grammar and punctuation
   3. Syntax and clarity
   4. Test construction
   5. Font and size of lettering

B. Feedback on Content Areas
   1. Overall satisfactory or unsatisfactory feedback
   2. Special education and general education
   3. Inclusion and inclusive education
   4. Educational leadership and administration

Figure 11. Outline of Feedback Responses

Phase II: Pilot Testing of Instruments

After Phase I, the pre-pilot testing phase, was completed, Phase II pilot testing on the DEAQ and the IIIQ was conducted with a sample of actual high school principals from the selected sample school system. The two survey questionnaires were developed to examine such assumptions of high school principals and the perception that inclusion was important enough to

be implemented in their high schools. Assumptions were categorized into political, social, contextual, individual, and procedural domains (Astuto et al., 1994, 2-20). The principals identified their educational assumptions under these five domains and then identified the importance of detailed steps and strategies designed for the implementation of inclusion. The participants were high school principals from the high schools in a state in Mid-Atlantic United States. The state was identified as the “State” throughout the research. There were 193 high schools in the State with 193 high school principals assigned. Out of the 193 principals, there were 146 principals of comprehensive day programs, grades 9-12. From the 146, there were those who responded by indicating that they would either participate (mailed survey packet back) or not (did not mail survey packet back). Out of the 146 principals who responded either way, 1 principal declined to participate who was substituting for another principal, 2 declined to participate who were brand new to the school and to the high school principalship position, 3 declined to participate who were brand new to the high school principalship position, 5 returned blank questionnaires with no comments, and 2 declined for personal reasons. The sample population consisted of 83 principals (45 principals indicated that they would not participate) who returned the Dominant Education Assumptions Questionnaire (DEAQ) and the Inclusion Implementation Importance (IIIQ). All sample principals returned both questionnaires in the same packet. The sample principals came from each of the 23 county districts and one city district. Only those high school principals willing to mail back completed surveys were included anonymously in the

research study as volunteer study participants.

The research surveyed principals of schools who had African-American, Hispanic, and White high school student populations in 23 county school systems and one city school system.

Statistical Summary and Analysis of Data: Phase II Pilot Testing

Each educational assumption was randomly assigned to the dominant educational assumptions questionnaire (DEAQ), as presented in Table 26 (DEAQ Items 1-26) and Table 27 (DEAQ Items 27-52).

Table 26

Randomly Selected Sequence of Items (Numbers 1-26) for the DEAQ & Matching /Corresponding Educational Assumption Codes

DEAQ Items (D1 - D13)	Matching Assumption Codes	DEAQ Item (D14 - D26)	Matching Assumption Codes
D1	17a	D14	19b
D2	17b	D15	19a
D3	8b	D16	26b
D4	3a	D17	26a
D5	12b	D18	21b
D6	2b	D19	21a
D7	22b	D20	13b
D8	15a	D21	13a
D9	5a	D22	12a
D10	4b	D23	16a
D11	4a	D24	10a
D12	1b	D25	9b
D13	16b	D26	3b

Table 27

Randomly Selected Sequence of Items (Numbers 27-52) for the DEAQ & Matching /Corresponding Educational Assumption Codes

DEAQ Items (D27 - D39)	Matching Assumption Codes	DEAQ Items (D40 - D52)	Matching Assumption Codes
D27	18a	D40	11a
D28	23a	D41	18b
D29	7b	D42	23b
D30	2a	D43	24a
D31	6b	D44	20b
D32	25b	D45	15b
D33	24b	D46	9a
D34	1a	D47	5b
D35	6a	D48	8a
D36	10b	D49	11b
D37	14a	D50	25a
D38	14b	D51	20a
D39	7a	D52	22a

Items on the DEAQ and the IIIQ were coded as 1's and 0's. The ones were scores that reflected either a “yes” to facilitator questionnaire item or the DEAQ or a “no” to a barrier item. The zeros are scores that reflect either a “no” to a facilitator questionnaire item on the DEAQ or a “yes” to a barrier item. The "1-scores" range from +1 to +26. The “1-scores” are values that show strength of assumption affirmative or positive responses expressed as “yes” responses or facilitator responses. The "0-scores" range from –1 to -26. The “0-scores” are values that show strength of assumption negative responses expressed as “no”

responses or barrier responses. For example, if a high school principal responded with 15 one's and 37 zero's, then his/her score would be –22. Descriptive statistics were run to determine facilitator scores of facilitator assumptions on the DEAQ and positive scores of inclusion implementation importance on the IIIQ. Since having a negative score was confusing the scores were recoded as positive scores with low, medium and high interval ranges.

The Dominant Educational Assumptions Questionnaire (DEAQ) total scores were recoded and the results were presented in Table 28. The DEAQ total scores were recoded as follows: scores between 0-35 (less than 36) were coded as low, scores between 36 – 44 were coded as medium, and scores between 45-52 were coded as high.

Table 28

Facilitator Responses Translated as DEAQ Category Scores

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
LOW	9	10.7	11.1	85.2
MEDIUM	60	71.4	74.1	100.0
HIGH	12	14.3	14.8	
Total	81	96.4	100.0	
Missing System*	3	3.6		
Total	3	3.6		
Total	84	100.0		

*Note: Number of principals who had missing scores because they did not respond to a particular questionnaire item or items.

There were nine principals who scored low on the DEAQ, 60 had medium scores, and 12 had high scores (see Table 29). Out of 81 principals who responded, nine scored low (10.7%), 60 scored in the medium range (71.4%), and 12 scored high (14.3%). Three principals did not take the DEAQ assessment.

The Inclusion Implementation Importance Questionnaire (IIIQ) total scores were recoded and the results are presented in Table 29.

Table 29

Facilitator Responses Translated as IIIQ Category Scores

Category Scores	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
LOW	16	19.0	19.8	19.8
MEDIUM	18	21.4	22.2	42.0
HIGH	47	56.0	58.0	100.0
Total	81	96.4	100.0	
Missing System*	3	3.6		
Total	84	100.0		

Note. Number of principals who had missing scores because they did not respond to a particular questionnaire item or items.

The recoded IIIQ scores were divided into three response categories: scores that were less than 19 (0-18) = low, scores between 19 – 22 = medium, and scores between 23 – 26 = high (see Table 29). There were 16 principals who scored low on the IIIQ, 18 had medium scores, and 47 had high scores (see

Table 29). The three principals that did not respond on the DEAQ did not respond on the IIIQ.

Summary of Results and Analysis of Data on Research Questions

Summary of Results for Research Question 1 (RQ 1)

Research Question 1 (RQ 1). Does gender of high school principals predict their educational assumptions about the contextual domains of schooling as defined by the items on the *DEAQ*?

The first research question asked whether there was a significant difference between female and male high school principals' responses to facilitator and barrier dominant assumptions on the *DEAQ*. Did the female principals score higher on facilitator assumptions or inclusion importance than the males? The analysis for this question included dividing each set of dominant educational domains on the following pages: (a) political, (b) social, (c) structural, (d) individual, and (e) procedural (Astuto et al., 1994, pp. 3-20). There were separate domain categories with the corresponding number and percentage of female and male high school principal respondents making facilitator responses.

High school principals included 56 male principals and 26 female principals. Both the male principals or 68.3% and the female principals or 31.7% of the total respondents scored high on specific and random questionnaire items under specific educational domains. Scoring high means scoring "no" to barrier assumptions or "yes" to facilitator assumptions. The impact of the contextual domains on high school principals regardless of gender is graphically illustrated to accompany the data results for Research Question 1 in Figure 12.

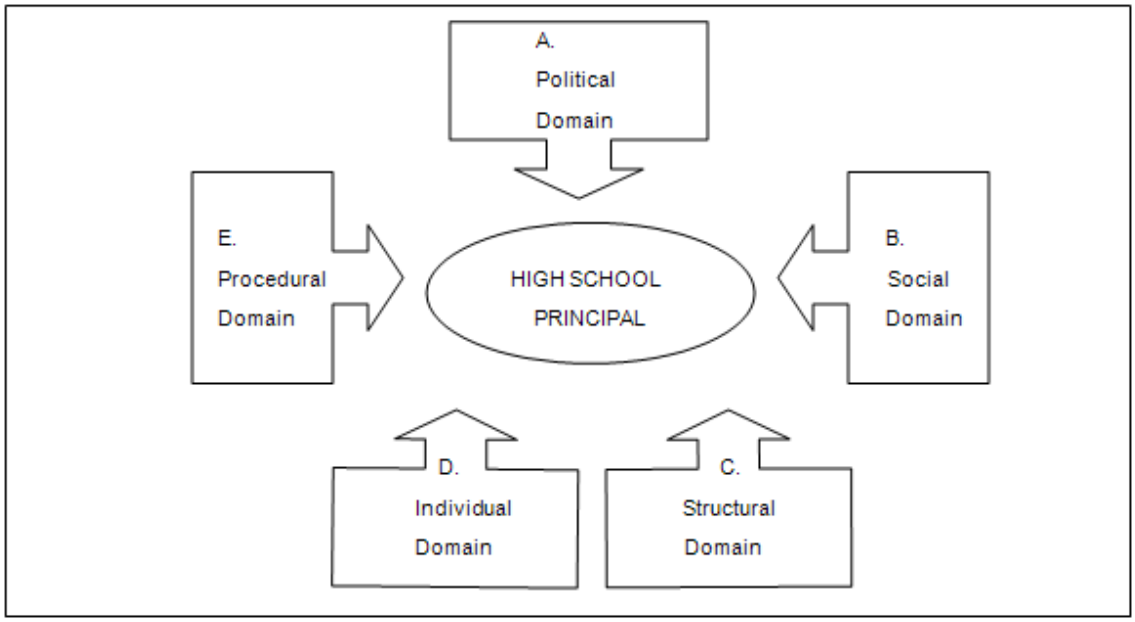

Figure 12. Illustration of Assumption Domain Impact on High School Principal

The data results for Research Question 1 showed the differences in responses across all five domains per female principals and male principals with respect to their actual facilitative responses and the percentage of facilitative responses for each DEAQ item. The data results per domain are presented in Table 30 (Political), Table 31 (Social), Table 32 (Structural), Table 33 (Individual), and Table 34 (Procedural) as shown in Figure 13.

DOMAINS	RESEARCH QUESTION 1 CODES	TABLES
A. Political	Research Question 1, Part 1A or RQ1A	Table 30
B. Social	Research Question 1, Part 1B or RQ1B	Table 31
C. Structural	Research Question 1, Part 1C or RQ1C	Table 32
D. Individual	Research Question 1, Part 1D or RQ1D	Table 33
E. Procedural	Research Question 1, Part 1E or RQ1E	Table 34

Figure 13. Data Results Organization Codes for Research Question 1

The number of and score percentages for female and male principals who responded to the political domain assumptions on the DEAQ were presented in Table 30. The randomized political domain assumptions that were barrier assumptions on the DEAQ (D) were 5 items: -D4, -D9, -D11, -D34, -D35. The randomized political domain assumptions that were facilitator assumptions on the DEAQ (D) were 7 items: +D6, +D10, +D12, +D26, +D30, +D31, +D47. Table 28 included assumption summaries, questionnaire item numbers (D) original item numbers (before randomization), and the categories of the assumption is, i.e., barrier assumption (-D) or facilitator assumption (+D).

Table 30

DEAQ Political Domain Assumptions and Principal (PR) Gender Responses

			Female PRs		*Male PRs*	
Item #	Assumption Summary	*Code-Category*	*#*	*%*	*#*	*%*
-D4	Individual Responsibility	*3a-Barrier*	*26*	*100*	*53*	*96.36*
Assumes children are responsible for own success with no responsibility being placed on schooling.						
+D6	Entitlement	2b-Facilitator	*21*	*74.55*		
Assumes education system valued on what benefits from society it obtains for children.						
-D9	Stable Investments	5a-Barrier	*22*	*84.62*	*40*	*72.73*
Assumes putting additional resources in schools will not increase system performance.						
+D10	*Cooperation/Support*	*4b-Facilitator*	*24*	*92.31*	*53*	*96.30*
Inclusive learning environments are built on trust, cooperation among all.						
-D11	Competition/Standard	4a-Barrier	*24*	*92.31*	*46*	*83.64*
Assumes special education children in inclusive classes will pull down assessment scores.						
+D12	Universality	*1b-Facilitator*	*25*	*96.15*	*51*	*92.73*
Assumes all children may have access to all benefits available in society.						
+D26	Institutional Responsibility	*3b-Facilitator*	*25*	*96.15*	*49*	*89.09*
Assumes schools are responsible for the success of all children regardless of ability levels.						
+D30	Instrumentality	2a-Barrier	*25*	*96.15*	*51*	*92.73*
Assumes education system exists only for itself and to society, not existing for children.						

			Female PRs		*Male PRs*	
Item #	Assumption Summary	*Code-Category*	#	%	#	%
+D31	Viability	6b-Facilitator				
Assumes a broad view of today's children being smarter and faring better in today's society.						
-D34	Meritocracy	1a-Barrier	*26*	*100*	*54*	*98.18*
Assumes education has no responsibility to meet children where they are and take them further.						
-D35	Bankruptcy	6a-Barrier	*25*	*96.15*	*53*	*96.36*
Assumes there is a need for a national takeover of American public education.						
+D47	Increased Investments	*5b-Facilitator*				
Assumes additional resources invested in education does increase student performance.						

Note. +*Facilitator Assumption,* -Barrier Assumption

The number of and score percentages for female and male principals who responded to the social domain assumptions on the DEAQ were presented in Table 31. The randomized social domain assumptions that were barrier assumptions on the DEAQ (D) were 5 items: -D24, -D39, -D40, -D46, -D48. The randomized political domain assumptions that were facilitator assumptions on the DEAQ (D) were 5 items: +D3, +D25, +D29, +D36, +D49. Table 29 included assumption summaries, questionnaire item numbers (D) original item numbers (before randomization), and the categories of the assumption is, i.e., barrier assumption (-D) or facilitator assumption (+D).

Table 31

DEAQ Social Domain Assumptions and Principal (PR) Gender Responses

			Female PRs		Male PRs	
Item #	Assumption Summary	Code-Category)	#	%	#	%
+D3	Diversity Assumes education demonstrates understanding and appreciation of diverse cultural traditions.	8b-Facilitator 24	92.31%	50	90.91%	
+D29	Transformation Assumes when schools are actively engaged in schooling for all children, there is considerable growth.	7b–Facilitator 22	88.46	55	100	
+D36	Family Support Assumes that regardless of situations or circumstances like disabilities, student progress is possible.	10b–Facilitator	23	92.31	54	98.18
-D39	Stability Assumes there is no merit in thoughts of movement and growth or stability for an education system.	7a–Barrier	24	100	52	94.55
-D40	Segmented Support Assumes education systems need not be at the center of cooperative agreements for children to progress.	1a–Barrier	26	69.23	39	70.91
+D49	Comprehensive Support Assumes education systems must take the lead in coordinating comprehensive services.	11b–Facilitator	24	100	38	69.09

Note. +Facilitator assumption, -Barrier assumption.

The number of and score percentages for female and male principals who responded to the structural domain assumptions on the DEAQ were presented in Table 32. The randomized structural domain assumptions that

were barrier assumptions on the DEAQ were 3 items: -D21, -D22, D37. The randomized structural domain assumptions that were facilitator assumptions on the DEAQ (D) were 3 items: +D5 +D20, +D38. Table 30 included assumption summaries, questionnaire item numbers (D) original item numbers (before randomization), and the categories of the assumption is, i.e., barrier assumption (-D) or facilitator assumption (+D).

Table 32

DEAQ Structural Domain Assumptions and Principal (PR) Gender Responses

			Female PRs		Male PRs	
Item #	Assumption Summary	Code-Category	#	%	#	%
+D5	Democracy	12b – Facilitator				
	Assumes shared activities, not dictated mandates, ensures survival of inclusive practices.					
+D20	Empowerment	13b – Facilitator	23	88.46%	44	80%
	Empowerment fosters inclusive decisions affecting combining general and special education.					
-D21	Control	13a – Barrier	20	76.92	42	76.36
	Assumes organizational, institutional control constrains and impedes the positive growth of inclusion.					
-D22	Bureaucracy	12a – Barrier				
	Assumes bureaucracy or a rigid structure of schooling impedes the survival of inclusive practices.					
-D37	High Standards	14a – Barrier	26	100	53	96.36
	Assumes standards and assessments are used to exclude students from the educational organization.					
+D38	Improved Processes	14b – Facilitator	*24*	*92.31*	*49*	*89.09*
	Assumes standards are incorporated into assessment to ensure an inclusive educational organization.					

Note. +Facilitator assumption, -Barrier assumption.

The number of and score percentages for female and male principals who responded to the individual domain assumptions on the DEAQ were presented in Table 33. The randomized individual domain assumptions that were barrier assumptions on the DEAQ (D) were 2 items: -D8, -D27. The randomized individual domain assumptions that were facilitator assumptions on the DEAQ (D) were 4 items: +D13, +D14, +D41, +D45. Table 31 included assumption summaries, questionnaire item numbers (D) original item numbers (before randomization), and the categories of the assumption is, i.e., barrier assumption (-D) or facilitator assumption (+D).

Table 33

DEAQ Individual Domain Assumptions & Principal (PR) Gender Responses

		Female PRs		Male PRs	
Item #	Code-Category	#	%	#	%
Assumption Summary					
-D8 External Motivation	15a–Barrier	21	80.77%	51	92.73%
Individuals will only become inclusive if the institution forces them through external motivation.					
+D13 Cooperation	16b–Facilitator	22	84.62	48	87.27
Cooperation has strong tendency to support and include children with disabilities.					
+D14 Initiators of Action	19b–Facilitator	22	84.62	47	85.45
People hold keys to making inclusion succeed through human nature as action initiators.					
-D27 Evaluation	18a–Barrier	20	76.92		
Competitive work environments are detrimental to persons with special needs through elimination.					
+D41 Collaborative Learning	18b–Facilitator	23	88.46	25	94.55
Inclusion survives if there is individual and collective learning through collaborative work environments.					
+D45 Internal Motivation	15b–Facilitator	18	69.23		
Individuals are capable of being inclusive through self-motivation and the evolving of human nature.					

Note. +Facilitator assumption, -Barrier assumption.

The number of and score percentages for female and male principals who responded to the procedural domain assumptions on the DEAQ were presented in Table 34. The randomized procedural domain assumptions that were barrier assumptions on the DEAQ (D) were 5 items: -D4, -D9, -D11, -D34, -D35. The

randomized procedural domain assumptions that were facilitator assumptions on the DEAQ (D) were 7 items: +D6, +D10, +D12, +D26, +D30, +D31, +D47. Table 32 included assumption summaries, questionnaire item numbers (D), original item numbers (before randomization), and the categories of the assumption is, i.e., barrier assumption (-D) or facilitator assumption (+D).

Table 34

DEAQ Procedural Domain Assumptions and Principal (PR) Gender Responses

			Female PRs		Male PRs	
Item #	Assumption Summary	Code – Category	#	%	#	%
+D7	Transformation Assumes personalization of education lends itself to any set of school processes.	22b-Facilitator	20	76.92 %	45	81.82%
-D17	Measuring Standards Assumes accommodations need not be made because assessments test ability and disability.	26a-Barrier	22	84.82	43	78.18
-D18	Diversity Assumes inclusion is supported by divergent thinking and the curriculum may address issues of multi-diversity.	21b-Barrier	22	84.62	47	96.45
-D19	Commonality Assumes curriculum may be developed around central core of knowledge and common cultural heritage.	21a-Barrier	18	69.23		
-D28	Rational Planning Assumes human factor in management is not necessary to ensure a desired future state for the organization.	23a-Barrier	24	92.31	51	92.73
+D33	Decentralized Decisions Assumes stakeholders are capable of working together to process ranges	24b-Facilitator	24	92.31	50	90.91

Item #	Assumption Summary	Code – Category	Female PRs #	Female PRs %	Male PRs #	Male PRs %
	of options and strategies for all students.					
+D42	Participatory Planning Assumes participation of stakeholders is supportive of inclusion due to the goal to meet needs of those participating.	23b-Facilitator	21	90.77	40	85.45
-D43	Centralized Decisions Assumes administrators must hold the key to schooling instead of facilitating and engaging other key professionals.	24a-Barrier	24	92.31	47	85.45
+D44	Flexibility Assumes flexibility lends itself to inclusive thinking and action that includes complexity in decision-making.	20b-Facilitator	25	96.16	49	89.09
-D50	Standardized Assessment Assumes there is only one dimension to students performance and is measured only by standardized test assessments.	25a-Barrier	26	100	55	100.0
-D51	Efficiency Assumes instruction may be organized for purposes of efficiency and may not include anything complex.	20a-Barrier	20	76.92	39	70.91
-D52	Routinization Assumes inclusion may take too much time and cause disruption to the time allocations and daily school routines.	22a-Barrier	25	96.15	47	85.45

Note. +Facilitator assumption, -Barrier assumption.

A summary description of the scores from the political, social structural, individual and procedural assumption domain sections of the DEAQ was presented in Table 35. The mean facilitator score for the females principals was 87.16% and the mean score for the male principals was 90.00%. The lowest score for the female principals was 69.23% (2 female principals scoring 69.23%). The male

principals scored slightly lower with 69.09. The high score for the females was 100.00 and for the males was 100.00% (2 male principals scored 100.00% (See Table 35).

Table 35

Descriptive Statistics: DEAQ Domain Scores & Principal (PR) Gender

Domains & Gender	Mean Score	Median Score	Lowest Score	Highest Score
POL- Female PRs	94.87		84.62	100.00(2)
POL-Male PRs	89.26		72.73	98.18
SOC-Female PRs	87.16		89.23(2)	100.00
SOC-Male PRs	90.00		69.09	100.0(2)
STR-Female PRs	89.92		76.92	100.00
STR-Male PRs	85/45		76.36	96.36
IND-Female PRs	80.77		69.23	88.46
IND-Male PRs	90.00		85.25	94.55
PRO-Female PRs	88.35		69.23	100.00
PRO-Male PRs	88.64		70.91	100.00

Note. Code: POL = Political Domain, SOC = Social Domain, STR=Structural Domain; IND = Individual Domain, PRO = Procedural Domain

The summary of the type of percentages of facilitator responses on the DEAQ per gender of the high school principals were presented in Table 36: There were 84 principals, 26 females and 55 males, that responded. There were 3 principals, 2 males and 1 female, that returned the questionnaire packets without completing either of the questionnaires

Table 36

Principal Gender and DEAQ RQ2a Principal Gender.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	3.6	3.6	3.6
Female	26	31.0	31.0	34.6
Male	55	65.5	65.5	100.0
Total	84	100.0	100.0	
Total	84	100.0		

There were 20 (76.9%) of the 26 females who had a medium score on the DEAQ, across all domains, compared to 40 (72.7%) of the 55 males. There were four (15.4%) females scoring high, compared to eight (14.5%) males. Note that 92.3% (76.9% medium +15.4% high) of the females had a medium or high score on the DEAQ compared to 87.2% (72.7% medium + 14.5% high) of the males. This result indicates that the females score higher on facilitator assumptions than the males (see Table 37).

Table 37

Crosstabulation-Dominant Educational Assumption Questionnaire (DEAQ) DEAQ Category Score & Principal Gender (PRGEN)

Category Scores		PRGEN Females	PRGEN Males	PRGEN Total
DEAQ CATEGORY SCORE	LOW SCORE Count	2	7	9
	% within DEAQ SCORE	22.2%	77.8%	100%
	% within PRGEN	7.7	12.7	11.1
	% of Total	2.5	8.6	11.1
	MEDIUM SCORE Count	20	40	60
	% within DEAQ SCORE	33.3%	66.7%	100%
	% within PRGEN	76.9	72.7	74.1
	% of Total	24.7	49.4	74.1
	HIGH SCORE Count	4	8	12
	% within DEAQ SCORE	33.3%	66.7%	100%
	% within PRGEN	15.4	14.5	14.8
	% of Total	4.0	9.9	14.8
Total	TOTAL Count	26	55	61
	% within DEAQ SCORE	32.1%	67.9%	100%
	% within PRGEN	100.0	100.0	100.0
	% of Total	32.1	67.9	100.0

Data Summary for Research Question 2 (RQ2)

1. Does gender of high school principals predict perceived importance of implementing inclusion in their high schools as defined by the items on the Inclusion Implementation Importance Questionnaire (IIIQ)?

Table 38 shows to what extent does gender of high school principals predict their assumptions on the importance of implementing inclusion in his/her high school in terms of raw scores and percentages.

Table 38

Principal Gender (PRGEN) and IIIQ Category Scores

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LOW	16	9.0%	19.8%	19.8%
	MEDIUM	18	21.4%	58.0%	42.0%
	HIGH	47	56.0%	100.0%	100.0%
	Total	81	86.4%		
	Missing System	3	3.6%		
	Total	3	3.6%		
Total		84	90.0%		

The IIIQ was recoded as follows: less than 19 = low, 19 – 22 = medium, and 23 – 26 = high. There were 16 high school principals who scored low on the IIIQ, 18 had medium scores, and 47 had high scores. There were 4 (15.4%) of the 26 females had a medium score on the IIIQ, compared to 14 (25.5%) of the 55 males. There were 16 (61.5%) females who scored high on the IIIQ compared to 31 (56.4%) males who scored high. There were 6.9% (medium =15.4%

+ high = 61.5%) of the females who had a medium or high score on the IIIQ compared to 81.9% (medium = 25.5% + high = 56.4%) of the males. This result indicated that the male high school principals scored higher on IIIQ targeting the assumptions on the importance of implementing inclusion than did the female high school principals (see Table 39).

Table 39

Crosstabulation: Inclusion Implementation Importance Questionnaire (IIIQ) Category Score and Principal Gender (PRGEN)

IIIQ Category Scores		Female PRs	Male PRs	Total
CATEGORY LOW	Count	6	10	16
	% within IIIQ SCORE	37.5%	62.5%	100.0%
	% within PRGEN	23.1	18.2	19.8
	% of Total	7.4	12.3	19.8
CATEGORY MEDIUM	Count	4	14	18
	% within IIIQ SCORE	22.2%	77.8%	100.0%
	% within PRGEN	15.4	25.5	22.2
	% of Total	4.9	17.3	22.2
CATEGORY HIGH	Count	16	31	47
	% within IIIQ SCORE	34.0%	66.0%	100%
	% within PRGEN	61.5	56.4	58.0
	% of Total	19.8	38.3	58.0
TOTAL	Count	26	55	81
	% within IIIQ SCORE	32.1%	67.9%	100%
	% within PRGEN	100.0	100.0	100
	% of Total	32.1	67.9	100

Data Summary for Research Question 3 (RQ3)

3. Does school size, school type, percent of school population on Free and Reduced Meals (FARM), percentage of special education students taking the high school assessment, or the size of the African-American, Hispanic, and White student population predict: (a) principals' assumptions regarding the contextual domains of schooling as described by the *Dominant Educational Assumptions Questionnaire (DEAQ)* (b) principals' assumptions regarding the importance of implementing inclusion in their high schools as defined by the items on the *Inclusion Implementation Importance Questionnaire (IIIQ*)?

The third research question asked to what extent, if any, do the following Independent variables predict respondent high school principals' dominant educational assumptions or principals' assumption on the importance of implementing inclusion: school size, school type, size of diverse populations, size of diverse populations and school type, percentage of FARM students, and percentage of special education HSA students.

The above independent variables for this third research question were divided into six sections as outlined below:

A. School Size & Category Scores on DEAQ and IIIQ

(Table 33, Table 34, Table 35, Table 36)

(Research Question 3, Part 3A (RQ3A1-3)

1. Small (RQ3A1)
2. Medium (RQ3B2)

3. Large (RQ3A3)

B. School Type & Category Scores on DEAQ and IIIQ
(Research Question 3, Part 3B (RQ3B1-3)
(Table 37, Table 38, Table 39, Table 40)
   1. Rural (RQ3B1)
   2. Suburban (RQ3B2)
   3. Urban (RQ3B3)

C. Size of diverse student populations, African American, Hispanic & White, and facilitator responses on DEAQ & positive responses on the IIIQ (Research Question 3, Part 3C1-3/RQ3C1-3)
(Table 41, Table 42, Table 43).
   1. African-American student population (RQ3C1)
   2. Hispanic student population (RQ3C2)
   3. White student population (RQ3C3)

D. Size of Diverse Student Populations & School Type
(Research Question 3, Part 3D1-3/RQ3D1-3)
(Table 44, Table 45, Table 46)
   1. Size of African American Population & School Type (RQ3D1)
   2. Size of Hispanic Population & School Type (RQ3D2)
   3. Size of White Population & School Type (RQ3D3)

E. Percentage of special education students taking the High School Assessment (HSA) (Research Question 3, Part 3E/RQ3E1-3)

The summary of the results on the independent variables predicting the dominant educational assumptions on inclusion held by high school principals in the study was shown in Table 40, Table 41, and Table 42. The regression showed that the variables were not good predictors of principals' assumptions as described by the DEAQ (R Square =.110). The independent variables of school size, school type only, school type & diverse populations, students on FARM, special education students taking the HSA, and size of diverse populations did not predict whether the principals held facilitator assumptions about inclusion or barrier assumptions about inclusion. Principals who held barrier assumptions (negative, blocking opinions) about inclusion were leaders of school with economically challenged student populations (as evidenced by the number of students on the State's free and reduced meal program). Or the principals who scored high on having barrier assumptions were from schools on the other side of the spectrum with economically richer student populations.

Table 40

Model Summary for Regression Analysis to Determine Predictability of DEAQ

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.332[a]	.110	.024	4.9052

Note. [a] Predictors: (Constant) WHPOP, TOT IIIQ, HISPOP, SEPOP%, HSA-SE%, FARM%.

Table 41

ANOVA[b] for Dominant Educational Assumptions Questionnaire (DEAQ)

Model	Category	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	185.265	6	30.877	1.283	278[a]
	Residual	1401.808	62	24.061		
	Total	1677.072	68			

Note. [a] Predictors: (Constant) WHPOP, TOTAL IIIQ SCORE, HISPOP, SEPOP%, HSA-SE%, FARM% [b] Dependent variables: TOTAL DEAQ SCORES

Table 42

DEAQ: Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	13.998	4.946	072	2.831	.006
	FARM%	1.785E-02	.057	-,210	.312	.756
	HISPOP	-4.962E-03	.004	.014	-1.149	.255
	HSA-SE%	4.343E-03	.048	.099	.090	.929
	SEPOP%	.115	.165	-.166	.696	.489
	WHPOP	-1.286E-03	.002	.158	-.712	.479
	TOT DEAQ SCORE	.126	.104	.316	1.206	.233
	TOTPOP	2.092E-03	.001		1.465	.148

Note. [a] Dependent variable: TOTAL IIIQ SCORE

The summary of the results on the assumptions about the importance of implementing inclusion held by high school principals in the study was shown in Table 43, Table 44, and Table 45. The regression showed that the variables were not good predictors of principals' perceived importance of

implementing inclusion (R Square =.079). The independent variables of school size, school type only, school type & diverse populations, students on FARM, special education students taking the HSA, and size of diverse populations did not predict whether the high school principals felt implementing inclusion was important or not important. The predictability of these tests on the IIIQ was of less value (R Square =.079 for the IIIQ and R Square =.110 for the DEAQ) than the regression on the DEAQ.

Table 43

Model Summary for Regression Analysis of Predictability of IIIQ

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	281[a]	.079	.027	4.0017

Note. [a] Predictors: (Constant) TOTPOP, TOT DEAQ, HSA-SE%, SEPOP%, HISPOP, FARM%, WHPOP

Table 44

ANOVA[b] for Inclusion Implementation Importance Questionnaire (IIIQ)

Model	Category	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	83.443	7	11.920	.744	.635a
	Residual	976.846	61	16.014		
	Total	1060.290	68			

Note. [a] Predictors: (Constant) TOTPOP, TOTAL DEAQ SCORE, HSA-SE%, SEPOP%, HISPOP, FARM%, WHPOP. [b] Dependent variables: TOTAL IIIQ SCORES

Table 45

IIIQ Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	32.989	4.900	*	6.728	.000
	FARM%	5.273E-02	.070	-.170	-.755	.453
	HISPOP	1.300E-04	.004	.004	.033	.974
	HSA-SE%	4.384E-02	.059	.-112	.743	.460
	SEPOP%	.205	.196	.140	1.047	.299
	TOT IIIQ SCORE	.236	.151	.188	1.55	.124
	WHPOP	5.270E-04	.002	.054	.277	.783

Note. [a] Dependent Variable: TOTAL DEAQ SCORE. * No response

Summary of the results shown in Table 46 was 24 schools were classified as small size schools, 26 were classified as medium size, and 24 were classified as large size. The sizes were taken from the schools led by the sample principals.

Table 46

School Size & DEAQ Category Percentage of Principal Participation

			Valid	Cumulative
	Frequency	Percent	Percent	Percent
Valid				
SMALL	24	28.6	32.4	32.4
MEDIUM	26	31.0	35.1	67.6
LARGE	24	28.6	32.4	100.0
Total	74	66.1	100.0	
Missing System	10	11.9		
Total	10	11.9		
Total	84	100.0		

The crosstabulation of school size and the facilitator responses on the DEAQ by the high school principals yielded percentages shown in Table 47. The scores that were the highest, or most facilitator, and the lowest, or more barrier, were noted. The highest percentage score was 87.5%. This percentage came from 21 principals who had medium DEAQ scores and were principals from large (greater than 500 students) high schools. The lowest percentage, 4.7%, came from 1 principal, from a large high school, who had with medium DEAQ scores.

Table 47

Crosstabulation: School Size & DEAQ Category Score

School Size	Variables	DEAQ CATEGORY SCORE			
		LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	5	15	4	24
	% within Type	20.8%	62.5%	16.7%	100.0%
	% within DEAQ	62.5	26.3	44.4	32.4
	% of Total	6.8	20.3	5.4	32.4
TYPE MEDIUM	Count	2	21	3	26
	% within Type	7.7%	80.8%	11.5%	100.0%
	% within DEAQ	25.0	36.8	33.3	35.1
	% of Total	2.7	28.4	4.1	35.1
TYPE LARGE	Count	1	21	2	24
	% within Type	4.2%	87.5%	8.3%	100.0%
	% within DEAQ	12.5	36.8	22.2	32.4
	% of Total	1.4	28.4	2.7	32.4
TOTAL	Count	8	57	9	74
	% within Type	10.8%	77.0%	12.2%	100.0%
	% within DEAQ	100.0	100.0	100.0	100.0
	% of Total	10.8	77.0	12.2	100.0

The crosstabulation of school size and the inclusion implementation importance response scores on the IIIQ yielded percentages shown in Table 48. The results were in a different pattern from the parallel crosstabulation of the DEAQ (school sizes and facilitator responses on the DEAQ). The DEAQ crosstabulation had high facilitator scores in the center or in the medium range of scores. The IIIQ implementation importance scores were skewed to the right in all three school size category types, small, medium and large (see Table 46). The principal scores the highest positive percentages of scores were from small, medium and large size schools. Regardless of the size of the schools, the largest percentage of principal scores fell in the high IIIQ positive range. The highest percentage of all 3 categories of scores was 62.5% for principals with large high schools (greater than 500 students). The next highest percentages were 58.3% for principals with small size high schools (less than 200 students) and 50.0% for principals with medium size high schools (200-500 students).

Table 48

Crosstabulation: School Size and IIIQ Category Score

		IIIQ CATEGORY SCORE			
School Size	Variables	LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	6	4	14	24
	% within Type	25.0	16.7	58.3	100.0
	% within IIIQ	40.0	23.5	33.3	32.4
	% of Total	8.1	6.4	18.9	32.4
TYPE MEDIUM	Count	7	6	13	26
	% within Type	26.9	23.1	50.0	100.0
	% within IIIQ	46.7	36.3	31.0	35.1
	% of Total	9.5	8.1	17.6	35.1
TYPE LARGE	Count	2	7	15	24
	% within Type	8.3	29.2	62.5	100.0
	% within IIIQ	13.3	41.2	35.7	32.4
	% of Total	2.7	9.5	20.3	32.4
TOTAL	Count	15	17	42	74
	% within Type	20.3	23.0	56.8	100.0
	% within IIIQ	100.0	100.0	100.0	100.0
	% of Total	20.3	23.0	56.8	100.0

Of those responding, 7 were from rural schools, 68 from suburban, and 6 from urban schools (see Table 49).

Table 49

School Type & DEAQ Category Percentage of Participation

School Type	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Rural	7	6.3	6.3	11.9
Suburban	68	81.0	81.0	92.9
Urban	6	7.1	7.1	100.0
Missing System	3	3.6	3.6	
Total	3	3.6		
Total	84	100.0		

Note. School Type & DEAQ Category Score (RQ3B2).

Table 50

Crosstabulation: School Type and DEAQ Category Score

		DEAQ CATEGORY SCORE			
School Type	Variables	LOW	MEDIUM	HIGH	TOTAL
TYPE RURAL	Count		5	2	7
	% within Type		71.4	28.6	100.0
	% within DEAQ		8.3	16.7	8.6
	% of Total		6.2	2.5	8.6
TYPE SUBURBAN	Count	8	50	10	68
	% within Type	11.8	73.5	14.1	100.0
	% within DEAQ	88.9	83.3	83.3	84.0
	% of Total	9.9	61.7	12.3	84.0
TYPE URBAN	Count	1	5	*	6
	% within Type	16.7	83.3	*	100.0
	% within DEAQ	11.1	8.3	*	7.4
	% of Total	1.2	6.2	*	7.4
TOTAL	Count	9	60	12	81
	% within Type	11.1	74.1	14.8	100.0
	% within DEAQ	100.0	100.0	100.0	100.0
	% of Total	11.1	74.1	14.8	100.0

Summary of the results for school type and positive scores on the IIIQ were shown in Table 51. Out of 7 principals from rural high schools, 3 principals (42.9%) who scored in the medium range on the IIIQ were from rural high schools, 4 principals (57,1) who scored in the high positive range were from rural schools, and no principals scored in the low range from rural high schools. The percentage of 16.7% was noted for the principals who scored medium on the IIIIQ and were from rural high schools, 6.5% of the principals who had facilitator scores on the DEAQ scored in the medium range of possible scores on the IIIQ were from rural high schools, and 6.6% of all of the principals who had scores of any kind on the DEAQ were from rural high schools.

Table 51

Crosstabulation: School Type and IIIQ Category Score

		IIIQ CATEGORY SCORE			
School Type	Variables	LOW	MEDIUM	HIGH	TOTAL
TYPE RURAL	Count	*	3	4	7
	% within Type	*	42.9	57.1	100.0
	% within DEAQ	*	16.7	6.5	6.6
	% of Total	*	3.7	4.9	8.6
TYPE SUBURBAN	Count	14	15	39	68
	% within Type	20.6	22.1	57.4	100.0
	% within DEAQ	87.5	83.3	83.0	84.0
	% of Total	17.3	14.5	48.1	84.0
TYPE URBAN	Count	2	*	4	6
	% within Type	33.3	*	66.7	100.0
	% within DEAQ	12.5	*	66.7	100.0
	% of Total	2.5	*	4.9	7.4
TOTAL	Count	16	18	17	81
	% within Type	19.8	22.2	58.0	100.0
	% within DEAQ	100.0	100.0	100.0	100.0
	% of Total	19.8	22.2	58.2	100.0

Note. *No sores fell within range.

Size of diverse population, African-American, Hispanic, and White Students, and facilitator responses on the DEAQ & positive responses on the IIIQ

1. African American Population & DEAQ Category Score (RQ3C1)

   The population of African-American students (see Table 52) was divided as follows: 36 schools had small African American student populations (less than 200); 21 had medium African-American

student populations (200-500); and 17 schools had large African-American student populations (greater than 500)

Table 52

Size of African-American Student Population & DEAQ

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
SMALL	36	42.9	48.6	48.6
MEDIUM	21	25.0	28.4	77.0
LARGE	17	20.2	23.0	100.0
Total	74	88.1		
Missing System	10	11.9		
Total	84	100.0		

Table 53

Crosstabulation: Size of African-American Population (AAPOP) & DEAQ

	Variables	DEAQ CATEGORY SCORES			
		LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	6	26	4	36
	% within TYPE Size of AAPOP	16.7	72.2	11.1	100.0
	% within DEAQ	75.0	45.6	44.4	48.6
	% of TOTAL	8.1	35.1	5.4	48.6
TYPE MEDIUM	Count		18	3	21
	% within TYPE Size of AAPOP		85.7	14.3	100.0
	% within DEAQ		31.6	33.3	28.4
	% of TOTAL		24.3	4.1	28.4
TYPE LARGE	Count	2	13	2	17
	% within TYPE Size of AAPOP	11.8	76.5	11.8	100.0
	% within DEAQ	25.0	22.8	22.2	23.0
	% of TOTAL	2.7	17.6	2.7	23.0
TOTAL	Count	8	57	9	74
	% within TYPE Size of AAPOP	10.8	77.0	12.2	100.0
	% within DEAQ	100.0	100.0	100.0	100.0
	% of TOTAL	10.8	77.0	12.2	100.0

Table 54

Crosstabulation: Size of African-American Student Population (AAPOP) & IIIQ

		IIIQ CATEGORY SCORE			
Size of AAPOP	Variables	LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	11	8	17	36
	% within TYPE	30.6	22.2	47.2	100.0
	% within IIIQ	73.3	47.1	40.5	49.6
	% of TOTAL	14.9	10.8	23.6	48.6
TYPE MEDIUM	Count	2	6	13	21
	% within TYPE	9.5	26.6	61.9	100.0
	% within IIIQ	13.3	35.3	31.0	28.4
	% of TOTAL	2.7	8.1	17.6	28.4
TYPE LARGE	Count	2	3	12	17
	% within TYPE	11.8	17.6	70.6	100.0
	% within IIIQ	13.3	17.6	28.6	23.0
	% of TOTAL	2.7	4.1	16.2	23.0
TOTAL	Count	15	17	42	74
	% within TYPE	20.3	23.0	56.8	100.0
	% within IIIQ	100.0	100.0	100.0	100.0
	% of TOTAL	20.3	23.0	56.8	100.0

Size of Hispanic Population & DEAQ Category Score

There were 53 schools that had small (fewer than 200) Hispanic student populations, 14 had medium (200-500) students, and 7 high schools had had large populations of Hispanic students (greater than 500).

Table 55

Size of Hispanic Student Population & DEAQ

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LOW	53	63.1	71.6	71.6
	MEDIUM	14	16.7	18.9	90.5
	HIGH	7	8.3	9.5	100.0
	Total	74	88.1	100.0	
	Missing System	10	11.9		
	Total	10	11.9		
Total		84	100.0		

Table 56

Crosstabulation: Size of Hispanic Student Population (HISPOP) & IIIQ

TYPE		DEAQ CATEGORY SCORE			
Size of HISPOP	Variables	LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	7	37	9	53
	% within TYPE	13.2	69.8	17.0	100.0
	% within DEAQ	87.5	64.9	100.0	71.6
	% of TOTAL	9.5	60/0	100.0	71.6
TYPE MEDIUM	Count		14		14
	% within TYPE Size of HISPOP		100.0		100.0
	% within DEAQ		24.6		18.9
	% of TOTAL		18.9		18.9
TYPE LARGE	Count	1	6		7
	% within TYPE Size of HISPOP	14.3	85.7		100.0
	% within DEAQ	12.5	10.5		9
	% of TOTAL	1.4	8.1		5
TOTAL	Count	8	57	9	74
	% within TYPE Size of HISPOP	10.8	77.0	12.2	100.0
	% within DEAQ	100.0	100.0	100.0	100.0
	% of TOTAL	10.8	100.0	100.0	100.0

Table 57

Crosstabulation: Size of Hispanic Student population (HISPOP) & IIIQ Category

Size of HISPOP	Variables	IIIQ CATEGORY SCORE LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	11	9	33	53
	% within TYPE Size of HISPOP	20.8	17.0	62.3	100.0
	% within IIIQ	73.3	52.9	78.6	71.6
	% of TOTAL	14.9	12.2	44.6	71.6
TYPE MEDIUM	Count	3	5	6	14
	% within TYPE Size of HISPOP	21.4	35.7	42.9	100.0
	% within IIIQ	20.0	29.4	14.3	18.9
	% of TOTAL	4.1	6.8	8.1	18.9
TYPE LARGE	Count	1	3	3	7
	% within TYPE Size of HISPOP	14.3	42.9	42.9	100.0
	% within IIIQ	6.7	17.6	7.1	9.5
	% of TOTAL	1.4	64.1	4.1	9.5
TOTAL	Count	15	17	42	74
	% within TYPE Size of HISPOP	20.3	23.0	56.8	100.0
	% within IIIQ	100.0	100.0	100.0	100.0
	% of TOTAL	20.3	23.0	56.0	100.0

Size of White Student Population (WHPOP) and DEAQ Category Score

The summary for Table 58 was: 11 schools had small White population, 22 had medium, and 41 had large population of white students.

Table 58

Size of White Student Population & DEAQ

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LOW	11	13.1	14.9	14.9
	MEDIUM	22	26.2	29.7	44.6
	HIGH	41	48.8	55.4	100.0
	Total	74	88.1	100.0	
	Missing System	10	11.9		
	Total	10	11.9		
Total		84	100.0		

Table 59

Crosstabulation: Size of White Population (WHPOP) & DEAQ Category Score

Size of WHPOP	Variables	DEAQ CATEGORY SCORE LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	3	6	2	11
	% within TYPE Size of WHPOP	27.3	54.5	18.2	100.0
	% within DEAQ	37.5	10.5	22.2	14.9
	% of TOTAL	4.1	8.1	2.7	14.9
TYPE MEDIUM	Count	1	16	4	22
	% within TYPE Size of WHPOP	9.1	72.7	18.2	100.0
	% within DEAQ	25.0	28.1	44.4	29.7
	% of TOTAL	2.7	21.6	5.4	29.7
TYPE LARGE	Count	3	36	3	4.1
	% within TYPE Size of WHPOP	7.3	85.4	7.3	100.0
	% within DEAQ	37.5	61.4	33.3	55.4
	% of TOTAL	4.1	47.3	4.1	5.4
TOTAL	Count	8	57	9	74
	% within TYPE Size of WHPOP	10.8	77.0	12.2	100.0
	% within DEAQ	100.0	100.0	100.0	100.0
	% of TOTAL	10.8	77.0	12.2	100.0

Table 60

Crosstabulation: Size of White Population (WHPOP) & IIIQ Category Score

Size of WHPOP	Variables	IIIQ CATEGORY SCORE LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	3		8	11
	% within TYPE Size of WHPOP	27.3		72.7	100.0
	% within IIIQ	20.0		19.0	14.9
	% of TOTAL	4.1		10.8	14.9
TYPE MEDIUM	Count	5	7	10	22
	% within TYPE Size of WHPOP	22.7	31.8	45.5	100.0
	% within IIIQ	33.3	42.2	23.8	29.7
	% of TOTAL	6.8	9.5	13.5	29.7
TYPE LARGE	Count	7	10	24	41
	% within TYPE Size of WHPOP	17.1	24.4	58.5	100.0
	% within IIIQ	46.7	58.8	57.1	55.4
	% of TOTAL	9.5	13.5	32.4	55.4
TOTAL	Count	15	17	42	74
	% within TYPE Size of WHPOP	20.3	23.0	56.8	100.0
	% within IIIQ	100.0	100.0	100.0	100.0
	% of TOTAL	20.3	23.0	56.8	100.0

E. Percentage of special education students taking the HSA & DEAQ & IIIQ Category Scores (Research Question 3

Table 61

Crosstabulation: Percentage of Special Education Students taking HSA

Size of HSA-SE%	Variables	DEAQ CATEGORY SCORE LOW	MEDIUM	HIGH	TOTAL
TYPE LOW	Count	6	24	4	34
	% within Type	17.6	70.6	11.8	100.0
	% within DEAQ	75.0	44.4	44.4	47.9
	% of Total	8.5	33.8	5.6	47.9
TYPE MEDIUM	Count	1	12	2	15
	% within Type	6.7	80.0	13.3	100.0
	% within DEAQ	12.5	22.2	22.2	21.1
	% of Total	1.4	16.9	2.8	21.1
TYPE HIGH	Count	1	18	3	22
	% within Type	4.5	81.8	13.6	100.0
	% within DEAQ	12.5	33.3	33.3	31.0
	% of Total	1.4	25.4	4.2	31.0
TOTAL	Count	8	54	9	71
	% within Type	11.3	76.1	12.7	100.0
	% within DEAQ	100.0	100.0	100.0	100.0
	% of Total	11.3	76.1	12.7	100.0

Table 62

Crosstabulation: Percentage of Special Education Students taking the High School Assessment (HSA) & IIIQ Category Score

Size of HSA-SE%	Variables	IIIQ CATEGORY SCORE LOW	MEDIUM	HIGH	TOTAL
TYPE SMALL	Count	8	7	19	34
	% within Type	23.5	20.6	55.9	100.0
	% within IIIQ	57.1	41.2	47.5	47.9
	% of Total	11.3	9.9	47.5	47.9
TYPE MEDIUM	Count	1	3	26.8	15
	% within Type	6.7	20.0	11	100.0
	% within IIIQ	7.1	17.6	73.3	21.1
	% of Total	1.4	4.2	27.5	21.1
TYPE LARGE	Count	5	7	15.5	22
	% within Type	22.7	31.8	10	100.0
	% within IIIQ	35.7	41.2	45.5	31.0
	% of Total	7.0	9.9	25.0	31.0
TOTAL	Count	1.4	17	14.1	71
	% within Type	19.7	23.9	40	100.0
	% within IIIQ	100.0	100.0	56.3	100.0
	% of Total	19.7	23.9	100.0	100.0

Data Summary for Research Question 4 (RQ 4)

4. Is there a relationship between a principal's facilitator score on the Dominant Educational Assumptions Questionnaire (DEAQ) and his/her score on the Inclusion Implementation Importance Questionnaire (IIIQ)?

There was a low positive (.254) between the DEAQ and the IIIQ. The political domain and structural domain of the education assumptions were found to be significant contributors to scoring high on the importance of implementing inclusion instrument. Specifically high scores on political barrier assumptions and structural facilitator assumptions were significant factors for predicting high scores on the inclusion implementation importance instrument. The principals' score on the DEAQ could be explained by their score on the IIIQ and the percent of school population on FARM.

Data Summary for Research Question 5 (RQ 5)

5. Is there a special or significant relationship across descriptors?

   Was there anything special or significant across the descriptors?

Summary of the results from running basic descriptive statistics were provided in Table 63: The average values across the state for some of the key variables were as follows:

a. FARM 22.7%
b. AAPOP 363
c. HISPOP 79
d. SESPOP 11

e. TOTPOP 1350

f. WHPOP 835

Table 63

Summary of Descriptive Statistics: Key Variables of the Study

Variables	N	Minimum	Maximum	Mean	Std Deviation
FARM %	72	1.90	67.40	22.6778	16.0472
HSA-RE%	72	4.50	95.30	54.9986	19.3010
HSA-SE%	71	0.00	52.80	3.1014	12.6565
REPOP%	74	17.10	100.0	88.6661	3.6551
SEPOP%	74	.01	22.90	11.3339	3.6551
AAPOP	74	1.00	1815.00	363.3378	410.9273
HISPOP	74	.00	842.00	78.6892	162.6374
WHPOP	74	1.00	1880.00	834.8243	518.8529
TOTPOP	74	23.00	3293.00	1350.014	604.1679
Valid N (listwise)	69				

Note. Code: FARM = Free & Reduced Meals%, AAPOP = African American Student Population, HISPOP = Hispanic Student Population, WHPOP = White Student Population, HSA-RE % = High School Assessment-Regular Education %, HSA-SE % = High School Assessment-Special Education %, REPOP % = Regular, Education Population %, SEPOP % = Special Education Population %.

The general correlation findings for research question 5 were presented in Appendix I and key correlations were summarized for clarity:

1. There is a positive correlation (.436) between AAPOP and FARM%, which indicates that a high percentage of African American student population is associated with a high free and reduced meal

percentage.

2. There is a positive correlation (.300) between AAPOP and HISPOP, which indicates that a high percentage of African American student population is associated with a high percentage of Hispanic student population.
3. There is a negative correlation (-.436) between AAPOP and WHPOP, which indicates that a high percentage of African-American student population is associated with a low percentage of White student population.
4. There is a positive correlation (.258) between FARM% and SEPOP%, which indicates that a high percentage of special education population is associated with a high free and reduced meal percentage.
5. There is a negative correlation (-.530) between FARM% and HSA-SE%, which indicates that a high percentage of students taking the HSA is associated with a low free and reduced meal percentage.
6. There is a negative correlation (-.800) between FARM% and WHPOP, which indicates that a high percentage of white student population is associated with a low free and reduced meal percentage.
7. There is a negative correlation (-.311) between HSA-SE% and SEPOP%, which indicates that a high percentage of students taking the HSA is associated with a low percentage of special

education population.

8. There is a positive correlation (.364) between HSA-SE% and WHPOP, which indicates that a high percentage of white student population is associated with a high percentage of students taking the HSA.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter interprets and discusses the results of pilot testing two researcher-made questionnaires taken from the works of Astuto et al.(1994) on dominant educational assumptions and Kochhar, West, & Taymans (2000) on the importance of implementing inclusion. The two researcher-made questionnaires, *Dominant Educational Assumptions Questionnaire (DEAQ)* and the *Inclusion Implementation Importance Questionnaire (IIIQ),* were pilot-tested on a sample of high school principals from all school districts in one of the Mid-Atlantic American states, referred to in this study as the "State." Survey instruments were voluntarily completed together by the same sample of high school principals within the same testing time frame. The extent to which facilitator or positive educational assumptions were made by high school principals became the focus of the research study. The focus on facilitator or positive educational assumptions was important in identifying effective leadership skills and strategies for high school principals in future research studies.

The goal of this study was to contribute information to the field of professional development for high school principals regarding the need to improve teaching and learning for all students in inclusive classroom settings. With the intention of adding to the research on dominant educational assumptions, inclusion importance, inclusion implementation, and high school principals as leaders, this research study examined selected high school

principals to study the impact of their assumptions on their perceived importance of implementing inclusion within their respective schools.

Overview of Findings

The study used survey research, analyzed with descriptive statistics. The variables examined were gender of high school principals, ethnicity of student populations, type of school community, economic status of student populations, student participation on a system-wide high school assessment, and size of special and regular education populations. The *DEAQ* was used to survey the educational assumptions, categorized into five domains (political, social, structural, Individual and procedural), held by the sample of high school principals. The *IIIQ* was used to survey how the high school principals felt about the importance of implementing inclusion as indicated by the positive or negative responses made by the same sample of high school principals.

Details of the study's data and statistical analysis may be found in Chapter Three. However a brief summary of the methods and findings include the following.

1. Crosstabulation was conducted to determine the significance between gender of the sample of high school principals and their facilitator or barrier scores to answer the first research question. The crosstabulated variables were (a) male and female (high school principals), (b) rural, urban and suburban (school type), (c) small, medium, and large (size of each studied ethnicity for the student population and size of student population), or (d) low, medium and

high (size of FARM percentage).

2. The null hypothesis for *ANOVA* meant that the mean (average value of the dependent variable) was the same for all groups. The alternative or research hypothesis meant that the average was not the same for all groups.
3. The *ANOVA* test procedure produced an *F-statistic*, which was used to calculate the p-value. If $p < .05$, the null hypothesis could have been rejected. However, in this study $p > .05$ and the alternate or research hypotheses for research questions 1, 2, and 3 were rejected. At least two groups were different from each other.
4. The *t-test* was the most commonly used method to evaluate the differences in means between two groups. For example, the *t-test* was used in this study to test whether there was a significance difference between the female high school principals and the male high school principals in their individual responses on the DEAQ or the IIIQ. The results were not significantly different for males and females, except that females scored high more often than the males on facilitator responses. In addition and fortunately for this study, the *t-test* could be used even if the sample sizes were very small (e.g., as small as ten). The number of female and male principals in this study did total more than ten (22 and 59, respectively). Smaller numbers are possible, as long as the variables are normally distributed within each group and the variation of scores in the two groups were not reliably different.

The normality assumption could be evaluated by looking at the distribution of the data (via histograms) or by performing a normality test. The p-level reported with a t-test represented the probability of error involved in accepting the research hypothesis about the existence of a difference. This was the probability of error associated with rejecting the hypothesis of no difference between the two categories of observations (corresponding to the groups of high school principals) in the population when, in fact, the hypothesis was true.

Findings from Research Questions and Hypotheses

The research questions in this study took on a dual purpose. First, the research questions served to guide the research attempting to validate two researcher-made assessment instruments in the form of survey questionnaires. Secondly and perhaps most importantly, the research questions had to be strong enough to survive future research trials in establishing reliability. In this study, the research questions were clear and concise.

The level of significance from the results of the first three research questions yielded low or no significance. Patterns of results were noted but were not significant and therefore could not be generalized to the general population of high school principals or even another similar sample of high school principals from the same “State” or from another U. S. state. This was an important finding to share with future researchers to ensure that no generalization be made to the general population of high school principals or even similar populations. Facilitator and barrier educational assumptions held by high school principals

and the perceived importance they placed on implementing inclusion were analyzed to answer the following research questions.

Research Question 1

Does gender of high school principals predict their educational assumptions regarding the contextual domains of schooling as described by the Dominant Education Assumptions Questionnaire (DEAQ)?

The researcher set out to observe if there was any correlation between the gender of high school principals and their facilitator responses on the dominant educational assumptions questions. It was hypothesized that if there was a correlation, there would be predictability between gender and facilitative assumptions about inclusion. In addition, there was a test for simple linear regression. Simple regression is similar to correlation in that the purpose is to measure to what extent there is a linear relationship between two variables. The major difference between the two is that correlation makes no distinction between independent and dependent variables while linear regression does. In particular, the purpose of linear regression is to "predict" the value of the dependent variable based upon the values of one or more independent variables. It was found that by calculating the mean scores and the difference between the lowest and highest *DEAQ* scores and assessing the scores by gender, the female principals scored higher on the *DEAQ* than the male principals. In summary, 92.3% of the female high school principals had a medium or high score on the *DEAQ* compared to the 87.2% of the males. That indicates that

slightly more females scored higher on facilitator assumptions than the males. However, the difference is not statistically significant.

The findings from Research Question 1 were interpreted to mean that most principals, male and female, seem to hold positive or facilitative assumptions about inclusion. A re-administration of the DEAQ or this same sample of principals or a new assessment on a similar sample of principals is needed in an effort to reach a level of significance.

Research Question 2

Does gender of high school principals predict their assumption of the importance of implementing inclusion in his/her high school?

The goal in testing this research question 2 was the same as the goal in testing research question 1. The goal of this part of the research study was to see if there was any correlation between the gender of high school principals and their facilitator responses on the questionnaire. It was hypothesized that if there was a correlation, there would be predictability between gender and facilitative assumptions about inclusion (Malouf, 1995). By reviewing the linear regression data, it was found that by calculating the mean scores and the difference between the lowest and highest *IIIQ* scores and assessing the scores by gender, slightly more female principals scored higher on the DEAQ than the male principals. In summary, the percentage, 76.9%, of the female high school principals had a medium or high score on the IIIQ compared to the percentage, 81.9%, of the male high school principals, which indicates that slightly more males score higher on inclusion importance. However, there was no significant

difference.

The findings from Research Question 2 may be interpreted to mean that both the female and male principals held assumptions that supported the importance of implementing inclusion. It appeared that it was important to most principals to implement inclusion and complete the task.

Research Question 3

Does school size, percent of school population on Free and Reduced Meals (FARM), or the size of the African-American, Hispanic, and White student populations predict a principal's assumptions regarding the contextual domains of schooling as described by the Dominant Education Assumptions Questionnaire (DEAQ) and the Inclusion Implementation Importance Questionnaire (IIIQ)?

The regression analysis showed that the variables are not good predictors of principals' assumptions as described by the DEAQ. (R Square =.110) The regression also showed that the variables are not good predictors of principals' assumptions regarding inclusion importance (R Square =.079).

The findings of Research Question 3 suggested that the independent variables in this study were not good predictors of what kinds of assumptions principals held regarding inclusion or the importance of implementing inclusion. The significance of testing the predictability of variables in the field of educational leadership and special education is to be able to set stages and construct environments conducive to inclusion and its implementation. At the onset of this study, it was hypothesized that such variables as gender, school size, school

type, economic status of students, and ethnicity of student populations may have some level of significance when it came to predicting principals' assumptions related to the study.

Research Question 4

Is there a relationship between a principal's facilitator score on the Dominant Educational Assumptions Questionnaire (DEAQ) and his/her score on the Inclusion Implementation Importance Questionnaire (IIIQ)?

The educational assumptions in the political and structural domains are significant contributors to successfully implementing inclusion best practices in the principals' educational and administrative environments. The political educational domain involves governance, hierarchies of authority, educational theory and related doctrine. The structural educational domain relates to the infrastructure of systems, organizations, and bureaucracies. Specifically high scores on the political barrier assumptions and structural facilitator assumptions are significant factors for determining inclusion. Also, the principals' score on the *Dominant Educational Assumptions Questionnaire (DEAQ)* can be partially explained by their score on the *Inclusion Implementation Importance Questionnaire (IIIQ)* and the percent of school population on Free and Reduced Meals (FARM).

The findings from Research Question 4 may be interpreted to mean that one questionnaire was not related to the second questionnaire. This study found no connection between the questionnaires themselves. However, the DEAQ scores under the political and structural domains did

have a low positive correlation which meant that as the female and male principals scored high or low on the political facilitator assumptions, the scores on the structural facilitator assumptions were correspondingly high or low and both sets predicted the scores on the IIIQ. Either set of domain scores predicted the other set of scores. In some unidentified or yet unstudied way, the political and structural domains were related with respect to the scores of this sample group of female and male high school principals. Both educational domains involved hierarchies. The political domain involved a hierarchy of governance and the structural domain involved a hierarchy in infrastructure.

Research Question 5

Is there a special or significant relationship across descriptors?

The intent of this question was to study whether the descriptor variables had any correlation to each other. The findings from this question could help to design a study involving assumptions and each of the descriptors. For example, there could be a study designed to research the relationship between principal assumptions regarding inclusion and the high or low percentages of African-American students enrolled in the respective school. The summary of findings for research question five follow:

a. There is a positive correlation (.436) between African-American student population (AAPOP) and Free and Reduced Meals % (FARM %), which indicates that a high percentage of African-American student population was associated with a high free and reduced meal

percentage. The key finding here is that because the African-American population in this country as a whole, tend to fall below the poverty line, there is also a tendency to need assistance with getting that population fed.

b. There is a small positive correlation (.300) between African-American student population (AAPOP) and Hispanic student population (HISPOP), which indicates that a high percentage of African American student population was associated with a high percentage of Hispanic student population.

c. There is a negative correlation (-.436) between African-American student populations (AAPOP) and White student populations (WHPOP), which indicates that a high percentage of African American student population was associated with a low percentage of white student population. As the concentration of an African-American student population increased in high schools throughout the State, the concentration of a White student population decreased.

   The meaning given to this finding seemed to be understandable because schools are situated in neighborhoods and neighborhoods tend to be clustered around one majority number of ethnic population. So if the neighborhood is White, then the school has more White students than African-American students or vice versa.

d. There is a small positive correlation (.258) between FARM% and special education student population % (SEPOP %), which indicates

that a high percentage of special education population was associated with a high free and reduced meal percentage.

e. There is a negative correlation (-.530) between FARM% and HSA-SE percentage, which indicates that a high percentage of students taking the HSA was associated with a low free and reduced meal percentage. High percentages of students who took the high school assessment may be White student populations because of the tendency to have high economic levels where there are pockets of White populations.
f. There is a strong negative correlation (-.800) between FARM percentage and WHPOP percentage (white student population), which indicates that a high percentage of white student population is associated with a low free and reduced meal percentage. More research in this area is needed to support any conclusions.
g. There is a negative correlation (-.311) between HSA-SE percentage and SEPOP percentage, which may indicate that a high percentage of students taking the HSA is associated with a low percentage of special education population. More research is needed in this area to draw significant conclusions.
h. There is a small positive correlation (.364) between HSA-SE percentage and the size of the WHPOP, which seems to indicate that a high percentage of a white student population may be associated with a high percentage of students taking the HSA. More research is needed.

This finding of Research Question Five, part h, may support the notion that the White student population is more academically fit and ready for a rigorous work load and therefore would be more apt to take the high school assessment than other ethnic student populations, at least in the school districts included in this research study.

Speculative Conclusions and Discussion

Throughout our lives assumptions have played a significant role in shaping our actions, decisions and value judgments. Therefore principals have had to make assumptions as they lead schools in making a significant and positive educational difference in the lives of all children. Making appropriate assumptions has been critical to leading the inclusive education movement. Also, it is true that making appropriate policies is critical to the inclusive education movement.

Presently, in our American educational system, there are dominant assumptions influencing educational reform agendas, programs and initiatives (Astuto et al., 1994). These assumptions encompass educational organization, structure and processes in the specific areas of political and social contexts, organizational structure of schools, people in educational organizations and educational processes. According to Astuto et al. (1994), there are five domains of educational assumptions-political, social, individual, structural and procedural - that may provide a contemporary backdrop for the development of inclusive education for special education students. Defining inclusive education provides a

strong backdrop for analyzing the impact of dominant educational assumptions. These educational assumptions can be either supportive and facilitative or create barriers that are non-facilitative to reform in inclusive education. Inclusive education moves American education away from a continuum of meaningless education placements (Soffer, 1994) and toward meaningful participation of students, based on actual facts and their abilities in general education classes.

Juxtaposed with making assumptions is knowledge—knowing relevant facts. All students in America's schools, including high schools, deserve to be led by strong and committed leaders who acknowledge and know facts. Leaders in principal positions who know facts about inclusion will help to ensure the success of all children. Schools may need principals who know the basic five domains of educational support as they embrace the concept of inclusion. The implementation of Inclusion in high schools, as in all schools, may differ. However, the concept of inclusion may be implemented by principals who at least make facilitative assumptions that will ultimately lead them to knowing the facts about all aspects of inclusion. This will in turn lead them to the successful education of all children, especially those with disabilities. The tasks of creating school climates and constructing learning environments are opportunities for principals to genuinely support the learning of all students regardless of ability or disability.

The inclusion of students with disabilities may be as important to high school principals as is the purchase of equipment for the athletic program or the inclusion of advanced placement courses in the curriculum. Inclusion simply

cannot be overlooked. Fortunately, the principals surveyed did respond on the pilot questionnaires in a positive manner. As a result of administering the two questionnaires first as pre-pilot instruments, the mechanics, format and the content of the DEAQ and IIIQ became clearer in the opinion of the researcher.

Implications for Practice in Special Education and Educational Leadership

The results of this study support taking a closer look at the combined topics of the high school principal as a special education leader and the concept of inclusion in the forefront of educating today's students. Due to our rapid advances in technology and medicine, more and more children with disabilities are living and are being identified. It may be beneficial for the field of educational leadership and special education to embrace more contemporary professional development for high school principals (Daresh, 1998). More and more children are transitioning into the world of work and even into college-trained careers. We as a nation should not dismiss the need to strengthen our high school principals' education in the area of inclusion of students with disabilities. Making no strides or slipping back into isolation are not acceptable ways of running today's schools.

The purpose in exploring whether the descriptors had any relationship to each other, was accomplished by adding the number of variables that may be related to principal principals' educational assumptions and their implementation of inclusion. Descriptors other than the ones tested may be added to future research to retrieve a bigger picture of what principals actually assume when educating students, including those with disabilities. In the case of high school principals, what do they actually assume students with disabilities may need for a

smooth and successful all-inclusive education and transition to post-secondary options?

This research has implications for the practice of providing in-depth, specialized, and periodic professional development and training for high school principals in the specific area of special education for the 21st century (Meadows & Dyal, 1999). Our education today cannot afford to leave any children out of its system. America needs all of its citizens to be all that they can be. It is important for the findings in this study to connect with education models that have impact on the practice of effective educational leadership in high schools (Daniels, Bizar, Zemelman 2005).

This study will add to the body of knowledge related to making assumptions and implementing inclusion. For example, the results of this study underscored the need for recent, updated research that will support the much earlier research on inclusion conducted by Lipsky & Gartner (2007). Although, the research of Lipsky & Gartner (2007) focused on assumptions and beliefs about inclusions and identified them as factors. they can be viewed as correlated to the findings of this study, especially since the seven factors are aligned with the five assumption domains categorized in this study. The seven factors affirmed the need to study assumptions. As a review, the seven factors were

1. visionary leadership (assumes that leadership is to be visionary
2. collaboration (assumes that having social interaction to solve problems is important)

3. redirected use of assessment (assumes that assessment is for all students and needs to be redistributed)
4. staff and student support (assumes that everyone is key in making education accommodating for all students)
5. funding (assumes that the budget is generated for all students)
6. parental involvement (assumes that parents are a significant of the structure of the school)
7. adaptation of curricula and adoption of effective instructional practices (assumes that the curricula and instructional practices are to be state-of-the-art, relevant and global for all students).

There may be significance in the connection between principals' leadership and educational assumptions and their actions and behavior related to special education in general and, in particular, their perceived importance of implementing inclusion. Nationally, much of our attention has been on developing general skills and competencies of our high school leaders (Sergiovanni, 2000) but not as much attention has been paid to principals' underlying belief systems or assumptions and how they impact these leaders' skills and competencies (Sergiovanni, 2000). In other words, there may be a significant need to reform our professional development programs for high school principals. Reformed professional development programs need to explore the driving force behind educational assumptions on competencies impacting the implementation of inclusion. It is critical that more research was needed in this area before placing the responsibility on high school principals for inclusion reform in high schools.

Effective school level leadership was an essential component in the development of inclusive programs (Walther-Thomas, et al.1999).

As the inclusive movement continues to gain momentum in America and inclusion becomes an expected component of every curriculum, especially the high school curriculum, then there could conceivably be a universal inclusion facilitator assumption in the form of a national mandate on inclusion such as the following.

America's Inclusion Facilitator Assumption: It is our responsibility as a nation of civilized people to accept, include and advocate for all children and youth and to effectively provide the best educational practices and professional services to assist them in obtaining society's benefits and in reaching their potential, regardless of ability or disability, ethnicity or cultural heritage, and socio-economic status or family background.

This assumption would support and facilitate inclusion and would be the driving force in American education for this new century. School leaders, especially high school principals, should be actively engaged in driving education toward goals and objectives that included all students learning together in all learning environments.

Implications for Policy in Special Education and Educational Leadership

As it relates to this research study, policy guides, directs, leads and mandates the direction that schools within a school system or district are to function or operate under the leadership of the schools' principals. Because the high school principal has many more tasks and activities to plan and direct,

education policy keeps these principals focused on targets and indicators. This makes the high school principalship one of the most significant positions in any public school system - large or small, urban, rural or suburban. If the high school principal is hailed as successful in this significant position, then inclusion would be high on the priority list of roles and responsibilities.

> As Skrtic, 1995; Meltzer, 2007) observed: Understanding things such as social and public policy and organizational change depends on the frame of reference one brings to bear on the subject. More important, I began to see that the act of choosing a frame of reference has profound moral and political implications for individuals and society which of course got one thinking about the way special education and disability have been framed historically" (Skrtic, 1995, pp. 106-202).

This research was designed to help shed some light on the significant role of school leadership in ensuring that all children learn through inclusive environments. In addition, a connection between what the leaders of schools assume about the education of children including this with disabilities and the importance of implementing inclusion in their schools was explored. Their level of involvement in implementation of inclusion best practices may inherently be related to their, often masked, belief systems or assumptions. Lack of leadership or administrative support may be a major barrier to changing systems to progressively mandate inclusion (Kotter, 1996, p. 10; Aldridge & Goldman, 2007).

This study signals the need to create training environments for the study

of specific assumptions, along five domains, of principals, especially high school principals. Pilot-testing an instrument that observes facilitator and barrier assumptions was successful as an initial study. Policies made after careful decision-making about inclusion and inclusion best practices may then become the instruments to compensate for or re-direct barrier assumptions held by high school principals. Such policies may promote or shape facilitator assumptions that would probably benefit nearly all of the major aspects of the implementation of inclusion in the high school.

Hopefully, principals will not negatively debate inclusion policy but will actually have specific knowledge, or have facilitator assumptions about, the need to implement inclusion and then set out to successfully implement inclusion (Lombardi, 1999). They may need to gain through professional development and professional mentoring a sense of real and urgent never to include all students in educational plans, activities, and environments. High school principals may easily lead all other principals in setting the stage for successful inclusion.

However, without policy on inclusion guiding the practice of implementing inclusion, high school principals may not easily and effectively lead the charge in setting the stage for successful inclusion. The leading policy today to help ensure successful inclusion is the legislation, *No Child Left Behind (NCLB) of 2001*. *NCLB* helped set the stage for inclusive education policy and decision-making by monitoring the education of all students. The *NCLB* along with the *Individuals with Disabilities Education Act (IDEA) of 2004* mandated full participation in assessment (with some small leeway) and education establishing a standard for

our nation (Edelman, 2003; Aldridge & Goldman, 2007). Fortunately, NCLB continued to emphasize the way that all children are educated. The need to constantly monitor and evaluate the way all children are educated is reason for policy, such as *NCLB of 2001*, to mandate inclusion by all principals, not just high school principals.

Continuing to conduct research in this field may lead to the finding of barrier assumptions about inclusion that stand in the way of effective inclusion implementation. The exploration in this study of facilitator and barrier assumptions held by high school principals may help to better understand the impact of assumptions on leadership. Helping principals examine their assumptions and beliefs from a practical perspective may help to ease the pressure that principals may feel in trying to accommodate all students. Inclusive policies may help to strengthen the knowledge base of principals through mandatory attendance at and participation in professional development and specialized conferences or retreats. Inclusion is too important a component of successful schooling for principals to not follow inclusion policy based on barrier assumptions or negative beliefs about the need for the implementation of inclusion.

For example, the national conference, *"High Schools That Work,"* held for the first time in Washington, DC in 2001 provided a political backdrop for principals to gain significant insight and information on national secondary school reform efforts as well as the details of the State's secondary school reform movement. Inclusive education has been strongly viewed as necessary if all

children are to be successful in school and have equal access the benefits of society (Coutinho & Repp, 1999, p. 203; Kauffman & Hallahan, 2005, p. 18). However, inclusion was not included on the agenda as a viable component of high school reform. Despite policy mandates on inclusion, American school systems continue to lag behind in reaching targeted compliance, especially at the high school level.

Implications for Research in the Field

The intent of conducting this study was to add to the body of research methodology through the development of dual sets of survey instruments to assess educational assumptions and inclusion implementation. No instruments were found to test the basic assumptions about inclusion held by high school principals. There was no research found that studied the impact of assumptions and the perceived importance of implementing inclusion. But the results of this found that the assumptions of high school principal leadership may have a significant impact on the acceptance or rejection of high school students with disabilities into general education classrooms.

In order to increase reliability of these pilot research instruments, in the form of survey research, additional validations of the Dominant Educational Assumptions Questionnaire (DEAQ) and the Inclusion Implementation Importance Questionnaire (IIIQ) could be administered. A suggested format for the administration of these two pilot instruments would be *Split-half Administration* and *Test-Re-test Administration*. The Split-Half Administration, the most common format, would divide the DEAQ into two equal-item sections from

1-26 (see Table 24) and from 27-52 (see Table 25). Each section would have further randomized items within the split halves. The intent would be to strengthen these two pilot instruments for further use in research in special education and educational leadership.

The second format to increase reliability would be Test-Retest Administration, the easier format in use, would administer the same test in the same sequence of steps to the (a) same sample population, (b) a new sample population in the same Sate, and (c) a new sample population in another State. Increasing reliability of the DEAQ would ensure its valued or significant use in the field of research.

This research study investigated facilitative and barrier educational assumptions made by high school principals and any relationship to their perceived importance of inclusion because it is an overarching national policy. There is a need for high school principals to implement inclusion because inclusive education was a realistic preparation for adult life. Inclusion provides opportunities to learn in natural settings, such as general education classrooms with general education students and subject matter. Thus, inclusion supports equal and fair opportunities to develop programs for students with disabilities while also exposing general education students to people with disabilities. Policy mandating the implementation of inclusion may seem to guarantee that principals practice handling everyday challenges and experiences for children with disabilities (Bauer & Lynch, 1993), but principals need their own support via professional development to make this happen more universally.

Recommendations

Need for Future Research

Future research in this field is necessary to ensure that schools or school districts have in place appropriate and effective teaching and technology tools to teach all students. This study provides a glimpse into the educational assumption domains of principals as educational leaders. The continuation of research in this field focusing on this study's independent and dependent variables is useful to help principals make the best assumptions possible to support their leadership skills. Future research is needed to gain insight into the minds and actions of our leaders when it involves the important element of inclusion.

The next steps suggested for future research include, but are not limited to

1. Re-test, using a *Test-Re-Test* methodology, the same sample of high school principals from the same State to test the reliability of the two researcher-made questionnaires.
2. Select a new State from another part of the country or another state from the Mid-Atlantic part of the country and test the sample of high school principals available in that new State to further test the reliability of the two survey questionnaires.
3. Make comparisons of the data analysis from the future studies with the original study. This is necessary to make adjustments to the recommendations for professional development for high school principals focusing on the dichotomy (facilitator or barrier) of their

dominant educational assumptions and their beliefs (positive or negative) on the importance of implementing inclusion.

In summary, the purpose in continuing next steps is to ensure that there is no ambivalence on the part of what high school principals assume about inclusion of students with disabilities in the overall school environment. Research in this field would strengthen the leadership skills of high school principals who would ultimately lead all students to success.

High school principals continually need to enable all children to receive an individualized and appropriate education in typical, age-appropriate classroom and learning environments (Reif & Heimburge, 1996). Holland and Mazzoli (2001) observed, “Individual schools around the country have succeeded in making learning rigorous, relevant and rewarding for all students that they serve, not just the ones who come from educated and supportive families but these *success stories are by no means universal”* (Holland & Mazzoli, 2001, pp. 294-303).

There is a current trend among administrators toward increased debate over the necessity or value of inclusion in comprehensive, school-wide educational settings (Aldridge & Goldman, 2007, pp. 148-149). Therefore, it is important to review why inclusive education is a critical piece in today’s reform movement in order to understand why a slow pace exists in inclusion implementation.

Future research is needed to ensure that effective leadership skills of school principals will lead to effective education of all students. Making barrier

assumptions decreases the opportunity to practice strong and facilitative leadership skills. In past generations, the primary function of the principal evolved from “principal teacher,” as a master teacher who also tended to the limited duties required to keep the school organized and operating efficiently, to the principal as the chief executive officer of the campus” (Wilmore, 2002, p. 4). The primary emphasis has shifted from one in which the principal has the leeway to make assumptions, to one in which the principal needs to know the facts about everything related to his/her school and school system.

This study offers a first glimpse into the educational assumption domains of principals as educational leaders. Future research is needed and plausible to gain insight into the minds and actions of our leaders when it involves the critical process of inclusion. Without such research, the nation may be inhibiting the rights of students with disabilities to access the same educational opportunities and goals of academic achievement that is provided for other students.

Assumptions that underlie our focus in education or that guide our decisions about schooling or about the future existence of our society in relationships to the quality of human existence are assumptions supportive of inclusive educational practices. The quality of human existence may therefore be gauged by the extent to which educational needs of all students are met. Specifically, meeting the educational needs of special education students in general education environments has been a major focus of reform in both policy and practice. Chapmen and King (2004) observed that such a reform effort was on the horizon and would ensure that special education students were offered

the same educational opportunities as all students (Chapman & King, 2004). There may still be much-needed debate over how to better prepare school leaders, that is, school principals, to provide these equal opportunities. Assumptions that prioritize our focus in education or that guide our decisions about schooling or about the future existence of our society in relationship to the quality of human existence are assumptions that are supportive of inclusive educational practices that warrant future research.

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APPENDICES

Appendix A: DEAQ Pre-Pilot and Pilot Testing Instrument

DEAQ

DOMINANT EDUCATIONAL ASSUMPTIONS QUESTIONNAIRE

Questionnaire Items	Yes I do assume this	No I do not assume this
1. I assume more is needed than simply technical skill to support inclusive educational practices and settings.		
2. I assume high levels of professional expertise would ensure inclusion for all.		
3. I assume education must demonstrate an understanding and appreciation of diverse cultural traditions in society.		
4. I assume children are responsible for their own success and no responsibility may be placed on the institution of schooling.		
5. I assume shared activities rather than dictated mandates would ensure the survival of inclusive educational practices.		
6. I assume an education system is valued on what benefits from society it obtains, anchors and entitlements for children.		
7. I assume personalization of education lends itself to any school process including time and space constraints.		
8. I assume individuals will only become inclusive if the institution forces them through external incentives.		
9. I assume putting additional resources in public education will not increase system performance, which is the major goal.		
10. I assume an inclusive learning environment is built on trust, confidence, support, and challenge for all children and teachers.		
11. I assume special education children in inclusive education environments would pull down high standards and assessments.		
12. I assume all children may have access to all benefits available in society.		
13. I assume cooperation has a tendency to support/include children with disabilities.		
14. I assume people hold the keys to making inclusion best practices succeed through human nature as action initiators.		
15. I assume defining people as means of production falls short of true value of all people included in the organization.		
16. I assume processes of schooling and professional strategies to be assessed rather than students being faced with assessments.		
17. I assume accommodations/adjustments need not be made to support inclusion for assessments test ability and disability.		
18. I assume inclusion is supported by divergent thinking and the curriculum may address issues of multi-diversity.		
19. I assume curriculum may be developed around a central core of knowledge and a common cultural heritage.		
20. I assume empowering schooling fosters inclusive decisions affecting combining general and special education.		

(Adapted form Astuto et al, 1994)

21. I assume the organizational and institutional control would constrain and impede the positive growth of inclusion.		
22. I assume that bureaucracy or a rigid structure of schooling would impede the survival of inclusive educational practices.		
23. I assume competition has a strong tendency to shut out children with disabilities.		
24. I assume poverty, minority status and dysfunction impede all student progress.		
25. I assume taking bold steps in education will stop predetermined fates for children, especially those with disabilities.		
26. I assume schools must be responsible for adjusting schooling to the children.		
27. I assume competitive work environments are detrimental to children with special needs through elimination.		
28. I assume the human factor in management is not necessary to ensure a desired future state for the organization.		
29. I assume when schools are actively engaged in schooling for all children, there is considerable growth.		
30. I assume an education system exists for itself, contributing to society.		
31. I assume today's children do better in today's society than children in the past did in past societies.		
32. I assume assessment may not be the only factor in determining school performance but rather may be multi-faceted.		
33. I assume stakeholders are capable of working together to process ranges of options and strategies for all students.		
34. I assume education has no responsibility to meet children where they are and take them further.		
35. I assume there is a need for a national takeover of American public education because today's children are not faring well in today's societies.		
36. I assume that regardless of situation and circumstances like disabilities, student progress is possible and plausible.		
37. I assume standards and assessments are to be used as instruments to exclude the student from the educational organization.		
38. I assume standards are to be incorporated into assessment and instructional strategies to ensure an inclusive education organization.		
39. I assume there is no merit in thoughts of movement and growth or viability for an education system.		
40. I assume education systems need not be at the center of cooperative agreements for children to make progress.		
41. I assume inclusion survives when there is individual and collective learning through collaborative work environments.		

(Adapted form Astuto et al, 1994)

42. I assume that participation of stakeholders is supportive of inclusion due to the goal to meet needs of those participating.		
43. I assume administrators must hold the key to schooling instead of facilitating and engaging other key professionals.		
44. I assume flexibility lends itself to inclusive thinking and action that includes complexity in decision-making.		
45. I assume individuals are capable of being inclusive through self-motivation and the evolving of human nature.		
46. I assume schools can only effect marginal change to the lives of children with varying backgrounds.		
47. I assume additional resources invested in public education does increase student performance, which is the major goal.		
48. I assume schooling may promote the opinion that everyone may be as much alike as possible.		
49. I assume education systems take the lead in coordinating comprehensive services.		
50. I assume student performance can only be measured by standardized tests		
51. I assume instruction may be organized for efficiency and simplicity.		
52. I assume inclusion takes much time and causes disruptions to school routines.		

(Adapted form Astuto et al, 1994)

Appendix B. IIIQ Pre-Pilot and Pilot Testing Instrument

IIIQ

INCLUSION IMPLEMENTATION IMPORTANCE QUESTIONNAIRE

Questionnaire Items	Yes, very important	Not very important
1. It is important for me to know the percentage of students with disabilities in the special education classes, general education classes, and the vocational-technical education classes.		
2. It is important for me to seek to identify and get to know students with disabilities who might benefit from every aspect of the overall school program, special, general and/or vocational-technical education.		
3. It is important for me to know the percentage of students with disabilities participating in work-based and transition services and activities and seek to identify those students with disabilities who could benefit from such experiences.		
4. It is important for me to know the numbers of students with disabilities who are participating in nonacademic and extracurricular school activities with their non-disabled peers and seek to identify students who could participate.		
5. It is important for me to know the numbers of students with disabilities who are participating in guidance counseling and seek to identify students who could benefit.		
6. It is important for me to be trained and knowledgeable of the emergency procedures or actions that may be needed by a student with a disability, including medical, behavioral, or other emergency.		
7. It is important for me to believe that to the maximum extent possible, students with disabilities belong in classrooms and other school and community settings with students who are not disabled.		
8. It is important for me to believe that social inclusion is an essential element of successful full inclusion and that students must feel that they belong.		
9. It is important for me to believe that students with disabilities placed into general education classrooms may be as equally involved in cooperative learning and peer instruction as are all students.		
10. It is important for me to be committed to providing a caring high school community that fosters mutual respect and support among personnel, parents, and students.		
11. It is important for me to be committed to the belief that students without disabilities can benefit from friendships with students with disabilities.		
12. It is important for me to actively intervene in student behaviors that violate the belief that all students must demonstrate respect for each other and that all students belong.		

(Adapted from Kochhar, West, & Taymans, 2000)

13. It is important for me to create a school environment and culture of support and commitment to inclusion and the development of inclusive practices.		
14. It is important for me to celebrate the successes of inclusion by rewarding excellence in teaching of diverse classrooms, team teaching, special education consultation, and creative accommodations.		
15. It is important for me to celebrate the successes of inclusion by rewarding excellence in the achievement of students with disabilities in inclusive classrooms, classroom climates of acceptance, peer mentoring support, student participation in nonacademic and extracurricular activities.		
16. It is important for to celebrate the parental role in inclusion by rewarding excellence in parent involvement, parent-to-parent mentoring, and parent volunteering.		
17. It is important for me to have a school inclusion plan that addresses how I will intervene to fill absolute gaps in support services, as in cases in which needed support services in students' IEPs are not currently available at my high school.		...
18. It is important for me to have basic knowledge of support services, related services and community and neighborhood resource support agencies.		
19. It is important for me to inform parents of the reasons for their child's placement in general education classrooms, including information such placement decisions, explanation of student expectations and student performance.		
20. It is important for me to be knowledgeable of parents' due process rights and procedures available to parents for requesting due process hearings.		
21. It is important for me to establish a mediation process as a voluntary and informal method of dispute resolution involving parental disagreements with my school's IEP team.		
22. It is important for me to provide resources for ongoing in-service teacher training to prepare for team teaching, special education consultation, and general accommodation of students with disabilities in their classrooms.		
23. It is important for me to provide resources for technical assistance to teachers and related service personnel to support and guide their inclusion efforts.		
24. It is important for me to administer student and parent satisfaction questionnaires related to both placement and supports.		
25. It is important for me to review parent problem-solving and mediation strategies to determine whether changes are needed.		
26. It is important for me to "reinvest" any parental involvement evaluation results, or utilize the results for improvement of inclusive practices and to further dialogue about such improvement and future needs.		

(Adapted from Kochhar, West, & Taymans, 2000)

Appendix C: Summary Descriptions of Educational Assumptions Per Domain

#	*Assumption Name**	*Domain Code**	*Description of Educational Assumption** *bold assumptions supports inclusion	*Related to Inclusion**
1a	Meritocracy	POL	Assumes education has no responsibility to meet children where they are and take them further.	Bar
lb	Universality	POL	Assumes all children may have access to all benefits available in society.	Fac
2a	Instrumentality	POL	Assumes an education system exists only for itself, contributing to society, and not for children.	Bar
2b	Entitlement	POL	Assumes an education system is valued on what benefits from society it obtains, anchors and entitles for children.	Fac
3a	Individual Responsibility	POL	Assumes children are responsible for their own success and no responsibility may be placed on the institution of schooling.	Bar
3b	Institutional Responsibility	POL	Assumes the school must be responsible and may adjust schooling to the children regardless of ability levels.	Fac
4a	Competition/ Standards	POL	Assumes special education children in inclusive education environments would pull down high standards/assessments.	Bar
4b	Cooperation/ Support	POL	Assumes inclusive learning environment is built on trust, confidence,	Fac

			support, challenge among all children and teachers.	
5a	Stable Investments	POL	Assumes putting additional resources in public education will not increase system performance, which is the major goal.	Bar
5b	Increased Investments	POL	Assumes additional resources invested in public education does increase student performance, which is the major goal.	Fac
6a	Bankruptcy	POL	Assumes a need for a national takeover of American public education or the public school systems because today's children are not faring well in today's society.	Bar
6b	Viability	POL	Assumes a broad view of today's children being smarter and faring better in today's society than children did in past societies.	Fac
7a	Stability	SOC	Assumes there is no merit in thoughts of movement and growth or viability for an education system.	Bar
7b	Transformation	SOC	Assumes that when schools are actively engaged in schooling for all children, there is considerable growth.	Fac
8a	Commonality	SOC	Assumes that schooling may promote the opinion that everyone may be as much alike as possible.	Bar

8b	Diversity	SOC	Assumes education must demonstrate understanding and appreciation of diverse cultural traditions in society.	Fac
9a	Determinism	SOC	Assumes schools can only effect marginal change to the lives of children with varying backgrounds	Bar
9b	Interruptability	SOC	Assumes that taking bold steps in education will stop predetermined fates for children, especially those with disabilities.	Fac
10a	Family Deficit	SOC	Assumes poverty, minority status and dysfunctional families impede all student progress.	Bar
10b	Family Support	SOC	Assumes that regardless of situation and circumstances like disabilities, student progress is possible and plausible.	Fac
1la	Segmented Child &Family Support	SOC	Assumes education systems need not be at the center of cooperative agreements for the children to progress.	Bar
11b	Comprehensive Child & Family	SOC	Assumes education systems must take the lead in coordinating comprehensive services.	Fac
12a	Bureaucracy	STR	Assumes that bureaucracy or a rigid structure of schooling would impede the survival of inclusive educational practices.	Bar

12b	Democracy	STR	Assumes shared activities rather than dictated mandates would ensure the survival inclusive educational practices.	Fac
13a	Control	STR	Assumes the organizational, institutional control would constrain and impede the positive growth of inclusion.	Bar
13b	Empowerment	STR	Assumes that empowering schooling fosters inclusive decisions affecting combining general and special education	Fac
14a	High Standards	STR	Assumes standards and assessments are to be used as instruments to exclude the student from the educational organization.	Bar
14b	Improved Processes	STR	Assumes standards are incorporated into assessment and instruction to ensure an inclusive education organization for students.	Fac
15a	External Motivation	IND	Assumes individuals will only become inclusive if the institution forces them through external incentives.	Bar
15b	Internal Motivation	IND	Assumes individuals are capable of being inclusive through self-motivation and the evolving of human nature.	Fac
16a	Competition	IND	Assumes competition has a strong tendency to shut out children with disabilities.	Bar

16b	Cooperation	IND	Assumes cooperation has a strong tendency to support and include children with disabilities.	Fac
17a	Technicians	IND	Assumes more is needed than simply technical skill to support inclusive educational practices and settings.	Bar
17b	Professionals	IND	Assumes high levels of professional expertise would never leave any group of children from inclusion.	Fac
18a	Evaluation	IND	Assumes competitive work environments are detrimental to persons and children with special needs through elimination.	Bar
18b	Collaborative Learning	IND	Assumes that inclusion survives when there is individual and collective learning through collaborative work environments.	Fac
19a	Means of Production	IND	Assumes defining people as means of production falls short of true value of all people included in the organization.	Bar
19b	Initiators of Action	IND	Assumes people hold the keys to making inclusion best practices succeed through human nature as action initiators.	Fac
20a	Efficiency	PRO	Assumes instruction may be organized for purposes of efficiency and may not include anything complex.	Bar

20b	Flexibility	PRO	Assumes flexibility lends itself to inclusive thinking and action that includes complexity in decision-making.	Fac
21a	Commonality	PRO	Assumes curriculum may be developed around a central core of knowledge and common cultural heritage.	Bar
21b	Diversity	PRO	Assumes inclusion is supported by divergent thinking and the curriculum may address issues of multi-diversity.	Fac
22a	Routinization	PRO	Assumes inclusion may take too much time and cause disruption to the time allocations and daily school routines.	Bar
22b	Personali- zation	PRO	Assumes personalization of education lends itself to any school process including time and space constraints.	Fac
23a	Rational Planning	PRO	Assumes the human factor in management is not necessary to ensure a desired future state for the organization.	Bar
23b	Participatory Planning	PRO	Assumes participation of stakeholders is supportive of inclusion due to the goal to meet needs of those participating.	Fac
24a	Centralized Decisions	PRO	Assumes administrators must hold the key to schooling instead of facilitating and engaging other key professionals.	Barrier

24b	Decentralized Decisions	PRO	Assumes stakeholders are capable of working together to process ranges of options and strategies for all students.	Fac
25a	Standardized Assessment	PRO	Assumes there is only one dimension to students performance and is measured only by standardized test assessments.	Bar
25b	Collaborative Assessment	PRO	Assumes assessment may not be the only factor in determining school performance and assessments are multi-faceted.	Fac
26a	Measuring Standards	PRO	Assumes accommodations/adjustments are not be made to support inclusion because because assessments test ability and disability.	Bar
26b	Improving Processes	PRO	Assumes schooling and profession may be assessed rather than students having to measure up to unaccountable assessments.	Fac

(Adapted form Astuto et al, 1994)

Code:
POL = Political Domain
SOC = Social Domain
STR = Structural Domain
IND = Individual Domain
PRO = Procedural Domain

Fac = Facilitator or positive assumption to inclusion
Bar = Barrier (negative) assumption to inclusion

Appendix D: Randomly Selected Sequence of DEAS Items

Assumption #'s in random order-Dominant Educational Assumptions Survey

17a 17b	18a 23a
8b 3a	7b 2a
12b 2b	16a 25b
22b 15a	24b 1a
5a 4b	6a 10b
4b 1b	14a 14b
16b 19b	7a 11a
19a 26b	18b 23b
26a 21b	24a 20b
21a 13b	15b 9a
13a 12a	5b 8a
6b 10a	11b 25a
9b 3b	20a 22a

Appendix E: Cover Letter for Research Questionnaire Packet (DEAQ and IIIQ)

From the Desk of Zavolia Dortch Willis

Return Address: The George Washington University
Graduate School of Education and Human Development
2134 G Street, NW
Washington, DC 20052 Attention: Zavolia "Zee" Willis

Greetings High School Principal:

Thank you for taking the time to read this letter and for completing the two short questionnaires in the questionnaire packet. I am a doctoral student at The George Washington University (GW) Graduate School of Education and Human Development (GSEHD) in Educational Administration and Policy Studies with a focus on Special Education Leadership.

I have completed my coursework and am now in the research phase of my doctoral studies. I am earnestly seeking your help. I am making a very special request of you to assist me in completing my doctoral requirements. Your responses to the enclosed questionnaires will assist in adding to the body of research in the field of educational administration and leadership, especially in the area of special education leadership. *My goal is to help strengthen professional development in the area of leadership and management of special education services. I am approaching special education from an administrative perspective and I need your most candid and honest responses. Please respond from your individual perspective. In other words, make the assumptions that you actually make from your viewpoint and indicate what information you actually use to do your job as a high school principal. Be assured that my research is based on responses only and not on the individuals responding. Therefore, it is so extremely important that you give me your most candid responses to all of the questionnaire items. (End of new)* All responses will remain confidential. The anonymity of the questionnaires will be preserved through a random data recording process. Please *do not* place any identifying marks on the questionnaires.

The time it will take you to complete the materials in the questionnaire packet will vary but should be no more than 30 minutes. The 30 minutes includes sending the information back in the self-addressed, stamped envelope. Return both the DEAQ and the IIIQ in the one large white envelope. Try to complete this process as soon as you possibly can…let's say this evening, tomorrow, or within a week or sooner. A good mail-back date for me would be during the week of July 5-9, 2004 (do not hesitate to send the completed questionnaires back as soon as possible if this deadline week is not convenient for you). Thank you so much for helping with this phase of my research. Be sure to read the brief directions at the top of the questionnaires.

In sincere appreciation, I am enclosing a handsome GW-embossed portfolio and pen. I do realize that these may be small tokens of appreciation for your kindness and willingness to take time from your very busy schedule of finishing out end-of-year tasks and activities to complete the questionnaires, but I do sincerely thank you. Thank you again.

Please do have a well-deserved restful and peaceful summer!

Sincerely,

Zavolia Dortch Willis

Doctoral Student

Appendix F: Directions for DEAQ Pilot Test Instrument

DEAQ

DOMINANT EDUCATIONAL ASSUMPTIONS QUESTIONNAIRE

Directions for taking the DEAQ

Please read each educational assumption carefully and respond by placing an "x" under the box marked "Yes I assume this" or "No I do not assume this." A "yes" response means you make the particular assumption as you carry out your leadership roles and responsibilities as a high school principal. A "no" response means you do not make the particular assumption as you carry out your leadership roles and responsibilities. Please respond to each assumption with either "yes" or "no." Please do not leave any of the educational assumptions with a blank response. Do not assume that there are right or wrong responses. Indicate what you assume. Do not write your name or address anywhere on this questionnaire booklet. Do not make notes in the margins. Do not put any identifying marks anywhere in this questionnaire booklet.

PRACTICE SAMPLE: Driving Assumptions Responses

Directions: Mark one "x" per sentence based on own personal assumption.	*Yes*	*No*
1. I assume stop signs call for drivers to come to a full stop at all times.	____	____
2. I assume stop signs call for drivers to continue driving if nothing is coming.	____	____
3. I assume stop signs call for drivers to slow down and proceed with caution.	____	____
4. I assume stop signs are for the safety of pedestrians only.	____	____
5. I assume stop signs are for the safety of pedestrians and other drivers.	____	____
6. I assume stop signs are just part of a larger bureaucracy of control.	____	____

For Researcher Use Only:

1	11	21	31	41	51
2	12	22	32	42	52
3	13	23	33	43	
4	14	24	34	44	
5	15	25	35	45	
6	16	26	36	46	
7	17	27	37	47	
8	18	28	38	48	
9	19	29	39	49	
10	20	30	40	50	

Estimated Completion Time = 10 minutes

Appendix G: Directions for the IIIQ Pilot Test Instrument

IIIQ

INCLUSION IMPLEMENTATION IMPORTANCE QUESTIONNAIRE

Directions for taking the IIIQ

Please read each statement carefully and determine whether you consider the statement to be important or not to you as you carry out your leadership roles and responsibilities as a high school principal. Mark "x" under "Yes this is important to my high school leadership" or "No this is not important to my high school leadership." Please respond to each statement with either "Yes" or "No." Do not assume that there are right or wrong responses. Indicate what is important to you as you lead your high school. Do not write your name or address anywhere on this questionnaire booklet. Do not make notes in the margins. Do not put any identifying marks anywhere in this questionnaire booklet.

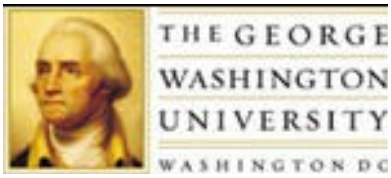
PRACTICE SAMPLE: Driving Importance as a Driver	Responses	
Directions: Mark one "x" per statement based on own leadership role.	Yes	No
1. It is important to come to a full stop at all times without exception.	____	____
2. It is important to proceed if nothing is coming and not tie up traffic.	____	____
3. It is important to slow down and proceed with caution if I am in a hurry .	____	____
4. It is important that I consider pedestrian safety only at the intersection.	____	____
5. It is important that I consider pedestrian and other drivers at stop signs.	____	____
6. It is important that stop signs are not part of bureaucratic controls.	____	____

For Researcher Use Only:

1	11	21
2	12	22
3	13	23
4	14	24
5	15	25
6	16	26
7	17	
8	18	
9	19	
10	20	

Estimated Completion Time = 10 minutes

Appendix H: Study Participant Information Sheet



Department of Teacher Preparation and Special Education

Information Sheet

IRB#U030322ER

Dear Study Participant:

You are invited to take part in a research study entitled, *"The Impact of Educational Assumptions Held by High School Principals on the Perceived Importance of Implementing Inclusion Best Practices."* Your decision to take part in the study is voluntary. Before you decide to be a part of the study, you need to understand the risks and benefits of this study. No identifiable information (no name, social security number, address, school address, telephone number, school telephone numbers, email or website addresses, or special identifying survey codes) will be requested of you. All measures of precaution have been taken to maintain your confidentiality and privacy. This information sheet provides information about the research study. A staff member of the research study will be available to answer your questions and provide further explanations if needed. Thank you in advance should you decide to participate in the study.

As a student in the Department of Educational Leadership of The George Washington University, I am conducting a research study to find out the impact of educational assumptions held by high school principals on the perceived importance of implementing inclusion best practices. The investigator (person in charge of this research study) is Zavolia Dortch Willis. The research will be conducted through survey packet mailers and non-identifiable return, stamped envelopes. There will be no need for you to report anywhere or call anyone in order to participate. You need only call if you have questions and then you will not be requested to identify yourself.

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life. Although we have made every effort to minimize this, you may find some questions we ask you on the survey may cause you to think deeply or ponder for a while. However, to the best of our knowledge, none of the questions should be upsetting or stressful. In addition, you will not get any personal benefit from taking part in this study. There are no costs associated with taking part in this study. You will not

receive compensation for participating in this study. The return envelopes are already stamped and self-addressed by the investigator. Even the return address on the return envelope is that of the investigator.

Your participation in this research study is voluntary. You may decide not to begin or to stop this study at any time. You will be told of any new information about the research study that may cause you to change your mind about

participation. However, such new information occurring is seen as unlikely during the process of the study. You will be mailed a survey packet set of two questionnaires for you to respond to using as little of your personal or professional time as possible. You will be asked to return your completed questionnaires without any identifiable information in the return, stamped, investigator-addressed envelope.

Your records will be confidential. You will not be identified (e.g. name, social security number, addresses, school addresses, telephone numbers, school telephone numbers, email or website addresses or any special identifying survey codes) in any reports or publications of this study. Except for mandatory reviews by official regulatory agencies, research study non-identifiable records will be kept confidential, not shared and private, not public. The records of the research study may be requested for review by law (i.e. court subpoena); but because the information returned to the investigator is non-identifiable, the records requested will not be traceable back to you. Once the study is complete all records will be destroyed.

If you have questions about the procedures of this research study, please contact Zavolia Dortch Willis by telephoning 202-973-0907 during the workday. Be sure to leave a detailed message and your call will be returned promptly. If you have questions about this information sheet or any other rights as an anonymous research subject, please contact Leodayan Bojanowski, Director, Office of Human Research, The George Washington University, on 202-994-0403.

Sincerely,

Zavolia Dortch Willis
Principal Investigator

Appendix I: Correlation Summary for Independent Descriptor Variables on the DEAQ and IIIQ in Research Question 5

Correlations

		AAPOP	FARM%	HISPOP	HSA-SE%	SEPOP%	TOTAL DEAQ SCORE	TOTAL IBP SCORE	TOTPOP	WHPOP
Pearson Correlation	AAPOP	1.000	.436**	.300**	-.200	-.084	.056	.146	.338**	-.493**
	FARM%	.436**	1.000	.105	-.530**	.258*	-.218	.025	-.446**	-.800**
	HISPOP	.300**	.105	1.000	.209	-.176	-.030	-.040	.529**	-.077
	HSA-SE%	-.200	-.530**	.209	1.000	-.311**	.178	-.034	.360**	.364**
	SEPOP%	-.084	.258*	-.176	-.311**	1.000	.064	-.012	-.247*	-.097
	TOTAL DEAQ SCORE	.056	-.218	-.030	.178	.064	1.000	.254*	.205	.188
	TOTAL IBP SCORE	.146	.025	-.040	-.034	-.012	.254*	1.000	.053	-.027
	TOTPOP	.338**	-.446**	.529**	.360**	-.247*	.205	.053	1.000	.566**
	WHPOP	-.493**	-.800**	-.077	.364**	-.097	.188	-.027	.566**	1.000
Sig. (2-tailed)	AAPOP	.	.000	.009	.094	.478	.634	.214	.003	.000
	FARM%	.000	.	.382	.000	.030	.065	.834	.000	.000
	HISPOP	.009	.382	.	.080	.133	.797	.732	.000	.516
	HSA-SE%	.094	.000	.080	.	.008	.137	.779	.002	.002
	SEPOP%	.478	.030	.133	.008	.	.586	.919	.034	.410
	TOTAL DEAQ SCORE	.634	.065	.797	.137	.586	.	.022	.080	.109
	TOTAL IBP SCORE	.214	.834	.732	.779	.919	.022	.	.654	.820
	TOTPOP	.003	.000	.000	.002	.034	.080	.654	.	.000
	WHPOP	.000	.000	.516	.002	.410	.109	.820	.000	.
N	AAPOP	74	71	74	71	74	74	74	74	74
	FARM%	71	72	71	69	71	72	72	71	71
	HISPOP	74	71	74	71	74	74	74	74	74
	HSA-SE%	71	69	71	71	71	71	71	71	71
	SEPOP%	74	71	74	71	74	74	74	74	74
	TOTAL DEAQ SCORE	74	72	74	71	74	81	81	74	74
	TOTAL IBP SCORE	74	72	74	71	74	81	81	74	74
	TOTPOP	74	71	74	71	74	74	74	74	74
	WHPOP	74	71	74	71	74	74	74	74	74

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

*. Correlation is significant at the 0.05 level (2-tailed).