

The Instructional Leadership Role of Pennsylvania Public School Principals and Their Effect on

Special Education Practices

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Abstract

Pennsylvania public-school principals are expected to be instructional leaders for all students within their district. When it comes to leadership for students with disabilities, this role can be problematic due to a lack of experience in the field of special education and pre-service special education training. Special education leadership should be a significant concern for school administrators as their roles have increased to ensuring successful outcomes for all students, the increased number of students placed in special education, the high cost associated with educating students in special education, and the due process ramifications if educational outcomes are not achieved. The research has demonstrated that overall, public-school principals receive little to no formal training in leading special education in pre-service or on-going professional development. The purpose of this research study was twofold. The research is helpful to colleges and universities when developing plans of study and programming for future public-school principal and leadership training degrees and certificates. This research also provides a platform where current Pennsylvania public-school principals can identify where their special education knowledge is lacking and how to become a better instructional leader for their own district's special education population. This study provided insight into understanding the factors that contribute to the lack of special education training in special education programs by higher education entities.

Keywords: Special Education, Leadership, Instructional Leadership, Principal

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You must do the thing you think you cannot do.
~Eleanor Roosevelt

CHAPTER I: Introduction

Rationale for the Study

For more than thirty-five years, special education has been a much-discussed topic in the education world. “Resulting from landmark social and legislative events, special education in the United States has undergone drastic changes over the past 30 years” (Lynch, 2012, p. 44). The Education for All Handicapped Children Act, Public Law (P.L.) 94-142, passed by congress in 1975 (IDEA, 2004), set the wheels in motion for decades-long debates and reviews of practices relating to special education. After multiple amendments, the Individuals with Disabilities Education Act (IDEA; P.L. 108-446), was established to protect the rights of students with disabilities and guarantee them the right to a free and appropriate public education (FAPE; Bateman & Bateman, 2000; IDEA, 2004 Wright & Wright, 2007; Yell, 2004). The impact of special education reform has been felt from administration all the way to the classroom. The connection of “special education administration with the educational leadership curriculum is at once a current problem and a perennial concern” (Crockett, 2002, p. 158) for public-school principals throughout the Commonwealth of Pennsylvania. Pennsylvania public-school principals have a critical role in the development of special education programming, curriculum planning, professional development for teachers under their supervision, and evaluating the fidelity of current programs in place (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012). Researchers must take an in-depth look at the role the Pennsylvania public-school principal has in special education programming to determine if Pennsylvania public-school principal degrees and certification training programs may be improved.

Several studies have been conducted across the country researching public-school principals and their knowledge of special education (Angelle & Bilton, 2009; Davis, 1980; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Garrison-Wade, Sobel, & Fulmer, 2001; Lasky & Karge, 2006; Lynch 2012; McHatton, Boyer, Shaunessy, & Terry, 2013; Wakeman, Browder, Flowers, and Ahlgrim-Delzell, 2006); however, limited research has been conducted to evaluate the knowledge and perceptions of the Pennsylvania public-school principal. More data in this critical area was needed to identify the knowledge, skill set, and beliefs held by Pennsylvania public-school principals. This information was vital, to certify Pennsylvania public-school principals are provided the appropriate pre-certification coursework and learning experiences. Research was needed to ensure the Pennsylvania public-school principal has knowledge of special education law, policies, and procedures to diminish litigation opportunities. Research was warranted from the perspective of the Pennsylvania public-school principal to confirm Pennsylvania public-school districts are providing high-quality education to students who receive special education supports and services allowing them to reach their full potential.

Purpose of the Study

The purpose of the current research study was twofold. It was the researcher's intention this research would be helpful to colleges and universities when developing plans of study and programming for future Pennsylvania public-school principal training degrees and certification programs. This research also provided a platform where current Pennsylvania public-school principals could identify where their special education knowledge was lacking and how to become a better instructional leader for their own district's special education population. This study addressed Pennsylvania public-school principals' lack of special education knowledge and

how it affects their views of instructional leadership as it pertains to special education programming and topics.

In this study, *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* (Section I: Demographics, Section II: Knowledge, and Section III: Frequencies) gathered quantitative data to test the theory Pennsylvania public-school principals are not given adequate special education training in their certification and/or degree programs to fully prepare them for the rigors surrounding special education implementation and regulations. The researcher wanted to determine if there was a lack of training and knowledge of special education topics, laws, and procedures which negatively influences Pennsylvania public-school principals' instructional leadership practices when it comes to implementing special education programs, inclusive practices, and supervising personnel. Concurrently, qualitative data was collected from Pennsylvania public-school principals' personal views using Section IV: Leadership Beliefs of the survey instrument (*The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey*). Personal opinions were obtained to explore personal views regarding special education held by public-school principals across the Commonwealth of Pennsylvania. The reasons for collecting both quantitative and qualitative data were to bring together the strengths of both forms of research and to compare and corroborate results. The researcher intended to determine if there were any patterns in the data based on the principals' years of service within their district that may have an impact on principal views and knowledge. The researcher also sought to determine whether a difference in level of knowledge and beliefs existed between elementary and secondary public-school principals.

Problem Statement

The research has demonstrated that overall, Pennsylvania public-school principals receive little to no formal training in leading special education in their degree and/or certification programs (Angelle & Bilton, 2009; Davis, 1980; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Garrison-Wade, Sobel, & Fulmer, 2001; Lasky & Karge, 2006; Lynch 2012; McHatton et al., 2013; Wakeman, et al., 2006). This inadequacy of leadership is due, mostly in part, to a lack of the Pennsylvania public-school principal's unfamiliarity with the unique aspects and key features of special education, a lack of technical competence for special education terminology, eligibility requirements, and student learning outcomes, and their knowledge regarding their specific leadership role as it pertains to special education laws, policies, and procedures (Angelle & Bilton, 2009; Davis, 1980; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Garrison-Wade, Sobel, & Fulmer, 2001; Lasky & Karge, 2006; Lynch 2012; McHatton et al., 2013; Wakeman, et al., 2006). These factors contribute to the diminished public-school principal leadership role in the day to day operations that surround special education programming. Special education leadership should be a significant concern for Pennsylvania public-school principals as their roles have increased to ensuring successful outcomes for all students, the increased number of students placed in special education programs, the high cost associated with educating students in special education, and the due process ramifications if educational outcomes are not achieved (Angelle & Bilton, 2009; Davis, 1980; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Garrison-Wade, Sobel, &

Fulmer, 2001; Lasky & Karge, 2006; Lynch 2012; McHatton et al., 2013; Wakeman, et al., 2006).

Significance of the Study

This study added to the understanding of the factors that contribute to the lack of special education training provided in degree and certification programs offered by higher education entities throughout Pennsylvania. Research design was both qualitative and quantitative in nature. Elliot, Fisher, and Rennie (1999) reported the “aim of qualitative research is to understand and represent the experiences and actions of people as they encounter, engage, and live through situations” (p. 216). This study, sought to understand the current knowledge base of practicing Pennsylvania public-school principals, evaluate their degree certification program, and explore personal beliefs by utilizing a mixed-methods research design (Graziano & Raulin, 2013; Tracy, 2013) to identify elements and describe relationships that contribute to, or act as barriers, to the lack of courses offered for Pennsylvania public-school principals during their certification programs. The quantitative component used data collected through a survey instrument to gather demographic background information, knowledge of special education topics of participants, frequencies of practices engaged in, and beliefs regarding special education. Through the survey, this study attempted to determine the level of special education knowledge among Pennsylvania public-school principals to determine if there was a relationship between demographic factors, years of experience as principal, and the current role (elementary versus secondary) the public-school principal is engaged in.

Possible benefits of this research included contributing to an improved understanding of statewide Pennsylvania public-school principal preparation programs. A better understanding of educational training programs across Pennsylvania could help higher education institutions to

identify, plan for, and provide support and services to increase special education programming as a graduation requirement to ensure newly certified Pennsylvania public-school principals are fully prepared to understand the dynamic workings of the special education population within the public-school setting. Additionally, this knowledge could help higher education institutions, which are delivering or considering developing public-school principal certification programs, to attract motivated, qualified, and talented future students. This research also helped current Pennsylvania public-school principals identify their areas of strength and knowledge when it comes to special education and compare it to other public-school principals across the state. Conversely, results of this research could help the Pennsylvania public-school principal identify areas of special education where knowledge and engagement practices are lacking. After gaps in knowledge and practices were identified, professional development programs may be organized and suggested to help current Pennsylvania public-school principals improve their practices. Additionally, information obtained from this study added to the knowledge base related to current research in this specific area.

Research Questions

Three major research questions guided this study:

1. What relationship, if any, exists between the amount of special education training received by Pennsylvania public-school principals in their certification program, instructional leadership skills, and the ability to effectively lead special education programs within their district? (*Addressed by survey sections I, II, and II.*)
2. To what extent are there differences in the knowledge, frequencies, and perceptions of special education policies and procedures between elementary and secondary school principals? (*Addressed by survey sections I, II, and III.*)

3. How does the relationship between the amounts of special education training received by Pennsylvania public-school principals in their certification program affect the instructional leadership in special education? (*Addressed by survey section IV.*)

Based on this research, the researcher attempted to complete the following: (a) the researcher made recommendations from common themes that emerged from the study, (b) identified where the gaps in knowledge appear to be and what can be done and (c) identify promising practices, if any that emerged from this review and evaluation.

Theoretical Framework/Constructs

Research Paradigms and Rationale

Tracy (2013) defined research paradigms as “preferred ways of understanding reality, building knowledge, and gathering information about the world” (p. 38). Research paradigms and philosophy are key parts of research methodology for any researcher; it is important to identify a research paradigm to collect data appropriately when conducting research. A research paradigm includes the research methods and research philosophies; it is based on ontology (the nature of reality), epistemology (the nature of knowledge), axiology (values), and methodology (Tracy, 2013). This combination of ontology, epistemology, axiology, and methodology helped this researcher develop the understanding and knowledge about the current topic of research and the hypothesized lack of special education coursework offered throughout Pennsylvania by colleges and universities offering public-school principal degrees and certification programs. Research paradigm can be considered a way of thinking about or conducting a research study. Paradigm is not strictly a methodology, but more of a philosophy that guides how the research will be conducted. Research paradigm can be sub-divided into the four distinct categories of positivist, interpretive, critical, and postmodern/post structural (Tracy, 2013).

For the current study, Pennsylvania public-school principals were asked to indicate their personal beliefs regarding special education and diversity issues of students within their district. This study attempted to create an understanding of the beliefs surrounding special education practices held by current Pennsylvania public-school principals. When it comes to methodology, Tracy (2013) reported “paradigms are toolboxes full of theories, practices, and ways of thinking and that all tools can be useful” (p. 38). The current research study employed aspects from both the positivist and critical paradigms. Aligning primarily with the positivist paradigm, the current study utilized measurement and research devices to ensure that biases did not interfere with research results (Tracy, 2013). This researcher was aware of backgrounds and biases (Tracy, 2013) which may have impacted study results; all efforts have been made to ensure personal biases were not a factor in study creation. The researcher attempted to be free from bias (as much as possible) and used anonymous online data collection, storage tools, scoring and transcription as the tools to “observe, measure, and predict empirical phenomena and build tangible, material knowledge” (Tracy, 2013, p. 39) and to ensure results remained anonymous.

Participants were asked to indicate their beliefs with respect to special education issues given their current role as the Pennsylvania public-school principal within their current school district. Participants were asked to report demographic background information, indicate yes/no knowledge questions, complete rating scales, and answer open-ended questions (Graziano & Raulin, 2013; Tracy, 2013) to gain insight on what professional skills Pennsylvania public-school principals felt they have and may need to effectively lead special education departments within the public-school setting. It was this researcher’s hope the knowledge gained from this study will be made available to practicing Pennsylvania public-school principals to help improve special education programs within their school districts. This research can be considered a

starting point for further research areas to improve special education practices within the Commonwealth of Pennsylvania.

As stated earlier, this research aligned with the positivist paradigm. Tracy (2013) reported the positivist paradigm, also known as the realist or functional paradigm, assumes a “single true reality” (p. 39). The concept of positivism is directly associated with the idea of objectivism. By using the positivist approach, this researcher used her viewpoint to evaluate the social world with the help of objectivity in place of subjectivity. According to this paradigm, the researcher was interested in collecting general information and data from a large social sample instead of focusing details of research. The researcher’s own beliefs had no value to influence the research study (Tracy, 2013); this author believed being an unbiased objective observer to be critical when conducting research. The positivist philosophical approach is mainly related with the observations and experiments to collect numeric data. The focus of research using a positivist paradigm is to build “knowledge through analysis of objective behavior (behavior that can be measured, counted, or coded)” (Tracy, 2013, p. 48). It was this researcher’s hope the current study can make suggestion to colleges and universities to improve their pre-certification programs to enable new leaders to have the proper skill set to lead special education programs and personnel.

It was this researcher’s intention both the positivist and critical paradigms were employed when it came to methodology for the current research study; this study employed a mixed methods design, using both qualitative and quantitative data collected concurrently in one phase. The collected data was analyzed continually throughout the research process, which is typical of qualitative research studies, the coding process was also used to identify themes which resonate with current special education familiarity and content knowledge of practicing professionals. By

using a mixed methods design, the researcher gained insight into the content knowledge of study participants while also gaining valuable insight from the opinions received. The positivist paradigm focused on the quantitative aspect of data while the critical paradigm reflected the qualitative methods. The reason for collecting both quantitative and qualitative data, and mixing methodology paradigms in the dissertation process, were to bring together the strengths of both forms of research to compare and corroborate results. “By moving among different paradigms, researchers may better appreciate a new topic, have a renewed sense of humility, dialogue with a variety of people, and continually remind themselves of multiple ways a problem or issue may be fruitfully addressed” (Tracy, 2013, p. 47).

Aligning with the positivist paradigm, this author agreed a good researcher should use measurement and research devices and ensure biases do not interfere with research results (Graziano & Raulin, 2013; Tracy, 2013). Again, this author believed research should be free from bias (as much as possible) and used data collection tools that would “observe, measure, and predict empirical phenomena and build tangible, material knowledge” (Tracy, 2013, p. 39); thus, the rationale for creating a survey that collected both qualitative and quantitative data for analysis.

In summary, while finding many areas under each paradigm important, the positivist paradigm was the one this researcher aligned with the most. Positivists “aim toward garnering representative samples that provide a clear answer to the question” (Tracy, 2013, p. 40). Positivists believe research biases are liabilities to studies and should be minimized (Tracy, 2013); “talk about self is viewed as unnecessary, indulgent, and a mark of low credibility” (Tracy, 2013, p. 40). Positivism emphasizes objectivity to research which gives importance to research methods focusing on quantitative analysis, surveys, experiments and the like.

Paradigm Shift to the Research

Pennsylvania public-school principals are expected to be instructional leaders for all students within their district. When it comes to leadership for students with disabilities, this role can be problematic due to some principals having a lack of experience in the field of special education and limited pre-certification training in special education related issues (Lasky & Karge, 2006; Lynch, 2012; McHatton, Boyer, Shaunessy, & Terry, 2010; Pazey & Cole, 2013). Since 1975, IDEA, (originally referred to as the Education of All Handicapped Children Act) has provided the framework that governs special education services to eligible students throughout the United States (Bateman & Bateman, 2000; IDEA, 2004 Wright & Wright, 2007; Yell, 2004). Several major features of the federal law have changed as IDEA has been reauthorized, but the framework remains the same. Under IDEA all students are entitled to a free and appropriate public education (FAPE) within the least restrictive environment (LRE) (Bateman & Bateman, 2000; IDEA, 2004 Wright & Wright, 2007; Yell, 2004). In other words, FAPE is an individualized educational program (hence the name IEP) that is designed to meet a special education student's unique learning needs and from which they receive educational benefit, to prepare students for further education, employment, and independent living.

Definitions of identification categories have changed over the years, and some states have adopted alternative frameworks, yet the notion of identifying and categorizing primary disabilities remains an element of the law (Bateman & Bateman, 2000; IDEA, 2004 Wright & Wright, 2007; Yell, 2004). Under IDEA in 2019, twelve disability categories exist; Pennsylvania public-school principals should have a working knowledge of the disability labels, entry criteria, and supports available to ensure their students are working to reach their full potential. A fundamental goal of education is to equip all students with the knowledge, skills, and tools necessary to think critically, solve problems, and succeed when they exit formalized

schooling. Pennsylvania public-school principals are tasked with ensuring all students are held to the same standard of learning and must be knowledgeable in special education to provide success (Bays & Crockett, 2007; Wakeman, Browder, Flowers, and Ahlgrim-Delzell, 2006). Special education leadership should be a significant concern for public-school principals across the Commonwealth of Pennsylvania as their roles have increased to certifying successful outcomes for all students, the increased number of students placed in special education, the high cost associated with educating students in special education, and the due process ramifications if educational outcomes are not achieved (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012).

Ethical dilemmas arise frequently in the field of special education; in the public-school system, special education students are considered the minority, they make up a small percentage of the collective (Billingsley, 2007; Bon & Bigbee, 2011). As a minority, their best interests and rights must be protected, and are under IDEA; this protection should be supported by each Pennsylvania public-school district's principal. Often when Pennsylvania public-school principals make decisions that affect students with disabilities, there is a distinction made between the best interests of the individual student versus the student population (Billingsley, 2007; Bon & Bigbee, 2011; Frick & Faircloth, 2007). Frick and Faircloth (2007) reported most principals in their daily duties "thought about the best interests of students in general, as a corporate body, and when specific student-related issues came to their attention they would alter their perspectives on students' best interest and focus on unique, individual student needs" (p. 30). IDEA and NCLB dictate what Pennsylvania public-school principals can and cannot do when it comes to special education students. Pennsylvania public-school principals

and policy makers must pay attention to how current and future school policies and initiatives may affect the public-school principals' abilities to respond to individual needs while creating a learning environment for all.

What will the current study do?

The research suggested that overall, Pennsylvania public-school principals receive little to no formal training in leading special education in the public-school setting (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012). As reported earlier, the researcher made recommendations from common themes that emerged following study completion, attempted to identify where the gaps in knowledge appeared to be and what could be done and identified promising practices, if any that emerged from this review and evaluation. The sample for the research consisted of diverse demographics including age, race, pre-service teaching role, district population, college/university where certification was received, and the amount of special education classes taken during certification. Data collection consisted of an anonymous web-based survey with online scoring to ensure timely data collection. Computerized random sampling was used to select Pennsylvania public-school principals to reduce the potential for human bias in the selection of participants to be included in the sample. Thus, the researcher assumed the sample provided a representative view of the target population (Pennsylvania public-school principals). Data was organized and stored electronically; data was be coded, disaggregated into manageable segments, and categorized into meaningful units using the software programs NVivo and the Statistical Package for the Social Sciences (SPSS). NVivo is software that supports qualitative and mixed methods research. (See chapter

three for detailed information regarding study methodology, chapter 4 for a display of results, and chapter 5 for a discussion of the findings.)

The survey itself focused on determining the amount of special education knowledge, background information, frequencies of practices engaged, and personal views about special education leadership the participants have. The survey sought to identify knowledge, personal beliefs, and frequencies of engagement practices in special education and how these factors may impact leadership roles in the daily supervision of special education teachers and programs, comfort levels, and how instructional leadership may be impacted. The sample consisted of diverse demographics including pre-service teaching role, gender, race, experience, certification, student population of each participant's school, and both rural/urban districts. The sample contained public-school principals from elementary and secondary public-schools across the Commonwealth of Pennsylvania.

The research design was comprised of two major sections. The first part synthesized the application of the data to analyze participants' responses to provide feedback from current practicing Pennsylvania public-school principals. The rationale and advantages of this have been previously explained. The second major segment targeted how personal views and knowledge of special education topics and initiatives impacts the instructional leadership skills of practicing Pennsylvania public-school principals. *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* was designed and developed by Slippery Rock University of Pennsylvania's doctoral student researcher, Mrs. Amanda J. Truitt-Smith. The survey drew on the existing leadership surveys and questions previously utilized by Frost and Kersten (2011) and Garrison-Wade, Sobel, and Fulmer (2001)

after consent was received to use the surveys (see Appendices C and E). The survey was designed to be administered in Web format.

Definitions

For the purposes of this study, the following definitions apply:

Administrator: Individual charged with seeing to the day to day operations of a school district; research participants will be defined as a practicing Pennsylvania public-school principal. Pennsylvania public-school principals will advocate for all students within their district, set goals improve education, and create lifelong learners.

Autonomy: Participants in a research study have the right to participate; participants can opt in or out of the study at any given time without risk. Participants will be given full disclosure prior to making any participation decision (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano and Raulin, 2013).

Belmont Report: Created by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research in 1978, The Belmont Report summarizes ethical principles and guidelines for research involving human subjects. The three principles identified are respect for persons (includes autonomy), beneficence, and justice (Office for Human Resource Protections, “The Belmont Report”, 1979)

Beneficence: Research study participants are treated in an ethical manner and protected from harm during the study. Participants are treated ethically no matter if they choose to opt out of the research study. Researchers continually strive to ensure participant well-being. Beneficence can also be noted to cover acts of kindness or charity that go beyond research obligation. (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano and Raulin, 2013).

College: Independent institution of higher learning offering instruction in a Pennsylvania public-school degree or certificate acknowledged by the Pennsylvania Department of Education. College is synonymous with university.

Curriculum: Plan of study for a degree or certificate program at the collegiate level; list of classes and requirements necessary for completion of coursework.

Data: Facts and information collected during the research study.

Diminished Autonomy: An individual with restricted or diminished capacity; persons not capable of deliberation regarding personal goals (Office for Human Resource Protections, “The Belmont Report,” 1979; Graziano and Raulin, 2013).

ESEA: Created in 1965 by President Johnson, ESEA is the country’s education law which provides equal opportunities for all students. ESEA was reauthorized in 2001 and is now known as No Child Left Behind (Wright & Wright, 2007).

Free and Appropriate Public Education (FAPE): Individualized educational program that is designed to meet the child's unique needs and from which the child receives educational benefit, and prepares them for further education, employment, and independent living (Wright & Wright, 2007).

Least Restrictive Environment (LRE): Under IDEA 2004 schools are “required to educate children with disabilities with children who are disabled, “to the maximum extent appropriate.” A child may only be removed from the regular education setting if the nature or severity of the disability is such that the child cannot be educated in regular classes, even with the use of supplementary aids and services” (Wright & Wright, 2007, p. 23)

Individualized Education Program (IEP): Legal document defining and describing a special education student’s course of study for one calendar year; important sections include

present levels of academic achievement, transition planning, goals/objectives, and program modifications and specially designed instruction.

Individuals with Disabilities Education Act (IDEA): Law ensuring services to children with disabilities throughout the nation age birth to twenty-one. IDEA mandates how “states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities. Infants and toddlers with disabilities (birth-2) and their families receive early intervention services under IDEA Part C. Children and youth (ages 3-21) receive special education and related services under IDEA Part B” (OSEP, 2006, para. 1).

Mixed Methods Research Design: A research method for conducting research that involves collecting, analyzing, and integrating quantitative and qualitative research data into one study.

No Child Left Behind (NCLB): NCLB was in effect from 2002–2015; NCLB was the reauthorization of the Elementary and Secondary Education Act (ESEA). NCLB was replaced by Every Student Succeeds Act in 2015. NCLB included provisions to help students in poverty, minorities, students in special education programs, and those with limited English proficiency (Wright & Wright, 2007).

NVivo: NVivo is software that supports qualitative and mixed methods research. NVivo is a platform to organize, analyze and find insights in unstructured, or qualitative data like in survey responses and web content (“What is NVivo, n.d.).

Parent: IDEA Regulations 34 C.F.R. §300.30 (a)) define parent as the “biological or adoptive parent, a guardian, a person acting as a parent of the child (e.g. grandparent, stepparent)

who lives with the child, a foster parent (unless prohibited by state law), or a surrogate parent who has been appointed following the procedures of the law” (Yell, 2004, p. 262).

Population: The group to which the research sample belong; population for this study will include all certified principals who are actively using their degree/certificates at the time of this study in the Commonwealth of Pennsylvania.

Principal: The individual with the most authority within the public-school building; responsible for supervision of personnel, curriculum decisions, and discipline of students.

Public-School: A school that receives funding from the public; this includes elementary, middle, and secondary schools.

Qualitative Research Design: Denzin and Lincoln (2005) describe qualitative research as involving “... an interpretive naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them.” (p. 3)

Quantitative Research Design: Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon. It may emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques.

Rehabilitation Act of 1973: “Civil rights statute designed to protect individuals with disabilities from discrimination; purposes are to maximize employment, economic self-sufficiency, independence, inclusion and integration into society” (Wright & Wright, 2007, p. 430).

Sample: Subgroup of the population; the research participants who are certified and working as school administrators from the target population.

School District: Entity charged with providing a free and appropriate public education within a set geographical area. There are over 500 school districts in Pennsylvania; see Appendix F for a full list.

Socioeconomic Status (SES): A total of person/families' combined economic and sociological work experience in relation to others; it is based on household income, earners' education, and occupation.

Special Education: "Specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability" (Wright & Wright, 2007, p. 21).

Statistical Package for the Social Sciences (SPSS). SPSS Statistics is a software package used for interactive, or batched, statistical analysis.

University: Independent institution of higher learning offering instruction in a Pennsylvania public-school degree or certificate acknowledged by the Pennsylvania Department of Education. University is synonymous with college.

Assumptions

This research study contained multiple assumptions. The researcher assumed Pennsylvania public-school principals participating in this study held the proper certification as they were identified via their public-school directory. Pennsylvania public-school principals were assumed to be highly qualified based on federal and state mandates to hold the principal/administrative certificate. It was assumed all participants had a basic understanding of the terminology used throughout the survey. The researcher assumed for this study that participants would answer honestly. Prior to participation, participants were provided full disclosure. Participants were informed their results would remain anonymous. Participants were informed they could withdraw from the study at any time with no ramifications. With this research study having a qualitative section, this researcher assumed the “research is context bound, but that patterns and theories can be explicated to develop a profound understanding of a situation or phenomenon” (Simon, 2016, p. 98); in the case of this study, the researcher attempted to develop patterns based on experiences reported.

Limitations of the Study

This study was utilized to identify elements and describe relationships among curriculums and programs that contribute to, or act as barriers, to the lack of courses and training offered in pre-certification Pennsylvania public-school principal degree and certification programs. Pennsylvania public-school principal satisfaction surrounding special education topics can be significantly influenced by the institutional setting in which the participant received training, or the pre-certification teaching or administrative role held by the individual prior to completing the survey. This study was designed to permit readers to judge the information and

make their own decisions about whether the themes that emerged from the research could be transferred to their own situations.

Organization of the Study

The current study was comprised of five chapters. Chapter one included a comprehensive introduction of the problem. Chapter one encompassed the rationale and purpose of the study as well as the problem statement. It identified the significance of the study for public-school principals across the Commonwealth of Pennsylvania. An introduction to the research questions was given as well as an overview of the theoretical frameworks and constructs that guided the research methods. Chapter one also contained the definitions of terms used throughout the study, assumptions made by the researcher and potential limitations that may be encountered.

Chapter two consisted of the review of literature regarding the history of special education and principles of IDEA that have impacted the Pennsylvania public-school principal's duties and the placements of special education students. There was information presented on the traditional role of the public-school principal within the public-school setting. The chapter also reviewed current Pennsylvania public-school principal preparation programs' curriculum and coursework. Lastly, chapter two provided an overview of the principal's knowledge and skills as well as the contribution inclusion have in the operation of special education programming.

Chapter three outlined precise information regarding the methodology used throughout the study. Chapter three thoroughly defined the study's participants, setting, population and sample selection criteria. There was information disclosing the ethical principles used throughout the study. The chapter provided a precise account of the research design which covered the survey instrumentation, including its reliability and validity; research questions and hypotheses;

variables; data collection and analysis procedures. Lastly, chapter three discussed any biases or limitations that may have been present or impacted study results.

Chapter four presented the specific results of the research study, descriptive statistics, and hypotheses testing, as well as themes that emerged from the qualitative data. Chapter five contained the summary of the research, which included the findings related to the literature and possible implications for future degrees and certification programs. Chapter five also provided a thorough review of the study's biases and limitations that were observed. Chapter five suggested recommendations for future studies and concluding remarks.

CHAPTER II: Literature Review

A Brief History of Special Education

Today thousands of students throughout the Commonwealth of Pennsylvania receive special education services and supports due to the passage of landmark legislation known as Public Law 94-142, The Education for All Handicapped Children Act of 1975 (Bateman & Bateman, 2001; Wright & Wright, 2007; Yell, 2004). Prior to the passage of PL 94-142, school-aged Pennsylvania students with disabilities were typically excluded from public-schools (Bateman & Bateman, 2001; Wright & Wright, 2007; Yell, 2004). In 1990, PL-142 was amended, and along with those changes came the first version of the Individuals with Disabilities Education Act (IDEA; Bateman & Bateman, 2001; Wright & Wright, 2007; Yell, 2004). Since its initial passage, IDEA has been amended and now includes transition services and safeguards for parents. IDEA was most recently reauthorized in 2004 with two primary purposes (McLeskey, Landers, Williamson, & Hoppey, 2012; Wright & Wright, 2007; Yell, 2004; Zirkel, 2016). The first purpose is to provide an education that meets a special education student's unique needs and prepares the student for further education, employment, and independent living (Bateman & Bateman, 2001; McLeskey et. al, 2012; Wright & Wright, 2007; Yell, 2004; Zirkel, 2016). IDEA's second purpose is to protect the rights of both special education students and their parents (Bateman & Bateman, 2001; McLeskey et. al, 2012; Wright & Wright, 2007; Yell, 2004; Zirkel, 2016).

IDEA is based on six major principles: zero reject, non-discriminatory identification and evaluation, FAPE, LRE, due process safeguards, and parental participation (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). Zero reject dictates that Pennsylvania public-schools must educate all students with disabilities regardless of

the nature or severity of the disability (Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). Pennsylvania public-school districts are required to provide educational programming to students aged 3-21 (Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). Under IDEA, Pennsylvania public-school districts must use unbiased evaluation methods to determine special education eligibility. Evaluations must not rely on one test measure to make the determination if a student is eligible for services; this includes testing a student in their native language (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). Principles three and four guarantee all public-school students throughout Pennsylvania have access to FAPE in the LRE (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; McLeskey et. al, 2012; Wright & Wright, 2007; Yell, 2004). FAPE and LRE must be provided to students at no cost to the parent (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). It is imperative Pennsylvania public-school principals demonstrate a thorough understanding of IEP creation and implementation; additionally, principals must be active participants in the identification process “to ensure not only that the district follows appropriate procedures, but that the student receives an appropriate education” (Bateman & Bateman, 2001, p. 12).

The LRE clause mandates special education is a continuum of services and students should only be removed from the general education classroom setting when supplementary aides and services cannot provide them a meaningful education (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004; Zirkel, 2012). The IEP must address and justify why a student is not in the general education classroom setting (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Katsiyannis, Losinski, & Prince, 2012; Wright & Wright, 2007; Yell, 2004; Zirkel, 2012). IDEA also safeguards the rights of students and their families.

Parental consent must be received for all evaluations and placement determinations (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Katsiyannis, Losinski, & Prince, 2012; Wright & Wright, 2007; Yell, 2004). Lastly, IDEA provides provisions for parent and student input when making decisions for students receiving special education services (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Katsiyannis, Losinski, & Prince, 2012; Wright & Wright, 2007; Yell, 2004). Pennsylvania public-school principals must have a working knowledge of the foundations of special education because knowledgeable regarding students within their school, so they can ensure resources are allocated appropriately (Bateman & Bateman, 2001).

As mentioned previously, special education students and their families have their rights to FAPE in the LRE guaranteed under the law thanks in part to the procedural safeguards of IDEA (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). Most IDEA litigation due process cases are due to violations of FAPE, tuition reimbursement, and compensatory education (Zirkel, 2012). Due process rights are protected via legislation to ensure in the event there is disagreement between the school district and the parents, either party can initiate a due process hearing (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). Special education litigation costs school districts billions of dollars and has an adverse effect on the relationships between the home and school (Mueller, 2009; Wright & Wright, 2007; Yell, 2004). Pennsylvania public-school principals “need to know the rights and obligations of the parents and the district, the process, how to prepare for a hearing, what is involved, the principal's role, and what happens when the hearing is over” (Bateman & Bateman, 2001, p. 103).

Due process hearing are “to resolve differences of opinion between parents and school officials regarding the education, placement, or services for the child with a disability” (Bateman

& Bateman, 2001, p. 16). The first landmark due process case to reach the Supreme Court after the establishment of PL 94-142 was brought via an appeal by a school district regarding the special education services of first grader, Amy Rowley. In the *Board of Education of Hendrick Hudson Central School District v. Rowley* (1982), the lower courts ruled the school district was required to pay for a sign language interpreter for Amy, a deaf student, so she could be included and participate in the curriculum to receive FAPE (Bateman & Bateman, 2001; Sage & Burrello, 1994; Wright & Wright, 2007; Yell, 2004). The “Supreme Court concluded that FAPE has two prongs, the first being procedural compliance, and the second being a relatively relaxed substantive standard” (Zirkel, 2016, p. 1); this became known as the Rowley Standard.

The Rowley standard is a two-prong test used by courts to determine whether public-school districts have provided FAPE as mandated under IDEA (Wright & Wright, 2007; Yell, 2004; Zirkel, 2016). The first prong of the Rowley standard is deciding if the school has complied with the procedures of the IDEA (Wright & Wright, 2007; Yell, 2004; Zirkel, 2016). The second part of the Rowley standard determines whether the IEP, which is to be based on the principles of IDEA, are detailed so the student receives educational benefit(s) from their placement and goals (Wright & Wright, 2007; Yell, 2004; Zirkel, 2016). The decision from the Rowley case is still relevant and important when a court is deciding on whether a student is receiving FAPE (Wright & Wright, 2007; Yell, 2004; Zirkel, 2016).

FAPE has been the reason many cases have made it to the Supreme Court, as in the cases of *Irving Independent School District v. Tatro*, 468 U.S. 883 (1984), *School Committee of Town of Burlington, Mass. v. Department of Educ. of Mass.*, 471 U.S. 359 (1985), *Honig v. Doe*, 484 U.S. 305 (1988), and *Florence County School Dist. Four v. Carter*, 510 U.S. 7 (1993) that each address FAPE violations to some degree (Heward, 2000; Wright & Wright, 2007; Yell, 2004;

Zirkel, 2016). In the case *Cedar Rapids Community School Dist. v. Garret F.*, 526 U.S. 66 (1999) the Court stated IDEA does not use cost factors to define related services nor does it exclude medical (nursing) services; therefore school districts must provide funds for related service providers and needs so that students with disabilities, like Garrett F., are able to have access to FAPE in the LRE. The *Cedar Rapids Community School Dist. v. Garret F.* reiterated the importance of the words “meaningful access” which was originally mentioned in the *Rowley* decision (Heward, 2000). Zirkel (2013) reviewed 224 court decisions to look for trends in special education cases. Out of the cases reviewed, states with the highest FAPE violations were: “(1) New York—thirty-five (16%); (2) California—thirty-two (14%); (3) Hawaii—twenty-two (10%); (4) Pennsylvania—nineteen (8%); (5) New Jersey—thirteen (6%); (6) Texas—eleven (5%); and (7) Alaska—ten (4%),⁵⁶” (Zirkel, 2013, p. 226). It is imperative school districts in Pennsylvania strive to follow the regulations under IDEA to reduce litigation statistics.

The Supreme Court’s latest decision regarding FAPE was in *Endrew F. v. Douglas County School District RE-1* which “addressed the substantive standard for the central obligation under the Individuals with Disabilities Education Act (IDEA) of a “free appropriate public education” (FAPE). The Court had not revisited this issue for 35 years, having originally addressed it in its landmark IDEA decision in Board of Education of *Hendrick Hudson Central School District v. Rowley*” (Zirkel, 2017, p. 1). In a unanimous decision in March 2017 the U.S. Supreme Court ruled in favor of a higher standard for students with disabilities. Endrew F.’s case revolved around one main theme: “Must schools provide a meaningful education in which children show significant progress and are given substantially equal opportunities as typical children, or can they provide an education that results in just some improvement” (McKenna, 2017, para. 4). The *Endrew F. v. Douglas County School District RE-1* highlighted the fact the IEP process is team

based, it should include opinions of professionals *and* parents; the team as a collective should work together for the betterment of the student.

Parental Involvement

Parents are critical when it comes to working with students. Pennsylvania public-school districts require parent support and follow-through; the *Endrew Decision* will help parents become more valued members of the IEP team in the eyes of the districts. IDEA Regulations 34 C.F.R. §300.30 (a) define a parent as the “biological or adoptive parent, a guardian, a person acting as a parent of the child (e.g. grandparent, stepparent) who lives with the child, a foster parent (unless prohibited by state law), or a surrogate parent who has been appointed following the procedures of the law” (Yell, 2004, p. 262). The rights of parents under IDEA can be broken down into five categories (Bateman & Bateman, 2001; Burke, 2013; Wright & Wright, 2007; Yell, 2004). Parents have the right to participate in any meeting that relates to the identification, evaluation, and educational placement of their child (Burke, 2013; Wright & Wright, 2007; Yell, 2004). They have a right to participate in any meeting or conversation regarding FAPE (Burke, 2013, Wright & Wright, 2007; Yell, 2004). Parents are entitled to be part of the team that decides whether their child has a disability or meets the criteria for special education and related services under the school code (Burke, 2013, Wright & Wright, 2007; Yell, 2004). They have the right to be key members of the team that develops the IEP for their child (Burke, 2013, Wright & Wright, 2007; Yell, 2004). They are also permitted to be part of the decision-making process when it comes to placement decisions for their child (Burke, 2013, U.S. Department of Education, 2018; Wright & Wright, 2007; Yell, 2004).

Parents rights were reaffirmed in the *Winkelman v. Parma City School Dist.*, 550 U.S. 516 (2007). The Court held parents are guaranteed protections and rights under IDEA; and they are,

as a result, entitled to prosecute IDEA claims on their own behalf (Summers, Hoffman, Marquis, & Turnbull, Poston, & Nelson, 2005; Wright & Wright, 2007; Yell, 2004). Pennsylvania public-school principals must ensure the IEP team works together using data-based decision making to reduce the need for litigation. It is essential the Pennsylvania public-school principal understands parents are critical team members (Summers et al., 2005); parents “have essential information about their children with disabilities that is not available from any other source” (Bateman & Bateman, 2001, p. 14). There is research and evidence to support the positive effects of parental involvement when parents actively support and encourage their student’s education (Summers et al., 2005). When parents were actively involved, students achieve more regardless of ethnic background or socioeconomic status (Burke, 2017; Henderson & Berla, 1994; Olson & Fuller, 2010; Summers et al., 2005). The more parents are involved, the higher the grades, test scores, homework completion, and school attendance was. Students were also considered to have higher self-esteem when parents were actively involved in education as well (Burke, 2017; Henderson & Berla, 1994; Olson & Fuller, 2010; Summers et al., 2005). Throughout the school year, public-school students spend an average of 6.64 hours in the school setting per day, which is 33.2 hours per week (U.S. Department of Education, 2008). When so many hours are designated to learning, it should be part of the Pennsylvania public-school principal’s responsibility to foster parental involvement; “without parental involvement, students with disabilities are vulnerable to receive inadequate and inappropriate services” (Burke, 2013, p. 225).

One way to ensure parents are involved and in the know is with the use of parent advocates (Burke, 2017; Krumins, 2009; Summers et al., 2005). Too often parents bring advocates to special education meetings when they feel like they are being excluded as equal

participants in the decision-making process; Krumins (2009) urged all parents to bring advocates to special education meetings in an attempt to alleviate stress, sort through the educational jargon, and provide a unbiased perspective when it comes to educational planning. Advocates are a way for parents to be proactive members of the IEP team; using an advocate can help foster the relationship between home and school and will make it possible to “work as a team to make the most of a child’s education” (Krumins, 2009, para. 17).

When selecting an advocate to represent a parent and their child, parents should seek qualified candidates who are willing to get to know the student and be objective and unbiased towards the district (Burke, 2017; Krumins, 2009). Parental advocates have multiple roles to fill when dealing with the public-school system (Burke, 2017; Krumins, 2009). Advocates can help parents understand documents and paperwork related to the special education process (Burke, 2017; Krumins, 2009). The advocate’s role is to also help parents clarify issues, offer solutions when disagreements arise, and help parents find supports when (Burke, 2017; Krumins, 2009). Parents are urged to use advocates to have someone able to decipher written reports from educational professionals and speak on their behalf when they are not comfortable approaching the school system (Burke, 2017; Krumins, 2009). A parental advocate is “worth their weight in gold when they can objectively look at a situation without an emotional charge and create solutions that work for the child” (Krumins, 2009, para. 10).

The goal of the IEP process is to create a partnership; a team where everyone’s opinions and input is valued (Bateman & Bateman, 2001; Burke, 2017; Krumins, 2009; Wright & Wright, 2007; Yell, 2004). All members of the IEP team should be valued; Pennsylvania public-schools should strive to include parents in the process as much as possible to avoid due process litigation (Bateman & Bateman, 2001; Burke, 2017; Krumins, 2009; Wright & Wright, 2007; Yell, 2004).

Special education should be viewed as a positive experience; its sole premise being that it was created for students to offer more supports and additional instruction in areas of weakness (Bateman & Bateman, 2001; Burke, 2017; Krumins, 2009; Wright & Wright, 2007; Yell, 2004). Pennsylvania public-school principals working with parents and the special education process must be aware of the past stigma attached to special education and the exclusion of parents from the process (Bateman & Bateman, 2001; Burke, 2017; Krumins, 2009; Wright & Wright, 2007; Yell, 2004). Changing the stigma involves changing perspectives; understanding the history of special education law and the many court decisions that have been resolved will help districts bridge the gaps between theory and practice. It is imperative Pennsylvania public-school principals understand where special education has been to avoid making the same mistakes. To sum it up, “special education is a necessary part of the educational system. When it is done properly, with good educators, and active parents, it can have a positive effect on the families and students. It can serve as a life preserver in a sea of confusion, despair and the unknown” (Pehrson, 2011, para. 14). It is the role of the Pennsylvania public-school principal to facilitate special education programming within their buildings.

Traditional Role of Principal in Schools

Pennsylvania principals in public education are responsible for not only school leadership, they are also accountable for referral and service delivery of special education programs within their school system (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004). Lynch (2012) noted in the traditional role, “the principal assumed responsibility for general education students and the director of special education assumed responsibility for students with disabilities” (p. 42). In Pennsylvania’s public-schools, principals are required to not only be instructional leaders, they

are also responsible for special education programming, personnel issues, public relations, budgeting, curriculum, and ensuring students are making adequate yearly progress (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006). Every Pennsylvania public-school principal must have the proper knowledge, skill set, and frame of mind to be an effective school leader (Tubbs, Heard, & Epps, 2011). On average 79% of a principal's time was spent on regular education and 21% was spent on special education issues (Cruzeiro & Morgan, 2006). Lasky and Karge (2006) surveyed 205 public-school principals; their results revealed 75% of principals felt the amount of time spent on special education had increased.

Pennsylvania public-school principals have multiple duties and may choose to delegate responsibilities, yet they are still responsible for overall school management and program implementation (Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006). "Resulting from landmark social and legislative events, special education in the United States has undergone drastic changes over the past 30 years" (Lynch, 2012, p. 44). Principals are often involved in compliance and legal issues related to special education. These findings were consistent with research reported in the literature (Bays & Crockett, 2007; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011). According to the data, interactions that happened between principals and special education teachers often revolved around paperwork and compliance issues; these interactions "may be necessary, but they are not sufficient to ensure positive learning outcomes for special education" (Bays & Crockett, 2007, p. 157). Pennsylvania public-school principals should seek an instructional vision that identifies increased outcomes and performance for special education teachers and staff; these outcomes could be offered

via professional development to enhance collaboration, provide ongoing support and encouragement to staff, and continually evaluating instruction of their teachers (Bays & Crockett, 2007; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011).

To face the many educational tasks and demands of the future, Pennsylvania public-school principals must cultivate “skills and strategies that are critical for providing a positive learning environment for a highly diverse student population” (Miller & Martin, 2015, p. 129). Competent Pennsylvania public-school principals should allocate time for “structuring the story of special education, ensuring that school practices on behalf of students with disabilities are grounded in the field’s conceptual core” (Crockett, 2002, p. 160). Crum, Sherman and Myran (2010) evaluated theories and actions taken by school principals which enabled them to be successful leaders within their educational setting. Using Leithwood’s (2006) core practice of successful school leaders, five central themes emerged from the data; with the core theme being leadership (Crum, Sherman, & Myran, 2010). Theme one, leadership with data; data drives decisions principals make daily. Theme two, honesty and positive relationships with staff is paramount (Crum, Sherman, & Myran, 2010). Three, principals must foster ownership and collaboration with school stakeholders (Crum, Sherman, & Myran, 2010). Four, principals must recognize and develop leadership skills of their current staff (Crockett, 2002; Crum, Sherman, & Myran, 2010). Finally, principals must be aware of current instruction and be involved in planning (Crockett, 2002; Crum, Sherman, & Myran, 2010). The findings suggested school accountability and conversations must be the front runner of all activities involving leadership (Crum, Sherman, & Myran, 2010). Due the importance of data-based decision making, it is critical leaders obtain multiple data sets from staff to make decisions.

The Pennsylvania public-school principal has multiple duties; DiPaola, Tschannen-Moran, and Walther-Thomas (2004) identified two critical areas that must receive leadership attention and support. To be an effective leader, Pennsylvania public-school principals should focus on improving professional skills and knowledge of their faculty and staff they lead and support (Crockett, 2002; DiPaola et al., 2004). PDE and Pennsylvania public-school principals need to look at developing more special education related areas as part of the principal induction program. Principals are to be the instructional leader for their building. Currently, principals must complete an induction program, yet not one of the eleven units outlined by PDE is specific to special education. (Principal Induction Program, PDE <http://www.education.pa.gov/>) School Boards should also consider, when looking at a candidate's background knowledge/resume, how much the potential elementary school leader understands special education. Principals also need to take the necessary time to provide supports and necessary professional development to beginning teachers to promote success and retention; teacher supports are a "critical leadership activity" that requires "systematic efforts" (Billingsley, 2004, p. 371). Public-school principals must strive to make connections within the community (Crockett, 2002; DiPaola et al., 2004,). To be considered an effective school leader for special education, principals must "(a) promote an inclusive school culture; (b) provide instructional leadership; (c) model collaborative leadership; (d) manage and administer organizational processes; and (e) build and maintain positive relations with teachers, families, and the community" (DiPaola et al., 2004, p. 3).

Principal Preparation Programs

Pennsylvania public-school principal education programs are not adequately preparing their participants to be instructional leaders for special education (Lasky & Karge, 2006; Lynch, 2012; McHatton, Boyer, Shaunessy, & Terry, 2010; Pazey & Cole, 2013). Today's Pennsylvania

public-school principals “must not only manage school finances, keep buses running on time, and make hiring decisions, but they must also be instructional leaders, data analysts, community relations officers, and change agents” (ISLCC, 2008, p. 3). In the Commonwealth of Pennsylvania, principal certification programs are approved through the Pennsylvania Department of Education (PDE). In 2018, Pennsylvania identified forty-nine PDE approved programs for principal degrees and certification (See Appendix A; PDE, 2018). Out of the 49 identified PA principal certification programs identified on the PDE website, the researcher was able to review curriculum and coursework for 47 programs (96%). Carlow University and Carnegie-Mellon were listed as a PDE approved program; however, neither university had programs listed on their official website for principal certification. Programs reviewed ranged from a post-master’s degree 12-21 credit certification programs and a master’s degree program (credit range 21-36; see Appendix O for curriculum data).

To be leaders of special education programs, Pennsylvania public-school principals require training on special education law, procedure, programs, and students with disabilities (Garrison-Wade et al., 2007; Wakeman, Browder, Flowers, & Ahlgrim-Delzell, 2006). Wakeman, Browder, Flowers, and Ahlgrim-Delzell (2006) conducted a survey which revealed 92% of participating principals had no formal training in special education or a special education teaching certification or license. Classes taken on special education at the undergraduate level were reported as follows: zero classes (57.1%), one class (16.9%); graduate level zero (66.4%) and one (12.5%). Classes taken during administrator training were reported as zero (45.9%) and one (27.8%) (Wakeman et al, 2006). Lasky and Karge (2006) reported “there is currently very little research examining the formal special education training or basic knowledge of special education laws and practices of school principals” (p. 21). Angelle and Bilton (2009),

Davis (1980), Lasky and Karge (2006), Lynch (2012), McHatton, Boyer, Shaunessy, and Terry (2013), and Pazey and Cole (2013) have all noted the discrepancy between principal preparation programs and subsequent practice. A survey conducted by Davis (1980) discovered most principals (51.9%) had never taken a special education class, and only 32.8% had any prior exposure of special education students in their certification programs and training. A similar survey completed 26 years later by Lasky and Karge (2006) revealed 36% of public-school principals had no experience with special education in their training programs. Another recent study of graduates from principal certification programs discovered that 40% of participants reported they lacked special education law knowledge, 28% doubted their abilities to mentor and support special education staff, and 28% were unsure of their abilities to manage special education programs (Garrison-Wade, Sobel, & Fulmer, 2007). In Pennsylvania, out of the 47 principal preparation programs reviewed, only 14 (29.79%) programs offered one special education class as part of their required curriculum; one program required two special education classes (00.02%; see Appendix O for the complete review).

Special education and knowledge of special education law has been targeted as a critical skill for public-school leaders; however, “within the context of social justice and school leadership, it is all but ignored” (Pazey & Cole, 2013, p. 249). A review of empirical literature indicated the research regarding special education law within education leadership was lacking and there is a need for increased study to be completed (Angelle & Bilton, Davis, 1980; Lasky & Karge, 2006; Lynch, 2012; McHatton et al., 2013; Pazey & Cole, 2013). Key findings from the literature indicate Pennsylvania public-school principals should receive training in twelve fundamental areas (Pazey & Cole, 2013). Those areas include communication and relationships (DiPaola & Tschannen-Moran, 2003; Taylor-Backor & Gordon, 2015; Pazey &

Cole, 2003), leadership and vision (Darling-Hammond et al., 2007; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Pazey & Cole, 2013), budget (Pazey & Cole, 2003), special education (Angelle & Bilton, 2009; Bateman & Bateman, 2001; McHatton et al, 2010; Pazey & Cole, 2013), curriculum and instruction, personnel, data analysis, collaboration (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Pazey & Cole, 2013), special education programs (Lasky & Karge, 2006; Lynch, 2012; Pazey & Cole, 2013), professional development (Darling-Hammond et al., 2007; Taylor-Backor & Gordon, 2015), the organization (Darling-Hammond et al., 2007; Pazey & Cole, 2013), and advocacy (Darling-Hammond et al., 2007; Pazey & Cole, 2013).

Even though special education was listed as one of the identified competencies for Pennsylvania public-school principals, it continues to be ignored in certification programs (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Lasky & Karge, 2006; Lynch, 2012; Pazey & Cole, 2013). Lynch (2012) reported “a review of state certification requirements indicated that only eight states required special education training for pre-service principals” (p. 45). To be an effective leader, it is essential school administrators be informed on evidence-based practices with special and regular education (Angelle & Bilton, 2009; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; McHatton et al, 2010; Pazey & Cole, 2013). To do so, Pennsylvania public-school principals should receive training in special education areas; school leaders must have a solid grasp of IDEA, procedural safeguard and due process, zero reject, and discipline (Angelle & Bilton, 2009; Bateman & Bateman, 2001; McHatton et al, 2010; Pazey & Cole, 2013). Researchers have reported special education law and procedures should become an integral part of certification programs (Angelle & Bilton, 2009; Bateman & Bateman, 2001; Lasky & Karge, 2006; McHatton et al, 2010; Pazey & Cole, 2013).

Pennsylvania public-school principal preparation programs must be “designed to meet the challenges of school improvement, not just graduate certified managers who lack the depth to lead effective school change” (Reames, 2010, p. 440). A review of the literature confirms school leaders acknowledge they have a limited understanding of all areas pertaining to special education (Angelle & Bilton, 2009; Davis, 1980; McHatton et al, 2010; Pazey & Cole, 2013). Special education needs to be considered and discussed as much as gender, class, and race have all been discussed in the past; it is time to make special education part of the discussion, not the afterthought (Frost & Kersten, 2011). Riehl (2000) conducted a literature review of the role of the school administrator and special education. The argument for the review was that American schools were providing services to a more diverse population than ever before with special education numbers on the rise (Praisner, 2003; Riehl, 2000). Research on instructional school leadership suggested principals have a critical role in the development of teaching and learning within their respective districts (Darling-Hammond et al., 2007; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Pazey & Cole, 2013; Riehl, 2000).

The research has suggested Pennsylvania public-school principals take steps to develop relationships between families, the community, and the school (DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Riehl, 2000). Pennsylvania public-school principals should continually be evaluating and critiquing their own buildings and practices to ensure students are receiving the best possible instruction (Riehl, 2000). After completing an in-depth literature review, Riehl (2000) made four suggestions. Suggestion one, based on the assumption administration is a form of practice it should be able to be supported by empirical and normative research (Riehl, 2000). Two, administrative practices were said to be both moral and “epistemological” and those values should be taught in administrative training programs (Riehl, 2000). Administrative practice was

said to be linked to identity, if this is the case, then it does matter whom is in the administrative role within districts (Riehl, 2000). Lastly, common language and discourse should be created to evaluate current programs and research (Pazey & Cole, 2012; Riehl, 2000).

A recent study was conducted a study to determine what practicing principals felt should be included in certification programs (Christensen, Siegel, Williamson, & Hunter, 2013). Reported areas of highest importance (75% or more of participants) were how to modify curriculum, disciplining students under IDEA, state mandated testing accommodations, mentoring new special education teachers, inclusion, special education law, IEPs, and classroom discipline (Christensen et al., 2013). Overall, the study supported findings from other studies that principals do not feel they adequately prepared nor do they fully understand special education policies and procedures (Angelle & Bilton, 2009; Christensen et al., 2013; McHatton et al, 2010).

Principals and Instructional Leadership for Special Education

Pennsylvania public-school principals are not only leaders of the school; they are instructional leaders for all (Darling-Hammond et al., 2007). Pennsylvania public-school principals are the most influential individual in a district, in their role, they ensure high-quality education and teaching happens in consistently throughout the school building they serve (Darling-Hammond et al., 2007); this includes special education. To be considered an instructional leader, “a school administrator must be knowledgeable about evidence-based practices within the field of both general and special education” (Pazey & Cole, 2012, p. 258). As mandated by law, public schools have the responsibility to identify students with learning and behavior deficits to enable them to receive supports needed to be academically successful (Bateman & Bateman, 2001; Hallahan, Kauffman, & Pullen, 2015; Wright & Wright,

2007; Yell, 2004). The 2004 reauthorization of IDEA reaffirmed the notion special education students had the right to be educated in the general education classroom setting with their non-exceptional peers (Bateman & Bateman, 2001; Hallahan, Kauffman, & Pullen, 2015; Wright & Wright, 2007; Yell, 2004).

Pennsylvania public-school principals have the power to promote inclusion and make changes to positively affect special education students (Praisner, 2003; Riehl, 2000). Riehl (2000) indicated all students should be treated as individuals, the cultural background of all students should be learned and used when teaching, and interethnic conflict should be treated as teachable moments when it happened. Public school principals “must be the change agents” (DiPaola et. al, 2004, p. 30; Reames, 2010); principals should create a caring, nurturing environment within their district, maintain high expectations for all students, and make academics the focus of the school (Riehl, 2000). Administrators should restructure schools to ensure all students have equal opportunities to access the curriculum and teachers should be encouraged to evaluate their own teaching for bias (Riehl, 2000).

Pennsylvania public-school principals are required to be instructional leaders for their buildings (Bays & Crockett, 2007; Frost & Kersten, 2009). Bays and Crockett (2007) attempted to develop a hypothesis regarding instructional leadership for special education at the elementary school level. Their goal was to answer three questions regarding principals and special education: “(a) What were the practices used in supervising specially designed instruction, (b) what needs were addressed by these practices, and (c) what conditions caused instructional leadership and supervision to be conducted as it was” (Bays & Crockett, 2007, p. 156). When analyzing the data, the goal was to develop a “grounded theory about instructional leadership for special education, the main goals were to identify categories within the data to identify properties

and dimensions of those categories and to establish how categories related to one another” (Bays & Crockett, 2007, p. 149). Analysis of the data collected indicated principals in all districts were the board appointed instructional supervisor in the schools, even when a director of special education was part of the district, the principal remained the main instructional supervisor, with the director being in a supportive position (Bays & Crockett, 2007).

Pennsylvania public-school principals in the secondary education setting are also responsible for ensuring best practices for special education. Wakeman, Browder, Flowers, and Ahlgrim-Delzell (2006) conducted a study to determine the overall knowledge secondary principals had regarding special education issues, best practices, and procedures. Their research subdivided special education knowledge into two areas, fundamental and current issues. Fundamental knowledge was quantified, using perspectives from Cochrane and Westling (1977), the Council for Exceptional Children (2002), and Monteith (1998), as a principal’s understanding of professional practice, all teachers teaching all students, characteristics of disabilities, legislation, and learning differences. The second knowledge level was current issues, which included those that were the basis for current research, policy making, and best practices in special education (Wakeman et. al, 2006). Results of the survey indicated secondary principals are generally well informed regarding special education issues. Differences were reported between fundamental and current knowledge (Wakeman et al., 2006). These findings support previous research conducted in 2003 by Patterson, Marshall, and Bowling (2003) and DiPaola and Tschannen-Moran (2000) (Wakeman et. al, 2006). Relationships were reported between a principal’s knowledge and demographics, training, and practice and how their personal experiences have influenced beliefs.

Researchers have reported a principal's experiences with special education in their personal life had an influence on their knowledge as it pertains to education (Frost & Kerston, 2009; Wakeman et. al, 2006). Secondary principals who were previously special education teachers indicated more knowledge; the more knowledge a principal reported, the more involvement with special education programming and services was reported (Wakeman et. al, 2006). The U.S. Department of Education Office of Special Education Programs (OSEP) should fund technical assistance to provide information to principals; special education personnel should be afforded opportunities to interact with school leaders; and principals can benefit from training on how to be reflective leaders in special education (Wakeman et. al, 2006). Principal certification programs should include special education in their curriculum (Voltz & Collins, 2010; Wakeman et. al, 2006). Lastly, further research is needed to determine the principal's impact on AYP (Wakeman et. al, 2006).

Frost and Kersten (2011) looked at instructional leadership of principals. Their study focused on determining the amount of special education knowledge/background the participants had and how much that knowledge impacted their leadership role regarding their special education teachers (Frost & Kersten, 2011). Frost and Kersten's (2011) study revealed two main demographic differences among participants: those with additional administrative supports (i.e. assistant principal, special education coordinator, etc.) and those without. The data suggested principals with extra support could use the personnel to support their special education staff; however, the extra supports also caused principals to become less engaged with special education directly. Principals who had a prior background in special education viewed themselves as having more awareness and involvement in the special education department in their building. Education and training programs to become certified as an elementary principal

were reported to be lacking in special education foundations as reported by this survey (Frost & Kersten, 2011). Many interviewed felt principal certification programs should focus more educating principals on interventions, behavior supports, and strategies. Principal involvement with their special education teachers was reported in a wide range in the survey. Involvement ranged from ‘seldom’ to ‘always’ (Frost & Kersten, 2011). Most principals reported they were most actively involved in the hiring of new special education teachers, conducting of formal observations, and completing teacher evaluations. The least involved activities reported were professional development training for special education, monitoring IEP compliance, and program planning (Frost & Kersten, 2009). Further research on the topic is warranted.

Inclusion and the Public-School Principal

The No Child Left Behind Act of 2001 (NCLB) mandated all public-schools be accountable for the academic success of all students as measured by Adequate Yearly Progress (AYP), including students with disabilities (Voltz & Collins, 2010; Wright & Wright, 2007; Yell, 2004). NCLB supported the inclusion of students in special education programs within the general education classrooms by decreeing states must develop academic achievement standards for all students to perform on grade level by 2014 (NCLB, 2001; Voltz & Collins, 2010; Wright & Wright, 2007; Yell, 2004). Inclusion is defined as “providing all students, including those with significant disabilities, equitable opportunities to receive effective educational services, with the needed supplementary aids and supports services, in age appropriate schools, in their neighborhood schools” (Bargerhuff, p. 2, 2001). NCLB further strengthened the mandates of IDEA as the focus was on the inclusion of all students within a district, as well as special education student participation in state and federal testing (Bargerhuff, 2001; NCLB, 2001; Voltz & Collins, 2010; Wright & Wright, 2007; Yell, 2004). NCLB targeted students with disabilities,

students with limited English proficiency, students with minority status, and those with an economic disadvantage (NCLB, 2001; Wright & Wright, 2007; Yell, 2004).

Inclusion is an essential component of IDEA and protects the rights of students with disabilities. From 1990 to 2007, student placement among 6 to 17 year old students with high incidence disabilities placed in separate settings or schools decreased by 25%; placement using the pullout service delivery model decreased by 30%; and placement in general education for students in special education increased by 93% (McLeskey et al., 2010). When talking about inclusion, Pennsylvania public-school principals must look at IDEA. IDEA has two key factors when thinking about the least restrictive environment (LRE). First, IDEA mandates students should be with their peers in general education to the maximum extent that is appropriate (Bargerhuff, 2001; McLeskey et al., 2010; NCLB, 2001; PDE, 2016; Voltz & Collins, 2010; Wright & Wright, 2007; Yell, 2004). Secondly, special classes, separate schools or removal from the general education class should only happen when the disability is severe enough that supplementary aids and services can't provide an appropriate education (Bargerhuff, 2001; McLeskey et al., 2010; NCLB, 2001; PDE, 2016; Voltz & Collins, 2010; Wright & Wright, 2007; Yell, 2004). Wade (2008) writes inclusion is not that every "student is educated with peers at all times, but it does mean that the responsibility of discovering effective means for all students to learn together is taken very seriously, and deviations from this approach are made with reluctance and only after careful deliberation" (para. 4).

Pennsylvania public-school principals' beliefs and previous special education experience can influence current views regarding inclusion in the public-school setting (Bargerhuff, 2001; Frost & Kerston, 2011; Voltz & Collins, 2010; Wakeman et al., 2006). Pennsylvania public-school principals have a "critical role in the implementation of successful inclusion in diverse,

standards-based environments” (Voltz & Collins, 2002, p. 70). Identified themes and benefits regarding inclusion models were “being with typical peers, exposure to everything and high expectations, individualized curricular and instructional supports, skilled and knowledgeable staff, collaboration and teaming, a positive and caring environment, and providing a balanced educational program” (Downing & Peckham-Hardin, 2007, p. 22). Other cited benefits for inclusion include increased awareness and tolerance of exceptionalities, increased empathy toward students with disabilities, learning while helping, and learning special skills (Bargerhuff, 2001; Downing & Peckham-Hardin, 2007; Voltz & Collins, 2010). The final highlights were that participants wanted their respective students to lead normal lives, yet on the other hand there were concerns for the future for students with more severe disabilities (Bargerhuff, 2001; Downing & Peckham-Hardin, 2007).

Ball and Green found “the attitudes of school leaders are important for inclusive practices, but not as important as the training and experience of the school leaders charged with implementing these practices” (p. 72). Frost and Kersten’s (2011) study also supported this assumption; their findings revealed principals who had a prior background in special education viewed themselves as having more awareness and involvement in the special education department in their building. It was the opinion of many that more research needed to be completed regarding programs that certify administrators when it comes to special education (Christensen et al., 20xx; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Garrison-Wade, Sobel, & Fulmer, 2001; Lasky & Karge, 2006; Lynch, 2012; Pazey & Cole, 2013; Voltz & Collins, 2010; Wakeman et al., 2006). More research is required to assess Pennsylvania public-school principals’ views on inclusion “to establish

cultures that support the development of all students, certain attitudinal, organizational, and instructional changes must occur” (Ball & Green, 2005, p. 57).

Bargerhuff (2001) reported the multitude of research that has been completed on principals’ involvement in inclusion has centered on the work of Villa, Thousand, Meyers, and Nevin and was based off survey data. Bargerhuff’s (2001) intent was to evaluate how leadership characteristics influence elementary inclusion models; to determine what specifically cultivates inclusion in their schools (Bargerhuff, 2001). Each principal believed students should be “valued for who they were instead of for what they could do” (Bargerhuff, p. 11, 2001). As a result, Bargerhuff suggested schools consider restructuring to allow common planning time for teachers to ensure inclusion success. Principals must use the relational leadership style and provide staff the proper resources if inclusion is to be successful. For inclusion to be successful there must be continuous communication between regular and special education staff and support personnel (Bargerhuff, 2001). One of the core objectives for educator preparation programs “is the development of teachers capable of providing individually designed instruction that is reasonably calculated to provide educational benefit to eligible students with disabilities” (Crockett, 2002, p. 161); administrator education programs should be no different. The main goal of special education is “finding and capitalizing on exceptional students’ abilities” (Hallahan & Kauffman, 2000, p. 13). Finally, pre-service certification programs must educate future leaders on inclusive practices (Bargerhuff, 2001; Crockett, 2002). Additional research needs to be completed to fully determine the implications of principal beliefs on successful special education inclusion practices.

Principals have been recognized as vital contributors to the effectiveness of public-schools. Tubbs, Heard, and Epps (2011) reported every principal must have the proper

knowledge, skill set, and frame of mind to be an effective school leader. Principals must have working knowledge of all aspects of a school including day to day operations that including curriculum, staffing, maintenance, and building/grounds (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Voltz & Collins, 2010). Tubbs, Heard, and Epps (2011) stressed the importance educational leadership programs have and their lack of emphasis on the Educational Leadership Constituent Council (ELCC) Standards.

Looking more closely at the seven ELCC standards, researchers have provided rationale to be incorporated into a pre-service leadership training program. For standard one, researchers suggested principals must have adequate knowledge, skills, and personality to run a school effectively; leaders must be able to be able to perform projection and assessment tasks (Bargerhuff, 2001; Frost & Kerston, 2011; Tubbs, Heard, & Epps, 2011; Wakeman et. al, 2006). Classes in leadership and business should be completed to fulfill this requirement (Tubbs, Heard, & Epps, 2011). For standard two, it was suggested principals be exposed to school facilities, journals, school websites, and the Educational Resource Information Center Education Facility Clearinghouse to complete a literature review on factors that impact success. Classes pertaining to standard two should include curriculum and instruction as well as business management (Tubbs, Heard, & Epps, 2011).

To meet standard three, future principals should complete coursework designed to improve their understanding of building codes, handicapped codes, fire safety, and health requirements that are needed for a school to operate. These skills can be targeted in a business management course (Tubbs, Heard, & Epps, 2011). Achievement of standard four is through courses on public relations and school business management; objectives are for principals to recognize community involvement and develop positive public relations (Tubbs, Heard, & Epps,

2011). Standard five states leaders need to be ethic and act with integrity and fairness, to achieve this, programs should contain courses that embed education ethics (most likely in business management) (Tubbs, Heard, & Epps, 2011).

The sixth standard dictates principals maintain an awareness of current political, social, and legal issues. Future school leaders should complete coursework that contains school law, social foundations, and business management (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wakeman et. al, 2006). The final standard, number seven, is that school leaders can manage facilities This includes current building and grounds space, upkeep and maintenance of current buildings, and space management. The suggested requirement is completed in a practicum class or portfolio assignment. The researchers suggest a combination of field experiences, professional speakers, hands-on activities, case studies, and learning simulations be used to complete learning objectives (Tubbs, Heard, & Epps, 2011).

Principal preparation and certification programs do not provide enough background knowledge in special education to adequately prepare public-school administrators for the rigors of special education programming (Bargerhuff, 2001; Christensen et al., 2010; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wakeman et. al, 2006). Instructional leadership is anything Pennsylvania public-school principals can do to foster and enhance learning and teaching, this includes inclusion and special education. What subgroup in any school district across the country needs more enhanced learning and specialized teaching than those served by special education? Pennsylvania public-school principals need to be actively seeking ways to boost the achievement of the special education population, taking a hard look at inclusion and using the LRE is best practice according to IDEA.

One common thread among much of the research seems to be if there is prior experience in special education or a related field, administrators are more likely to be involved in the day to day happenings (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wakeman et. al, 2006). When it comes to special education prior experience garners more positive attitudes towards inclusion (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wakeman et. al, 2006). PDE, certification programs, and school districts need to look at developing more special education related areas as part of administrator preparation certifications as well as their induction programs. Currently, Pennsylvania public-school principals must complete an induction program, yet not one of the eleven units outlined by PDE is specific to special education (PDE, 2016). School Boards should also consider, when looking at a candidate's background knowledge/resume, how much the potential school leader understands special education and is in favor of programs like inclusion (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wade, 2008; Wakeman et. al, 2006). Many times, Pennsylvania public-school principal positions are filled by capable staff; however, they have no experience in special education and inclusion.

In Pennsylvania, to become a public-school principal, candidates must have baccalaureate degree from a regionally or nationally accredited college/university (PDE, 2018). Candidates must meet “the requirements set forth in section 24 P.S. § 12-1209 relating to good moral character” (PDE, 2018, para. 1). They must have a minimum of three years teaching experience and complete a “Pennsylvania-approved, graduate-level principal certification program that includes an internship/practicum or an equivalent out-of-state program” (PDE, 2018, para. 1) and maintain a 3.0 grade point average (GPA) while completing coursework (PDE, 2018). Candidates must also pass The School Leaders Licensure Assessment (PDE, 2018). The School

Leaders Licensure Assessment “reflect the most current research and professional judgment and experience of educators across the country, and they are based on both a national job analysis study and a set of standards for school leaders identified by the Interstate School Leaders Licensure Consortium” (ISLLC; ETS, 2003).

The ISLLC standards were introduced to the public in 1996 and were revised in 2008. Both versions of the ISLLC provided the “frameworks for policy on education leadership in 45 states and the District of Columbia” (NPBEA, 2015, p. 1). The ISLLC standards were replaced in 2015 with The Professional Standards for Educational Leaders (PSEL); the PSEL are the third iteration of the original ISLLC standards. PSEL “are organized around the domains, qualities, and values of leadership work that research and practice indicate contribute to students’ academic success and well-being” (NPBEA, 2015, p. 6). The Council of Chief State School Officers reported “no students benefit more from an effective principal than those with disabilities. When a principal cultivates a school environment where all students feel safe, supported, and included, students with disabilities and other struggling learners thrive” (2017, p. 1). The 2015 PSEL standards were developed to serve as a model of professional standards. The PSEL standards

...communicate expectations to practitioners, supporting institutions, professional associations and policy makers and the public about the work, qualities and values of effective educational leaders. They are a compass that guides the direction of practice directly as well as indirectly through the work of policy makers, professional associations and supporting institutions. They do not prescribe specific actions, encouraging those in leadership and its development to adapt their application to be most effective in particular circumstances and contexts (National Policy Board for Educational Administration, 2015; p. 4)

The PSEL are

...organized around the domains, qualities, and values of leadership work that research and practice indicate contribute to students' academic success and well-being. Each standard features a title and a statement that succinctly define the work of effective educational leaders in that particular realm. A series of elements follow, which elaborate the work that is necessary to meet the standard. The number of elements for each standard varies in order to describe salient dimensions of the work involved (National Policy Board for Educational Administration 2015; p. 8).

The PSEL are based on current research and the real-life experiences of educational leaders. The PSEL (2015) standards are "student-centric, outlining foundational principles of leadership to guide the practice of educational leaders so they can move the needle on student learning and achieve more equitable outcomes" (p. 1). The table below defines the standards and details the link to special education for Pennsylvania public-school principals.

Table 1
Pennsylvania Public-School Principal Standards

2015 PSEL Standard	Description of Standard	Key Leadership Practices for Supporting Students with Disabilities (CCSSO, 2017)
Standard 1: Mission, Vision, and Core Values	"Effective educational leaders develop, advocate, and enact a shared mission, vision, and core values of high-quality education and academic success and well-being of each student" (NPBEA, 2015, p. 9).	"Work collaboratively to develop a mission and vision for their school that supports the success of all students, including students with disabilities" (CCSSO, 2017, p. 3).
Standard 2: Ethics and Professional Norms	"Effective educational leaders act ethically and according to professional norms to promote each student's academic success and well-being" (NPBEA, 2015, p. 10).	"Possess an ethical mindset to identify, interpret, and manage the ethical dilemmas in leadership for students with disabilities and address them by embodying the values of justice and care, equality and equity, and community in service of each student" (CCSSO, 2017, p. 4).
Standard 3: Equity and	"Effective educational leaders strive for equity of educational opportunity and culturally responsive practices to promote	"Ensure the academic success and well-being of each student, including students with disabilities, through

Cultural Responsiveness	each student's academic success and well-being" (NPBEA, 2015, p. 11).	equitable access to effective teachers, culturally responsive learning opportunities and supports, and necessary resources. Hold asset-based rather than deficit-based perspectives of students, and recognize relationships among disability, cultural differences, and social inequities (CCSSO, 2017, p. 5).
Standard 4: Curriculum, Instruction and Assessment	"Effective educational leaders develop and support intellectually rigorous and coherent systems of curriculum, instruction, and assessment to promote each student's academic success and well-being" (NPBEA, 2015, p. 12).	"Communicate high academic expectations for all students, including students with disabilities; promote high-quality, intellectually-challenging curricula and instruction; and provide opportunities for students with disabilities to achieve within the general education curriculum using a multi-tiered system of support. Work collaboratively with classroom teachers to help them develop their capacity for effective instruction. Ensure that evidence-based approaches to instruction and assessment are implemented with integrity and are adapted to local needs" (CCSSO, 2017, p. 7).
Standard 5: Community of Care and Support for Students	"Effective educational leaders cultivate an inclusive, caring, and supportive school community that promotes the academic success and well-being of each student" (NPBEA, 2015, p. 13).	"Ensure that students with disabilities have opportunities to learn with their non-disabled peers to the greatest extent appropriate. Promote inclusive social environments that foster acceptance, care, and sense of value and belonging in adult-student and student peer relationships" (CCSSO, 2017, p. 9).
Standard 6: Professional Capacity of School Personnel	"Effective educational leaders develop the professional capacity and practice of school personnel to promote each student's academic success and well-being" (NPBEA, 2015, p. 14).	"Hire and retain highly effective special education and general education teachers with a school-wide vision and a set of core values that support improving achievement and

		outcomes for students with disabilities” (CCSSO, 2017, p. 10).
Standard 7: Professional Community for Teachers and Staff	“Effective educational leaders foster a professional community of teachers and other professional staff to promote each student’s academic success and well-being” (NPBEA, 2015, p. 15).	“Promote collaborative cultures focused on shared responsibility for achieving the mission and vision of the school, and for the success of students with disabilities” (CCSSO, 2017, p. 12).
Standard 8: Meaningful Engagement of Families and Community	“Effective educational leaders engage families and the community in meaningful, reciprocal, and mutually beneficial ways to promote each student’s academic success and well-being” (NPBEA, 2015, p. 16).	“Create partnerships with families of students with disabilities and engage them purposefully and productively in the learning and development of their children in and out of school. Engage families to provide insight about their children’s specific disabilities that allows teachers to better understand their needs, make educationally sound instructional decisions, and assist in interpreting and assessing student progress” (CCSSO, 2017, p. 13).
Standard 9: Operations and Management	“Effective educational leaders manage school operations and resources to promote each student’s academic success and well-being” (NPBEA, 2015, p. 17).	“Manage their budgets and develop strong relationships with central offices in order to ensure the effective and efficient use of resources and that students with disabilities have access to appropriate transportation, classrooms, services, accommodations, and extracurricular activities” (CCSSO, 2017, p. 14).
Standard10: School Improvement	“Effective educational leaders act as agents of continuous improvement to promote each student’s academic success and well-being” (NPBEA, 2015, p. 18).	“Provide learning opportunities for teachers and staff to equip them to participate in strategic processes of improvement, and to take part in implementing effective programs and practices for students with disabilities” (CCSSO, 2017, p. 15).

Note: Sources: (NPBEA, 2015 & CCSSO, 2017)

What is the educational impact? To produce qualified staff who are ready to be the leaders of any building they enter; Pennsylvania public-school principal training programs must

add a special education component into their certification process to eliminate the lack of knowledge many new principals have. A Pennsylvania public-school principal who possesses a solid understanding of special education procedures, inclusion practices, IDEA, and the PA School Code is more likely going to have a staff that is supportive and in favor of their directives regarding inclusion and special education programming (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wade, 2008; Wakeman et. al, 2006). Teachers will want to help develop policy change and will constantly be striving for professional excellence. If the leaders of the school lack the proper knowledge of special education law and policy, it does not foster adequate respect and trust from special education staff. Having special education background knowledge will enable Pennsylvania public-school principals to better understand the IEP process, empowering them to help make IEP team decisions as they arise, and help the principal convey to regular education staff (if needed) the rationale behind an IEP team's decisions(Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wade, 2008; Wakeman et. al, 2006). Having Pennsylvania public-school principals complete more training in special education will not only make them more well-rounded individuals (Angelle & Bilton, 2009; Davis, 1980; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Garrison-Wade, Sobel, & Fulmer, 2001; Lasky & Karge, 2006; Lynch 2012; McHatton et al., 2013; Wakeman, et al., 2006), it will add credibility to their decisions when it comes to special education policies, like inclusion, and student decisions made in the district Bargerhuff, 2001; Christensen et al., 2010; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Voltz & Collins, 2010; Wade, 2008; Wakeman et. al, 2006) Members of a school must work together to bring about a positive change in the lives of their students and boost academic achievement (Bargerhuff, 2001; Christensen et al.,

2010; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wade, 2008; Wakeman et. al, 2006). The principal must have the influence over their faculty/staff to motivate all parties towards the common goal (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wade, 2008; Wakeman et. al, 2006).

According to IDEA, students with special needs have the right to receive necessary curricular adaptations to be successful; adaptations include accommodations and modifications to their programs (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Katsiyannis, Losinski, & Prince, 2012; Wright & Wright, 2007; Yell, 2004). At both the elementary, middle, and high school levels, students who receive accommodations are held to the same academic expectations as their general education classmates. Districts should adhere to the guidelines set forth under IDEA and presume students with disabilities are most appropriately educated with their non-disabled peers and removing them from the general education environment should only occur when the severity of their disability limits them from satisfactorily achieving in the general education classroom, even with supportive aides and services (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Katsiyannis, Losinski, & Prince, 2012; Wright & Wright, 2007; Yell, 2004). Detailed information is provided in each special education student's IEP regarding modifications, accommodations, and placement options explains why a student is placed where they are to avoid legal ramifications (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Katsiyannis, Losinski, & Prince, 2012; Wright & Wright, 2007; Yell, 2004). Special education competency needs to be a mandatory component in administrator preparation programs. For inclusion to be an option, staff must be properly trained and believe in the positive outcomes inclusion can deliver (Bargerhuff, 2001; Frost & Kerston, 2009; Tubbs, Heard, & Epps, 2011; Wade, 2008; Wakeman et. al, 2006).

Special education has been evolving for thirty-five years and will continue to do so; ensuring Pennsylvania public-school principals have a solid foundation in special education will ensure the principals of tomorrow are prepared today. Decisions to place students in other programs must be IEP team decision and based on data (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Katsiyannis, Losinski, & Prince, 2012; Wright & Wright, 2007; Yell, 2004). The suggestion should also be made that current certificate holders seeking employment must be made to complete training in special education as part of their induction program/process. Pennsylvania public-school principals are required to promote successful learning for all students; understanding special education will make this goal and inclusion more attainable.

Summarizing the Information: Principals and Special Education Go Together

The purpose of this study was to examine the experiences of public-school principals throughout Pennsylvania. The goal was to identify the specific leadership characteristics and views of practicing public-school principals regarding special education. This study included both quantitative qualitative research methods to evaluate the professional skills Pennsylvania public-school principals felt they must possess to effectively lead special education programs. The researcher hypothesized Pennsylvania public-school principals, who need to be supportive regarding time and behavior management, are not given adequate training in special education topics prior to certification (Billingsley, 2004; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola et al., 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012). Data must drive leadership decisions principals make (Crum, Sherman, & Myran, 2010). Principals must recognize and develop leadership skills of their current staff and be aware of current instruction and be involved in planning (Crockett, 2002; Crum, Sherman, & Myran,

2010). School accountability and conversations must be the front runner of all activities involving leadership (Billingsley, 2004; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola et al., 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012).

The Pennsylvania public-school principal must be knowledgeable regarding special education law and procedures (Billingsley, 2004; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola et al., 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012). The Pennsylvania public-school principal has multiple duties; to be an effective leader, principal should focus on improving professional skills and knowledge of their faculty and staff they lead and support (Billingsley, 2004; Crockett, 2002; DiPaola et al., 2004; NPBEA, 2015). Principals need to take the necessary time to provide supports and necessary professional development to beginning teachers to promote success and retention (NPBEA, 2015). Public-school administrators must strive to make connections within the community (Billingsley, 2004; Crockett, 2002; DiPaola et al., 2004; NPBEA, 2015).

Pennsylvania public school principals are expected to be instructional leaders for all students within their district (NPBEA, 2015). When it comes to leadership for students with disabilities, many public-school principals lack of experience in the field of special education and have limited pre-service training in special education related issues (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012). As mentioned throughout this research review, the research has demonstrated that overall, Pennsylvania public school principals receive limited educational experiences when it comes to special education in pre-service or on-going professional development (Crockett, 2002; Cruzeiro & Morgan, 2006;

DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012).

As mandated by law, public schools have the responsibility to identify students with learning and behavior deficits to enable them to receive supports needed to be academically successful (Hallahan, Kauffman, & Pullen, 2015; IDEA, 2002; Wright & Wright, 2007; Yell, 2004). The 2004 reauthorization of IDEA reaffirmed the notion special education students had the right to be educated in the general education classroom setting with their non-exceptional peers (IDEA, 2002; Wright & Wright, 2007; Yell, 2004). Special education leadership should be a significant concern for school Pennsylvania public school principals across the Commonwealth as their roles have increased to ensuring successful outcomes for all students; “to establish cultures that support the development of all students, certain attitudinal, organizational, and instructional changes must occur” (Ball & Green, 2005, p. 57). Special education leadership should be at the forefront for Pennsylvania public-school principals as their roles have increased to ensuring successful outcomes for all students, the increased number of students placed in special education programs, the high cost associated with educating students in special education, and the due process ramifications if educational outcomes are not achieved (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012). This literature review served to review the background of special education law and the features of an effective public-school principal. Pennsylvania public-school principal preparation programs must adapt their programs to prepare future principals to meet the demands of special education successfully lead all schools.

CHAPTER III: Methodology

Overview

The purpose of this research study was to provide a platform where current Pennsylvania public-school principals could identify where their special education knowledge was lacking and how to become a better instructional leader for their own district's special education population. The purpose of this study was to examine the formal training, basic knowledge, frequencies of special education engagement, and personal views, and perceptions of public-school principals across the Commonwealth of Pennsylvania. The current study included both qualitative and quantitative research methods (Cresswell, 2009; Cresswell, Plano, & Clark, 2007; Graziano & Raulin, 2013; Patton, 2002; Tracy, 2013).

The quantitative portion used data collected through a survey instrument to gather demographic background information, knowledge of special education topics of participants, frequencies of special education practices engaged in, and beliefs regarding special education. Through the survey, this study attempted to determine the level of special education knowledge among Pennsylvania public-school principals to determine if there was a relationship between demographic factors and years of experience as principal. *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* instrument, drew on the existing leadership surveys and questions previously utilized by Frost and Kersten (2011) and Garrison-Wade, Sobel, and Fulmer (2001) after consent was received (see Appendices C and E). The survey was designed to be administered in Web format. The researcher's goal was to have the survey ready for distribution by January 1, 2019, which was accomplished.

The qualitative portion of the study focused on data collected from open-ended questions attached to the survey instrument to identify Pennsylvania public-school principals' personal beliefs surrounding instructional leadership and special education practices. *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* instrument, section IV replicated the existing leadership survey completed, with permission (see Appendices D and E), by Garrison-Wade, Sobel, and Fulmer (2007). Elliot, Fisher, and Rennie (1999) reported the "aim of qualitative research is to understand and represent the experiences and actions of people as they encounter, engage, and live through situations" (p. 216). This study, sought to understand and expand the current knowledge, programs, and training by utilizing a qualitative research design (Elliot, Fisher, & Rennie, 1999; Graziano & Raulin, 2013; Tracy, 2013) to identify elements and describe relationships among the elements that contributed to, or acted as barriers, to the lack of courses offered for pre-service administrators during their training programs. The identified themes (i.e., words and narratives) in the qualitative component were expected to corroborate the quantitative results. It was the researcher's intention the results from this research would be helpful to colleges and universities when developing plans of study and programming for future Pennsylvania public-school principal and leadership training degrees and certificates. This research also provided a platform where current Pennsylvania public-school principal certification programs could identify where their curriculum regarding special education knowledge was lacking and how to improve plans of study for future instructional leaders.

Three major research questions guided this study:

1. What relationship, if any, existed between the amount of special education training received by Pennsylvania public-school principals in their certification program,

instructional leadership skills, and the ability to effectively lead special education programs within their district? (*Addressed by survey sections I, II, and III.*)

2. To what extent were there differences in the knowledge, frequencies, and perceptions of special education policies and procedures between elementary and secondary public-school principals? (*Addressed by survey sections I, II, and III.*)
3. How does the relationship between the amounts of special education training received by Pennsylvania public-school principals in their certification program affect the instructional leadership in special education? (*Addressed by survey section IV.*)

Based on this research, the researcher completed the following: (a) the researcher made recommendations from common themes that emerged from the study, (b) identified where the gaps in knowledge appeared to be and what could be done and (c) identified promising practices, if any that emerged from this review and evaluation.

Participants

The sample participants for the research study came from practicing elementary and secondary public-school principals across the Commonwealth of Pennsylvania. Random sampling was used to select districts from the possible 500 identified public-school districts from within the twenty-nine Intermediate Units (IUs) identified by PDE (see Appendix J); invitations were sent to all Pennsylvania public-school principals within the selected IU (see Appendix G). The sample was thought to consist of diverse demographics including pre-service teaching role, gender, race, experience, certification, student population of each participant's school, and both rural/urban districts. The sample contained elementary and secondary representations.

Participants were classified into four groups 0-5 years' experience; 6-10 years' experience; 11-15

years' experience, and 16 plus years of administrator experience. Private schools, charter schools (including cyber), and vocational schools were not included in the current study.

To gain a statewide representative sample, the researcher used a random number generator to select four IUs out of the 29 possible (see Appendix J). The following IUs were selected for district invitation: Riverview IU 6, Central IU 10, Luzerne IU 18, and School District of Philadelphia IU 26. All districts within each IU were sent an e-mail invitation to participate in the survey (see Appendices G, K, & M) once district approval was given by the superintendent (see Appendix M). Current principal e-mail addresses were obtained for all districts from their website except Wyoming Area School District (IU 18) eliminating five participants from the survey before it began. A total of 426 e-mail addresses were collected for potential dissemination once superintendent approval was granted.

Setting

The setting where public school administrators were employed was (potentially) thought to significantly impact the answers provided in this survey; participants were divided into elementary or secondary. Results were analyzed as collective and then again as separate entities (elementary and secondary school).

Population and Sample Selection

The research design was comprised of two major sections and all data was collected through online activities. The survey instrument given to participants gathered demographic data and identified legal, foundational, and contextual knowledge and frequencies by utilizing yes/no questions and Likert-type rating scales. The second activity involved open-ended questions (Tracy, 2013) to elicit current views and comfort levels of special education topics of current practicing Pennsylvania public-school principals. Data was coded and analyzed to determine

patterns in the responses. Data was divided into key themes assigned (through review of each response) using a coding system.

Survey Instrument

The survey instrument was designed to be administered concurrently with the open-ended interview type questions portion of the study. All materials were distributed through Survey Monkey, an online survey tool (www.surveymonkey.com). The instrument consisted of an online, four-section survey. Section I, contained nine demographic background information questions. Section II was comprised of eighteen questions using a yes/no answer format to address the Pennsylvania public-school principals' beliefs on legal topics, foundational and contextual knowledge. Section III contained fifteen questions using a 5-point Likert type scale ranging from never (1) to always (5) to address the Pennsylvania public-school principals' frequencies of use with legal topics, foundational and contextual knowledge. Section III also contained questions replicated from the work of Garrison-Wade, Sobel, and Fulmer (2001) and evaluated Pennsylvania public-school principals' perceived competencies for special education areas. Questions used a 5-point Likert type scale ranging from emergent (0) to exemplary (5).

Section II of the survey was further delineated into three sub-sections to address Pennsylvania public-school principals' views relating to legal, contextual, and foundational knowledge of special education topics; all eighteen questions required a yes or no response. Six questions addressed perceptions on whether Pennsylvania public-school principals believed they possessed enough legal knowledge for effective leadership of special education programs within their school district. This section of the survey addressed six legal topics: special education provisions in the NCLB (now ESSA), components of the Rehabilitation Act (Section 504) that affect public schools, how the ADA affected public schools, special education rules and

regulations contained in the PA Administrative Code, and their district's Response to Intervention (RTI) plan (Frost & Kersten, 2011). The second area focused on foundational knowledge and whether Pennsylvania public-school principals believed themselves to have sufficient foundational knowledge in special education to effectively serve students with disabilities. Foundational knowledge included six questions that addressed accommodation in the LRE, parental involvement in IEPs, district's special education placement continuum, identification and placement, discipline, and the district's related services model (Frost & Kersten, 2011). The final yes/no section addressed contextual knowledge. Six questions were presented to Pennsylvania public-school principals to indicate if they perceived themselves to have contextual knowledge in special education to serve students with disabilities. This section queried responses on state learning standards, effective instructional practices, academic assessments, curriculum design, program improvement plans, and evaluation of IEPs by staff (Frost & Kersten, 2011).

Section III contained three sub-sections to address Pennsylvania public-school principals' frequencies of engagement surrounding legal, contextual, and foundation knowledge of special education topics based on the work by Frost and Kersten (2011) and perceived competencies developed by Garrison-Wade, Sobel, and Fulmer (2001). Legal frequencies used a 5-point Likert type scale ranging from never (1) to always (5). These 18 indicators were written as positive statements and participants were asked to indicate how often a specific instructional leadership behavior with special education teachers was used (Frost & Kersten, 2011). Legal frequencies assessed the hiring special education teachers, monitoring student IEPs, and the implementation of federal and state special education requirements, attendance at professional development related to legal issues in special education and attendance at pre-referral meetings of the school-

based service team (Frost & Kersten, 2011). Foundational frequencies counted attendance annual IEP meetings, reviewing annually special education workload, encouraging parental involvement, formal evaluations of special education teachers, and monitoring alignment of IEPs to state learning standards (Frost & Kersten, 2011). The 5-point Likert type scale ranged from never (1) to always (5) was used for foundational frequency tabulation. Contextual frequencies looked at arranging monthly activities to build collegiality between special and general education staff, planning program improvement, weekly visits to special education classrooms, attendance at team meetings with special education staff to discuss concerns, and monitoring special education curriculum (Frost & Kersten, 2011). The 5-point Likert type scale ranged from never (1) to always (5) was used for contextual frequency tabulation.

The final component of Section III was based on the work of Garrison-Wade, Sobel, and Fulmer (2001) and evaluated Pennsylvania public-school principals' perceived competencies for special education areas. Questions used a 5-point Likert type scale ranging from emergent (0) to exemplary (5). These eleven indicators were written as positive statements and aligned with the study's objective and goals which sought to gather information from participants to assess their background information and thoughts on how prepared they were to step into leadership roles in special education after certification.

Open Ended Questions

In the qualitative data collection component, open-ended questions were used to elicit further descriptions of Pennsylvania public-school principals' beliefs regarding the administration of special education (see Appendix F for the question protocol). The protocol consisted of nine questions developed by researchers Frost and Kersten (2011) and Garrison-Wade, Sobel, and Fulmer (2001) based on their literature reviews and surveys. Respondents

were asked to describe specific behaviors and beliefs pertaining to the administration of special education. The open ended questions were chosen to (a) learn specific strategies and/or processes principals believe future public-school principals need to learn to support special education practices (b) to gather data on the benefits and disadvantages of working within schools that serve students with diverse needs and backgrounds, (c) to identify specific principal beliefs on placement recommendations for special education students and (d) to offer specific strategies that they perceived were effective in working with students in special education.

Open ended questions were as follows:

1. What type of disabilities have you encountered most frequently in your experience as a principal/administrator (Frost & Kersten, 2011)?
2. What benefits do you perceive for yourself and your students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007)?
3. What concerns do you have for yourself and your students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007)?
4. Describe the working relationship with your administrator(s) (Garrison-Wade, Sobel, & Fulmer, 2007).
5. Describe a specific initiative/action/project that your administrator has undertaken to support inclusive services in your school building (Garrison-Wade, Sobel, & Fulmer, 2007).

6. Have you experienced any challenges in working with an administrator on issues related to inclusive practices? If so, please identify (Garrison-Wade, Sobel, & Fulmer, 2007).
7. What questions do you have regarding addressing the needs of learners with diverse needs and backgrounds that you feel should be addressed in an administrator preparation program (Garrison-Wade, Sobel, & Fulmer, 2007)?
8. Please identify specific strategies and/or processes that you believe future administrators need to learn to support inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007).
9. Please identify any projects that you believe could help future administrators become skilled supporting inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007).

Data collection consisted of an anonymous web-based survey with online scoring to ensure timely data collection. There was the potential for the researcher to send out 426 e-mail invitations to participate in the survey if superintendent approval was given for all identified districts. The researcher's goal was to receive a minimum of 75 to 100 surveys in return; the goal was 20% ($N=86$). Simple random sampling was used to select participants to reduce the potential for human bias in the selection of participants to be included in the sample. Thus, the researcher assumed the sample provided a representative view of the target population. Data was organized and stored electronically; data was coded, disaggregated into manageable segments, and categorized into meaningful units using the software program NVivo and the Statistical Package for the Social Sciences (SPSS). SPSS Statistics is a software package used for interactive, or batched, statistical analysis. NVivo is software that supported qualitative and mixed methods

research. The survey itself focused on determining the amount of special education knowledge/background the participants had, how much prior knowledge impacted their leadership role regarding their special education teachers and programs, comfort level when working with special education staff and students, and how often instructional leadership was impacted by special education.

Ethical Principles/Human Subject Compliance

All research subjects in this study were free from research abuses, as outlined in the Belmont Report of 1979. The current study adhered to all three fundamental ethical principles outlined in the report: respect for persons, beneficence, and justice (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano & Raulin, 2013). Study participants were provided the ethical principle by being given autonomy; the freedom to deliberate, make considered choices, and opt in or out of the research study. Diminished autonomy was not an issue as there were no minors, geriatric/senile, or individuals with diminished capacity that were selected in data collection (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano & Raulin, 2013). During consent, all participants were provided information regarding the research study before consent to participate. No pressure or incentives were given to participate in the study; participants were free to withdraw participation at any time without penalty (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano & Raulin, 2013). Beneficence was adhered to as part of this study as the data and information collected caused no harm to those participating (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano & Raulin, 2013).

Instrumentation

The instrumentation used for this research study was an online survey containing demographics, yes/no questions, Likert-scales, and open-ended questions. Computerized random sampling was used to select participants to reduce the potential for human bias in the selection of participants to be included in the sample. Thus, the researcher assumed the sample provided a highly representative view of the target population. Participants were invited to participate in the survey via e-mail (see Appendix G for consent form); if a district was discovered to not have e-mail access, they were eliminated from the study; participants had thirty days to respond to the electronic link and complete the survey. After thirty days; a second reminder notice was electronically sent to complete the survey if they had not already been done so (see Appendix N for reminder e-mail letter). The second notice provided participants an additional fifteen days to complete the survey for a total of 45 days of data collection.

Validity

To ensure validity of the research findings, and to minimize possible distortions that may have resulted from contact with study participants, there was no engagement or interaction with the research participants once initial consent had been given. Survey items regarding special education knowledge, frequencies, and perceptions were validated by the original authors of the survey instruments. This researcher gained permission from Frost and Kersten (2011; Appendices B & C) and Garrison-Wade, Sobel, and Fulmer (2001; Appendices D & E) to use their questionnaires. Data collection continued until the point of data saturation, all the while using the grounded-theory process. Internal validity is an inductive estimate of the degree to which conclusions about causal relationships can be made (e.g. cause and effect), based on the measures used, the research setting, and the whole research design. The researcher of this study

modified the Garrison-Wade, Sobel, and Fulmer survey by deleting demographic items specific to the state of Colorado which were not pertinent to this study as it was conducted in Pennsylvania. Added to the survey were three demographic items to gather information on Pennsylvania public-school principals.

Confounding variables were considered in the survey design process. Graziano and Raulin (2013) reported eight confounding variables that can interfere with internal validity (i.e. with the attempt to isolate causal relationships). History (the specific events occurring between the first and second measurements) and surveying (the effects of taking a survey upon the scores of a second surveying) were not factors as participants only completed the survey instrument one time. Maturation was not a factor. The survey was completed one time only in 2019; there were no issues for participants regarding the passage of time or specific events to impact survey results. There were no changes to the instrumentation after release to affect results; survey questions and items had been previously validated by researchers Frost and Kersten (2011) and Garrison-Wade, Sobel, and Fulmer (2001). Statistical regression (operating where groups have been selected based on extreme scores) and selection bias did not confound results; random selection was used to select participants statewide. Experimental mortality and selection-maturation interaction were not applicable as this was a onetime only administered survey to determine views on special education and instructional leadership of practicing Pennsylvania public-school principals.

Reliability

All efforts were made by the researcher to validate the reliability of survey material. Internal consistency, which refers to the degree different questions or statements measure the same characteristic, was used to determine patterns. When conducting qualitative research,

reliability referred to the degree to which the researcher's approach was consistent so that the survey may be repeated across different researchers and over time (Creswell, 2009). Clear and consistent procedures and protocols were used across all facets of the data collection process for the current study.

Design of the Study

The mixed methods data generated in this study can help current Pennsylvania public-school principals evaluate their skills compared to a statewide sampling and provide information for colleges and universities across Pennsylvania to improve certification programs and degrees. The research design contained two major sections. The first section dealt with the application of the data to analyze participants' responses to provide feedback from current practicing Pennsylvania public-school principals. The rationale and advantages of this have been previously explained. The second major segment dealt with how current views and comfort level of special education topics and initiatives impacted the instructional leadership skills of current Pennsylvania public-school principals. *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* was administered in web format. The survey was designed around four categorical measures: demographic characteristics of principals and their certification preparation and development features; special education content knowledge; frequency of principal engagement in specific leadership practices; and personal beliefs. The appendices described the survey process, including consent forms and reminder emails.

Research Questions and Hypothesis

Three research questions guided this study.

1. What relationship, if any, exists between the amount of special education training received by Pennsylvania public-school principals in their certification program, instructional leadership skills, and the ability to effectively lead special education programs within their district? (*Addressed by survey sections I, II, and III.*)

H₀: There will be no relationship between the Pennsylvania public-school principal's years of experience as principal and their actual knowledge of special education content and topics.

H₁: There will be a positive relationship between the Pennsylvania public-school principal's years of experience as principal and their actual knowledge of special education content and topics.

H₀: There will be no relationship between the Pennsylvania public-school principal's proficiency and knowledge of special education policies and procedures.

H₂: There will be a positive relationship between the Pennsylvania public-school proficiency and knowledge of special education policies and procedures.

2. To what extent are there differences in the knowledge, frequencies, and perceptions of special education policies and procedures between elementary and secondary public-school principals? (*Addressed by survey sections I, II, and III.*)

H₀: There will be no difference in the reported knowledge of special education legal, foundational, and contextual knowledge reported between elementary and secondary public-school principals.

H3: There will be a positive difference in the reported knowledge of special education legal, foundational, and contextual knowledge reported between elementary and secondary public-school principals.

H0: There will be no difference in the reported perceived competencies reported between elementary secondary principals and years of service.

H4: There will be a positive difference in the reported perceived competencies reported between elementary secondary principals and years of service.

3. How does the relationship between the amounts of special education training received by public-school principals in their certification program affect the public-school principal's instructional leadership in special education? (*Addressed by survey section IV.*)

In this study, *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* (Sections I, II, and III) was used to test the theory Pennsylvania public-school principals were not given adequate special education training that predicts their knowledge of special education topics, laws, and procedures will negatively influence their instructional leadership for special education programs and students. Concurrent with this data collection, qualitative data regarding personal views from *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* (Section IV, Open Ended Questions) explored the personal views of special education Pennsylvania public-school principals across the Commonwealth possess. The reasons for collecting both quantitative and qualitative data were to bring together the strengths of both forms of research to compare and corroborate results.

Variables

It was the researcher's intention this research would be helpful to colleges and universities when developing plans of study and programming for future Pennsylvania public-school principal and leadership training degrees and certificates. This research also provided a platform where current Pennsylvania public-school principals could identify where their special education knowledge was lacking and how to become a better instructional leader for their own district's special education population. This study provided insight into understanding the factors that contributed to the lack of special education training in special education programs by higher education entities.

Variable 1: The amount of special education training received (as reported) by Pennsylvania public-school principals in their certification program.

Variable 2: The amount of special education knowledge Pennsylvania public-school principals possesses evidenced by their answers to legal, foundational, and contextual knowledge questions on *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey*.

Data Sources

The researcher collected data to obtain demographic background knowledge from each participant to determine skill and comfort level surrounding special education topics. Information was input into a statistical software program for analysis. As analysis proceeded, the data that emerged from the research was compared. Data was coded, reviewed, and modified by comparing different participant's views, situations, actions, accounts and experiences to determine emerging themes based on years of service and service role.

Survey data collection consisted of a confidential web-based survey with online scoring that ensured timely data collection. The researcher assumed the sample provided a representative view of the target population. Data was organized and stored electronically; data was coded, disaggregated into manageable segments, and categorized into meaningful units using the software programs NVivo and SPSS.

Data Collection and Analysis Procedures

The study began after written approval was received from the Slippery Rock Institutional Review Board. The survey itself focused on determining the amount of special education knowledge, frequencies of engagement, and personal views on leadership the participants possess. The survey sought to identify how much prior participant knowledge impacted their leadership role regarding their special education teachers and programs, their comfort level, and how often instructional leadership was impacted by special education. The sample for the research came from elementary and secondary public-school principals across the Commonwealth of Pennsylvania. The sample consisted of diverse demographics including pre-service teaching role, gender, race, experiences, certification, student population of each participant's school, and both rural/urban districts.

Descriptive statistics were used to describe participants in the study. Frequencies and percentages were collected from participants for demographic characteristics such as school setting, race, age, pre-certification role, and special education training received in degree programming. The means and standard deviations for the leadership behaviors were provided via tables and text.

The collected data was analyzed continually throughout the research process, which is typical of qualitative research studies, but also by using the coding process to identify themes

which resonated with current special education familiarity and content knowledge of practicing school principals. Throughout the study, constant data analysis and refinement helped narrow the focus to central themes experienced by principals, and further validated the assumptions made within the study design. Descriptive statistics were used to evaluate responses.

The research design contained two major sections. The first part dealt with the application of the data to analyze participants' responses to provide feedback from current practicing Pennsylvania public-school principals. The rationale and advantages of this have been previously explained. The second major segment dealt with how current views and comfort level of special education topics and initiatives impacted the instructional leadership skills of current public-school principals.

Research data was collected using survey format for the principal beliefs portion of the study. NVivo and SPSS software was used to store and analyze responses. *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* was designed and developed by Slippery Rock University of Pennsylvania's doctoral student researcher, Mrs. Amanda J. Truitt-Smith. The survey drew on the existing leadership surveys and questions previously utilized by Frost and Kersten (2011) and Garrison-Wade, Sobel, and Fulmer (2001) after consent was received to use the surveys (see Appendices C and E). The survey is designed to be administered in Web format. The researcher had the the survey ready for distribution on January 1, 2019.

Data Collection Methods

Participants were invited to participate in the survey via e-mail (see Appendix G for consent form); if a district was discovered to not have e-mail access, they were eliminated from the study; participants had 30 days to respond to the electronic link and complete the survey.

After 30 days; a second reminder notice was electronically sent to complete the survey if it had not already been done so (see Appendix N for reminder e-mail letter). The second notice provided participants an additional 15 days to complete the survey for a total of 45 days of data collection.

Biases/Limitations

Study limitations may include:

1. Sample size: Until participants began completing the surveys; the actual number of participants could not be determined. The sample size may have been too small, making it difficult to find significant relationships from the data.
2. There was the potential for the data to be unreliable; the researcher would not be able to state with one hundred percent conviction participants answered questions truthfully.
3. Limited prior research on this topic.
4. Since the data was self-reported in an asynchronous manner (Tracy, 2013), the data may not be an accurate reflection of the administrator's true knowledge and beliefs regarding special education and programming. There was the potential for participants to "carefully construct a desired presentation" (Tracy, 2013, p. 166) rather than give answers directly.

CHAPTER IV: Results

Public-school principals have a critical role in the development of special education programming, curriculum planning, professional development for teachers under their supervision, and evaluating the fidelity of current programs in place (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012). It is crucial the public-school principal be well-versed in special education content knowledge and procedures to ensure their school adheres to the law and operates smoothly. Research was warranted to ensure the Pennsylvania public-school principal has knowledge of special education law, policies, and procedures to diminish litigation opportunities (Bargerhuff, 2001; Lasky & Karge, 2006; Lynch, 2012; McHatton, Boyer, Shaunessy, & Terry, 2010; McLeskey et al., 2010; Pazey & Cole, 2013; Voltz & Collins, 2010; Wright & Wright, 2007; Yell, 2004).

Research Questions

The overarching premise of the study was that Pennsylvania public-school principals are not given adequate training in special education in their certification programs. To test these concepts, the following research questions and specific hypotheses were constructed:

1. What relationship, if any, exists between the amount of special education training received by Pennsylvania public-school principals in their certification program, instructional leadership skills, and the ability to effectively lead special education programs within their district? (*Addressed by survey sections I, II, and III.*)

H₀: There will be no relationship between the Pennsylvania public-school principal's years of experience as principal and their actual knowledge of special education content and topics.

H1: There will be a positive relationship between the Pennsylvania public-school principal's years of experience as principal and their actual knowledge of special education content and topics.

H0: There will be no relationship between the Pennsylvania public-school principal's proficiency and knowledge of special education policies and procedures.

H2: There will be a positive relationship between the Pennsylvania public-school proficiency and knowledge of special education policies and procedures.

2. To what extent are there differences in the knowledge, frequencies, and perceptions of special education policies and procedures between elementary and secondary public-school principals? (*Addressed by survey sections I, II, and III.*)

H0: There will be no difference in the reported knowledge of special education legal, foundational, and contextual knowledge reported between elementary and secondary public-school principals.

H3: There will be a positive difference in the reported knowledge of special education legal, foundational, and contextual knowledge reported between elementary and secondary public-school principals.

H0: There will be no difference in the reported perceived competencies reported between elementary secondary principals and years of service.

H4: There will be a positive difference in the reported perceived competencies reported between elementary secondary principals and years of service.

3. How does the relationship between the amounts of special education training received by public-school principals in their certification program affect the public-school principal's instructional leadership in special education? (*Addressed by survey section IV.*)

Instrument

In this study, *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* (Section I: Demographics, Section II: Knowledge, and Section III: Frequencies) was used to gather quantitative data to test the theory Pennsylvania public-school principals are not given adequate special education training in their certification/degree program to fully prepare them for the rigors surrounding special education implementation and regulations. The researcher sought to determine if there was a lack of training and knowledge of special education topics, laws, and procedures that negatively influenced Pennsylvania public-school principals' instructional leadership practices when it comes to implementing special education programs, inclusive practices, and supervising personnel. Concurrently, qualitative data was collected from Pennsylvania public-school principals' personal views using Section IV: Leadership Beliefs of the survey instrument. Personal opinions were obtained to explore principals' views regarding special education held by public-school principals across the Commonwealth of Pennsylvania. The reasons for collecting both quantitative and qualitative data were to bring together the strengths of both forms of research and to compare and corroborate results. The researcher intended to determine if there were any patterns in the data based on the years of service and place of employment (elementary versus secondary) that may have impacted principal views and knowledge.

Participants

The sample participants for the research study were obtained from practicing elementary and secondary public-school principals across the Commonwealth of Pennsylvania. Private schools, charter schools (including cyber), and vocational schools were not included in the current study. To gain a statewide representative sample, the researcher used a random number generator to select five IUs out of the 29 possible (see Appendix J). The following IUs were selected for district invitation: Midwestern IU 4, Riverview IU 6, Central IU 10, Luzerne IU 18, and School District of Philadelphia IU 26. The researcher obtained superintendent consent from 23 out of the 68 (34%) public-school districts that permission letters were sent to; 3 no responses were received for a total of 26 (38%) response rate for school districts contacted. See Table 2 for a list of the school districts that were sent invitations to participate in the survey.

The researcher obtained superintendent consent from the following public-school districts from the Midwestern IU 4: Butler Area School District, Karns City Area School District, Seneca Valley Area School District, Neshannock Township School District, Commodore Perry Area School District, Greenville Area School District, Grove City Area School District, Mercer Area School District, Reynolds Area School District, Sharon City Area School District, Sharpsville Area School District, and West Middlesex Area School District. The researcher was given superintendent consent from the following public-school districts from within the Riverview Intermediate Unit Six: Clarion Area School District, Clarion-Limestone Area School District, Cranberry Area School District, Keystone Area School District, Oil City Area School District, Punxsutawney Area School District, and Titusville Area School District. Consent was obtained from the from the following districts in Intermediate Unit 10: Moshannon Valley School District, Penns Valley Area School District, and Philipsburg-Osceola Area School

District. The Northwest Area School District was the only school to provide superintendent consent from the Luzern Intermediate Unit 18. See Table 2 for a list of the school districts that were sent invitations to participate in the survey.

Table 2
School Districts Invited to Participate in the Survey

IU	Invited SD
IU 4	Butler Area SD Karns City Area SD Seneca Valley Area SD Neshannock Township SD Commodore Perry Area SD Greenville Area SD Grove City Area SD Mercer Area SD Reynolds Area SD Sharon City Area SD Sharpsville Area SD West Middlesex Area SD
IU 6	Clarion Area SD Clarion-Limestone Area SD Cranberry Area SD Keystone Area SD Oil City Area SD Punxsutawney Area SD Titusville Area SD
IU 10	Moshannon Valley SD Penns Valley Area SD Philipsburg-Osceola Area SD
IU 18	Northwest Area SD

Note: IU= Intermediate Unit; SD= School District

All public-school principals within each identified district were sent an e-mail invitation (on 01/01/2019) to participate in the survey (see Appendices G, K, & M). Current principal e-mail addresses were obtained for all districts from their website. A total of 108 e-mail addresses

were collected and 108 invitations were sent. The researcher obtained survey responses from a total of 19 ($N=19$) participants out of the 108 (18% return rate). Participants were invited to participate in the survey via e-mail (see Appendix G for consent form); participants were provided 30 days to respond to the electronic link and complete the survey. After 30 days; a second reminder notice was electronically sent to complete the survey to all participants who had not responded (see Appendix N for reminder e-mail letter). The second notice provided participants another 15 days to complete the survey for a total of 45 days for data collection.

Survey responses were kept confidential; no one besides the researchers had access to information about who took a given survey. Participants were assigned a number pseudonym by the data analysis software program, NVivo upon completion. Survey results were kept confidential, the researcher never associated a survey respondent's name or e-mail with their survey response in any reporting. Survey results were aggregated; that is, individual survey results were combined and presented as a group using the Statistical Package for Social Sciences (SPSS) software program. Comments submitted on confidential surveys were not associated with a respondent's name or e-mail address however, the comments were reported verbatim. All materials were distributed through Survey Monkey, an online survey tool (www.surveymonkey.com).

Survey Results: Section I, Demographics

Demographic results are shown in detail in the following pages. All survey respondents ($N=19$) responded to the first demographic question, see Table 3. Question one had participants indicate their current administrative role in the public-school setting. Seven participants were currently serving as K-6 Elementary School principals (37%). Twelve participants were employed at the secondary levels as public-school principals (63%). For data analysis purposes,

results were coded and evaluated using elementary and secondary response collectively, separately, and compared.

Table 3
Participants' Current Administrative Role

	Frequency	Percent
Elementary School	7	37.0
Secondary	12	63.0
Total	19	

Demographic question number two, required participants to report the length of service in their current administrative position, see Table 4. Eleven respondents (58%) have been working in their current principal role from one to five years. Five participants (26%) noted they had been serving as a public-school principal between six and ten years. Two (11%) reported working as a public-school principal from eleven to fifteen years. One participant (5%) indicated over sixteen years in their current position as principal. For data analysis purposes, statistical analyses were completed for survey questions based on length of service.

Table 4
Participants' Length of Service in Current Position

	Frequency	Percent
1-5 Years	11	58.0
6-10 Years	5	26.0
11-15 Years	2	11.0
16 or more	1	5.0
Total	19	

Figure 1 represented the breakdown of participants based on their current role in the public-school setting as well as years of service. Figure 2 displayed at the amount of special education classes taken and length of service in the position.

Figure 1

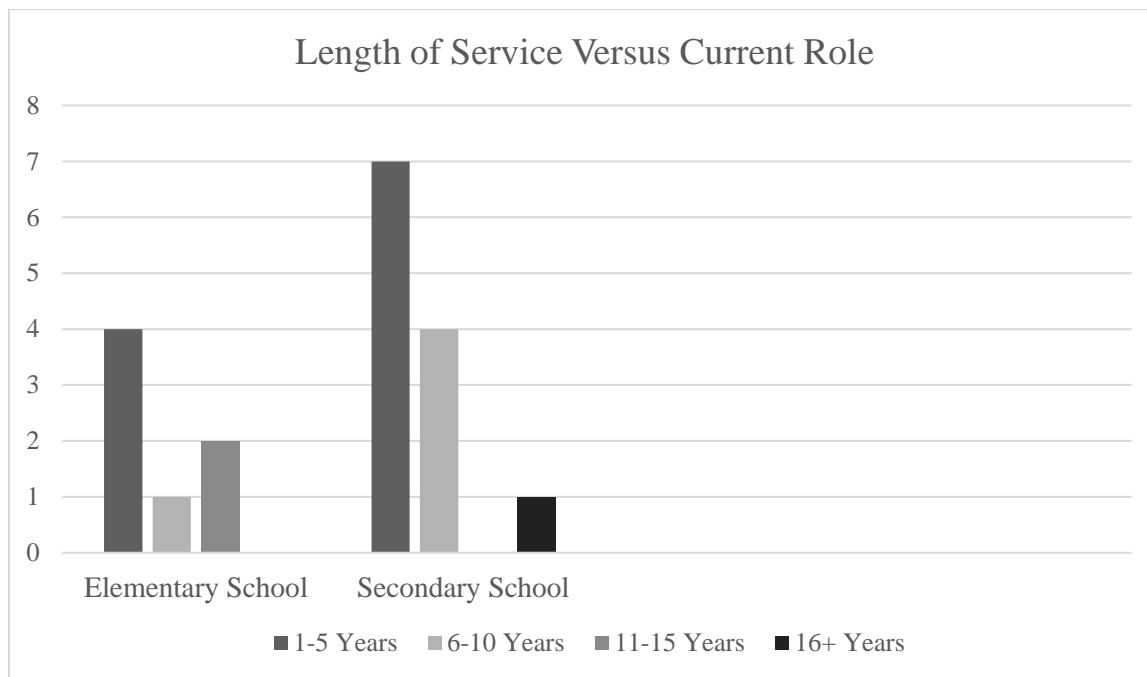
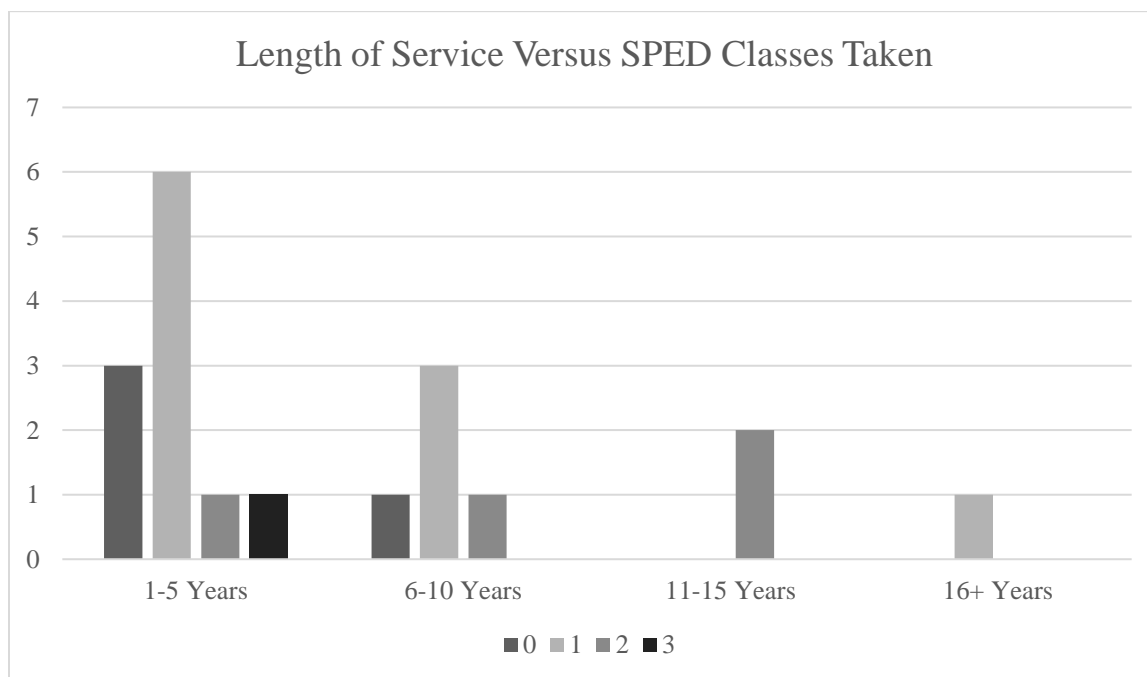
Participant role and length of service displayed

Figure 2

Cross Tabulations for Participants Comparing Length of Service by the number of special education classes taken in certification program.

All 19 participants ($N=19$) responded to the third demographic question with results displayed in Table 5. Question number three had participants report the size of the student population in the district which they served as the public-school principal. Two respondents (11%) noted working in public-school districts with student populations of less than 500 students. Eight respondents (42%) had district enrollments for students with a range between 501 to 1,000 students. One participant (5%) worked in a district with a student population of 1,001 to 1,500 students. Three participants (16%) were employed by districts with student populations of 1,501 to 2,000 students. Lastly, five participants (26%) were currently working as principals in districts with student bodies containing more than 2,001 individuals.

Table 5
Participants' Student Population Size

	Frequency	Percent
Less than 500 Students	2	11.0
501-1,000 Students	8	42.0
1,001-1,500 Students	1	5.0
1,501-2,000 Students	3	16.0
2,000 or more	5	26.0
Total	19	

No respondent completing the current survey was under the age of 30. Age breakdowns for survey participants are shown in Table 6. Nine respondents (47%) reported their age to be between the ages of 31 and 40. Seven participants' (37%) ages fell in the age range spanning 41 and 50 years. Three (16%) public-school principals were over the age of 51. When looking at ethnicity, demographic question number five, an overwhelming 95% ($n=18$) reported their ethnicity of origin as white. One participant (5%) reported their ethnicity as other.

Table 6
Survey Participants' Ages

		Frequency	Percent
Age	31-40	9	47.0
	41-50	7	37.0
	over 51	3	16.0
	Total	19	

All participants ($N=19$) responded to demographic question six regarding pre-service roles, see Table 7. The sixth demographic question specifically asked participants to report their previous educational role prior to becoming a Pennsylvania public-school principal. Thirty-two percent ($n=6$) reported their role in the public-school setting before becoming a principal was serving as a K-6 elementary school classroom teachers. Forty-seven percent ($n=9$) reported teaching in a high-school setting. Three respondents listed their pre-service role as other (16%). Five percent of participants were guidance counselors.

Table 7
Participants' Previous Role in the Educational Setting

	Frequency	Percent
Elementary Teacher	6	32.0
High School Teacher	9	47.0
Guidance Counselor	1	5.0
Other	3	16.0
Total	19	

Nineteen participants ($N=19$) responded to demographic question number seven identifying where their public-school principal certification/degree was obtained from, see Table 8. Principal certifications were issued by the following Colleges and Universities: Edinboro University of Pennsylvania (11%), California University of Pennsylvania (16%), Gannon

University (21%), University of Pittsburgh (11%), University of Scranton (5%), Westminster College (16%), and other (21%).

Table 8

Higher Education Institution Where Participants Received Certification

	Frequency	Percent
Institution Edinboro	2	11.0
California	3	16.0
Gannon	4	21.0
Pitt	2	11.0
Scranton	1	5.0
Westminster	3	16.0
Other	4	21.0
Total	19	

The eighth demographic queried the number of special education classes participants received as part of their certification program, see Table 9. Five participants (26%) disclosed they received no special education training or components in their educational programming prior to entering the field. Forty-seven (47%) percent reported completing one class in special education during their certification program ($n=9$). Twenty-one (21%) percent of respondents noted taking two classes in special education in their certification program ($n=4$). One participant said their schooling contained three classes in special education. The final demographic question addressed participant's professional development in the area of special education within the last year. Seventeen participants (90%) indicated they have completed professional development within the last year on special education topics. Five percent (05%) percent of survey participants reported no continuing education in special education topics ($n=2$).

Table 9

Special Education Classes Taken by Participants During Certification

		Frequency	Percent
Classes	0	5	26.0
	1	9	47.0
	2	4	21.0
	3	1	5.0
Total		19	

Data Analysis of Demographic Questions

The Chi-Square Test of Independence ($\alpha = 0.05$) was used to determine whether there was an association between demographic categorical variables (i.e., whether the variables were independent or related). The Chi-Square Test utilized a contingency table to analyze the data collected. A contingency table (also known as a cross-tabulation) classified the collected data according to two categorical variables, see Table 10. The categories for variable one (current role in the educational system) appear in the rows, and the categories for variable two appear in columns (length of service in current role). Each variable had two or more categories and each cell reflected the total count of cases for the specific pair of categories. Chi-Square ($\alpha = 0.05$) was selected to determine statistical independence or association between current participant role and length of service. The researcher made the following assumption when analyzing the data collected:

H^0 : Current principal role is independent of length of service in the position.

H^1 : Current principal role is not independent of length of service in the position.

Table 10

Current Participant Role and Length of Service Crosstabulation

			Length of Service			
			1-5 Years	6-10 Years	11-15 Years	16 or more
Current Role	Elem.	Count	4	1	2	0
		% Current Role	57.1%	14.3%	28.6%	0.0%
		% Length of Service	36.4%	20.0%	100.0%	0.0%
		% of Total	21.1%	5.3%	10.5%	0.0%
	Sec..	Count	7	4	0	1
		% Current Role	58.3%	33.3%	0.0%	8.3%
		% Length of Service	63.6%	80.0%	0.0%	100.0%
		% of Total	36.8%	21.1%	0.0%	5.3%
Total		Count	11	5	2	1
		% Current Role	57.9%	26.3%	10.5%	5.3%
		% Length of Service	100.0%	100.0%	100.0%	100.0%
		% of Total	57.9%	26.3%	10.5%	5.3%

Note: Elem=Elementary Principal; Sec.=Secondary Principal

The key result in the Chi-Square Tests (see Table 11) was the Pearson Chi-Square. The value of the test statistic was 4.623. The footnote for this statistic pertained to the expected cell count assumption (it was expected all cell counts have values greater than 5); 7 cells had an expected count less than 5, so this assumption was not met. The corresponding p -value of the test statistic was $p = 0.0202$. Since the p -value was greater than the chosen significance level ($\alpha = 0.05$), the researcher did not reject the null hypothesis (test value .0202 > table critical table value 2.353); rather, the researcher concluded there was not enough evidence to suggest an association between role in the school system (elementary/secondary) and length of service in the position. The test statistic was based on a 2 X 4 crosstabulation table and the degrees of freedom (df) for the test statistic 3.

Based on the results:

No association was found between current principal role and length of service ($\chi^2(2) = 4.623, p = 0.202$).

Table 11

Chi-Square for Current Participant Role and Length of Service Crosstabulation

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.623 ^a	3	.202
Likelihood Ratio	5.584	3	.134
Linear-by-Linear Association	.095	1	.758
N of Valid Cases	19		

Note: a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .37.

Survey Results: Section II, Beliefs

Section II, Beliefs was comprised of eighteen questions using a yes/no answer format to address the Pennsylvania public-school principals' beliefs regarding legal topics, foundational knowledge and contextual knowledge. Survey results were uploaded into the statistical software program SPSS for further analysis. All questions in Section II: Beliefs required participants to respond to binary categorical variables; responses were a yes or no value. Once all respondent data was input into the SPSS program, "yes" variables were assigned a "1" and no variables were assigned a "0" for analysis purposes. There were no missing responses to report. Frequency counts and their corresponding percentages were reported in tables and text in the subsequent pages.

Legal Knowledge

Legal Knowledge concentrated on six legal topics pertinent to the public-school principal's job. Legal Knowledge topics addressed whether principals indicated knowledge of special education provisions in NCLB (now ESSA), components of the Rehabilitation Act (Section 504) that affect public schools, how the ADA affects public schools, special education rules and regulations contained in the PA Administrative Code, and their district's Response to Intervention (RTI) plan (Frost & Kersten, 2011). Legal knowledge results can be found in Tables 12, 13, and 14.

The first legal knowledge question evaluated whether Pennsylvania public-school principals reported knowledge of IDEA, see Table 12. Ninety-five (95%) of respondents reported they had working knowledge of IDEA and its regulations. Five percent (5%) of respondents ($n=1$) reported lacking knowledge of IDEA. Legal knowledge question two, (survey question 12) addressed the understanding of special education provisions in NCLB, see Table 12. Sixteen participants (84%) reported knowledge of NCLB while only 3 participants reported a lack of knowledge (16%).

Table 12
Survey, Section II Results: Legal Knowledge Frequencies Questions 1 and 2

Legal Knowledge 1: Q10			Legal Knowledge 2: Q11		
	Frequency	Percent		Frequency	Percent
Yes	18	95.0	Yes	16	84.0
No	1	5.0	No	3	16.0
Total	19	100.0	Total	19	100.0

The third legal knowledge question asked if the Pennsylvania public-school principal had knowledge of the components of the Rehabilitation Act (Section 504) that affected public schools, see Table 13. Sixty-three percent (63%) of respondents reported they understood

Section 504; while 37% ($n=7$) reported lacking expertise of Section 504. Legal knowledge question 4, (survey questions 13) addressed the understanding of the Americans With Disabilities Act (ADA) and its effect on public-schools, see Table 13. Eleven participants (58%) reported knowledge of ADA while only 8 participants reported a lack of proficiency (42%).

Table 13

Survey, Section II Results: Legal Knowledge Frequencies Questions 3 and 4

Legal Knowledge 3: Q12			Legal Knowledge 4: Q13		
	Frequency	Percent		Frequency	Percent
Yes	12	63.0	Yes	11	58.0
No	7	37.0	No	8	42.0
Total	19	100.0	Total	19	100.0

The final two questions in the legal knowledge section addressed knowledge of special education rules and regulations contained in the PA Administrative Code and the principals' district's Response to Intervention (RTI) plan, see Table 14. Forty-seven percent (47%) felt they understood special education rules and regulations contained in the PA Administrative Code ($n=9$), while 53% ($n=10$) reported they did not grasp the special education rules and regulations ($n=10$). Ten participants (53%) indicated they understood their districts' RTI plan, while 47% reported they did not ($n=9$).

Table 14

Survey, Section II Results: Legal Knowledge Frequencies Questions 5 and 6

Legal Knowledge 5: Q14			Legal Knowledge 6: Q15		
	Frequency	Percent		Frequency	Percent
Yes	09	47.0	Yes	10	53.0
No	10	53.0	No	09	47.0
Total	19	100.0	Total	19	100.0

Foundational Knowledge

Foundational knowledge focused on whether Pennsylvania public-school principals believed themselves to have adequate foundational knowledge in special education to effectively serve students with disabilities. Foundational knowledge included six questions that addressed accommodation in the LRE, parental involvement in the IEP process, the district's special education placement continuum, identification and placement, discipline, and the district's related services model (Frost & Kersten, 2011). Foundational knowledge question results can be seen in Tables 15, 16, and 17.

Foundational knowledge question number one (survey question 16) revealed 84% ($n=16$) of the Pennsylvania public-school principals surveyed understood how to accommodate for the academic needs for students with disabilities in the least restrictive environment; only 3 participants (16%) reported a lack of understanding, see Table 15. The second foundational knowledge (survey question 17) had the same results as question one. Of those surveyed, 84% ($n=16$) were knowledgeable regarding the parents' role in developing IEPs while 16% ($n=3$) did not fully understand a parents' role in IEP development was, see Table 15.

Table 15

Survey, Section II Results: Foundational Knowledge Frequencies Questions 1 and 2

Foundational Knowledge 1: Q16			Foundational Knowledge 2: Q17		
	Frequency	Percent		Frequency	Percent
Yes	16	84.0	Yes	16	84.0
No	3	16.0	No	3	16.0
Total	19	100.0	Total	19	100.0

The third foundational knowledge question evaluated whether principals understood the special education continuum from least to most restrictive, see Table 16. All participants ($N=19$) disclosed they comprehended special education continuum and placement. Foundational

knowledge question 4, (survey question 19) addressed each district's educational placement procedure for special education, see Table 16. Fifteen participants (79%) said they understood their district's procedures for placing students in special education while 21% reported they lacked knowledge in this area ($n=4$).

Table 16

Survey, Section II Results: Foundational Knowledge Frequencies Questions 3 and 4

Foundational Knowledge 3: Q18			Foundational Knowledge 4: Q19		
	Frequency	Percent		Frequency	Percent
Yes	19	100.0	Yes	15	79.0
No	00	000.0	No	4	21.0
Total	19	100.0	Total	19	100.0

The remaining foundational knowledge questions (5 and 6) were devoted to discipline and related services, see Table 17. Foundational knowledge question five (survey question 10) asked principals if they were knowledgeable on the disciplinary interventions and supports for students with disabilities; 74% ($n=14$) felt they understood discipline and special education while 26% ($n=5$) did not. Seventy-nine percent ($n=15$) of principals indicated they were familiar with their district's related service programs, such as speech-language pathology, occupational therapy, social work, etc. while 21% ($n=4$) lacked full awareness.

Table 17

Survey, Section II Results: Foundational Knowledge Frequencies Questions 5 and 6

Foundational Knowledge 5: Q20			Foundational Knowledge 6: Q21		
	Frequency	Percent		Frequency	Percent
Yes	14	74.0	Yes	15	79.0
No	05	26.0	No	04	21.0
Total	19	100.0	Total	19	100.0

Contextual Knowledge

The final yes/no section addressed Pennsylvania public-school principals' competency of contextual knowledge and special education. Six questions were presented to public-school principal participants to determine if they perceived themselves to have contextual knowledge in special education to serve students with disabilities. This section queried responses on state learning standards, effective instructional practices, academic assessments, curriculum design, program improvement plans, and evaluation of IEPs by staff (Frost & Kersten, 2011). Contextual knowledge question results can be found in Tables 18, 19, and 20.

Contextual knowledge question one (survey question 22) queried principals if they were comfortable with PA state learning standards for students with disabilities. Seventy-four percent of survey respondents ($n=14$) were comfortable with state learning standards and disabilities while 26% ($n=5$) felt they lacked awareness in this area, see Table 18. The second contextual knowledge question addressed effective instructional practices for students with disabilities. Of those principals who responded, 37% ($n=7$) reported they understood best instructional practices for students with disabilities and 63% ($n=13$) reported to be deficient, see Table 18.

Table 18

Survey, Section II Results: Contextual Knowledge Frequencies Questions 1 and 2

Contextual Knowledge 1: Q22			Contextual Knowledge 2: Q23		
	Frequency	Percent		Frequency	Percent
Yes	14	74.0	Yes	07	37.0
No	05	26.0	No	12	63.0
Total	19	100.0	Total	19	100.0

The third and fourth contextual knowledge questions determined proficiency levels for assessments and curriculum design for students with disabilities, see Table 19. Over half of the public-school principals surveyed (53%; $n=10$) believed they understood assessments for

students with disabilities while 47% ($n=9$) did not. On the other side, 47% ($n=9$) of respondents felt they possessed the ability to design curriculum for students with disabilities and 53% ($n=10$) did not possess sufficient knowledge and skills to design curriculum and programming for special education.

Table 19

Survey, Section II Results: Contextual Knowledge Frequencies Questions 3 and 4

Contextual Knowledge 3: Q23			Contextual Knowledge 4: Q25		
	Frequency	Percent		Frequency	Percent
Yes	10	53.0	Yes	09	47.0
No	09	47.0	No	10	53.0
Total	19	100.0	Total	19	100.0

Contextual knowledge questions five and six (see Table 20) sought to determine if principals could develop a plan for program improvement in special education (knowledge 5, survey question 26) and how IEPs were evaluated by staff in the school (knowledge 6 survey question 27). Fifty-eight percent ($n=11$) of participants deemed they were unable to develop a plan for program improvement in special education. Eight participants (42%) felt they had the skill set to develop a special education improvement plan. Just under half of the public-school principals surveyed (47%; $n=9$) were unsure how student IEPs were evaluated within their district; 53% ($n=10$) reported having knowledge of IEP evaluation.

Table 20

Survey, Section II Results: Contextual Knowledge Frequencies Questions 5 and 6

Contextual Knowledge 5: Q26			Contextual Knowledge 6: Q27		
	Frequency	Percent		Frequency	Percent
Yes	08	42.0	Yes	10	53.0
No	11	58.0	No	09	47.0
Total	19	100.0	Total	19	100.0

Comparison of Special Education Classes Among Groups

One purpose of this research study was to provide a platform where current Pennsylvania public-school principals could identify where their knowledge was lacking and how to become a better instructional leader for their special education population. One of the research questions was to determine, what relationship, if any, existed between the amount of special education training received by Pennsylvania public-school principals in their certification program and their ability to effectively lead special education programs within their district. The information contained in Table 21 was an analysis between the number of classes taken in a certification program and the length of service for participants.

The key result in the Chi-Square Test table was the Fisher's Exact Test, see Table 21. The Fisher's Exact Test was used to evaluate the differences between the amount of special education training received in the Pennsylvania public-school principals' certification program to each of the assessed questions in legal, foundational, and contextual knowledge. The Fisher's exact text was used because one or more of cells in each category had a frequency of five or less. A chi-square test could not be performed because the chi-square test assumed each cell had an expected frequency of five or more, but the Fisher's exact test had no such assumption and could be used regardless of how small the expected frequency was. The value of the test statistic was 10.84 with the corresponding p-value of $p = 0.28$. Since the p -value was greater than the chosen significance level ($\alpha = 0.05$), the researcher did not reject the null hypothesis (test value $0.28 < 1.83$ table value). Rather, the researcher concluded that there was no evidence to suggest an association between respondent role (elementary and secondary public-school principal) and the amount of special education training taken in a principal's certification program and length of service in the position, see Table 21.

The test statistic was based on a 2 X 4 crosstabulation table. Based on statistical analysis, no association was found between current principal special education classes taken and length of service ($\chi^2(2) = 10.84, p = 0.28$).

Based on the statistics, the researcher concluded the following:

1. There was no relationship identified between the amount of special education training received by Pennsylvania public-school principals in their certification program and the ability to effectively lead special education programs within their district.

The Research accepted the null hypothesis: H_0 : There was no relationship between the Pennsylvania public-school principal's pre-service coursework and their actual knowledge of special education content and topics. Figure 3 shows the breakdown of participants based on years of service in the position and the number of special education classes take during their certification programs.

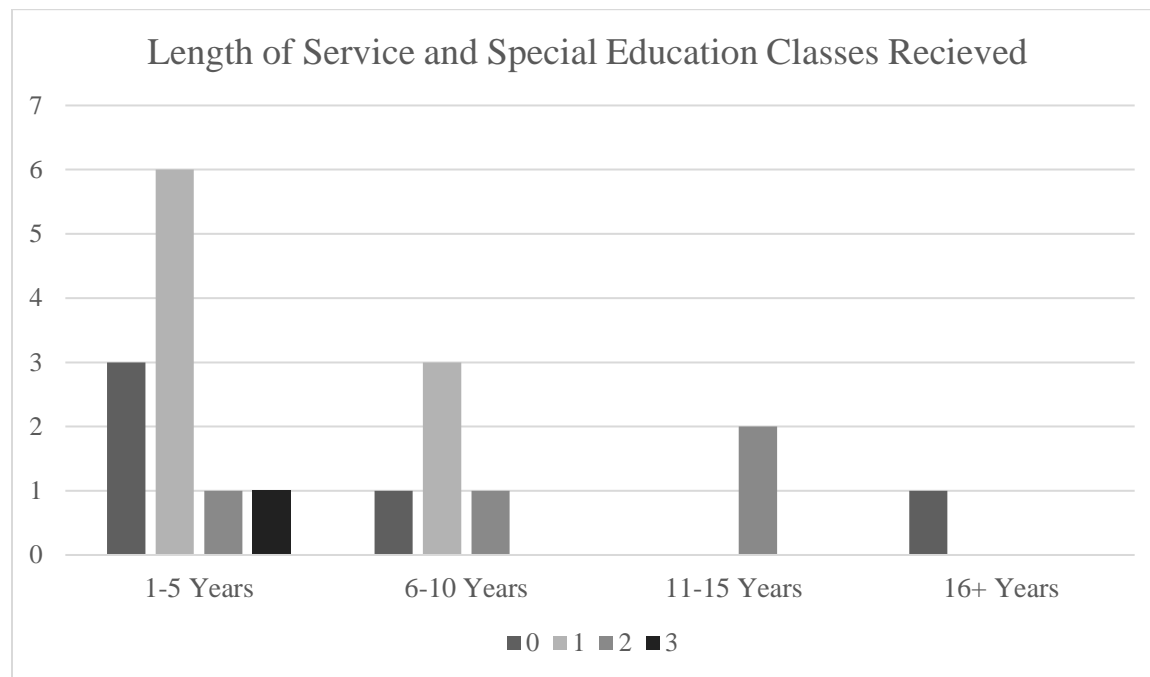
Table 21
Comparison of Length of Service and Special Education Training

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	11.987 ^a	9	.214	.222		
Fisher's Exact Test	10.836			.278		
N of Valid Cases	19					

Note: a. 15 cells (93.8%) have expected count less than 5. The minimum expected count is .05.

Figure 3

Comparison of Length of Service and Number of Special Education Classes Taken



Survey Results: Section III; Frequencies

Section III contained fifteen questions using 5-point Likert scales ranking answer choices from never (1) to always (5) that addressed the Pennsylvania public-school principals' frequencies of use surrounding legal topics, foundational, and contextual knowledge. Section III contained four sub-sections to address Pennsylvania public-school principals' frequencies of engagement in legal, contextual, and foundation knowledge of special education topics based on the work by Frost and Kersten (2011) and perceived competencies developed by Garrison-Wade, Sobel, and Fulmer (2001). Legal, foundational, and contextual frequencies used a 5-point Likert type scale ranging from never (1) to always (5). The indicators were written as positive statements and participants were asked to indicate how often a specific instructional leadership behavior with special education teachers was used (Frost & Kersten, 2011). Perceived

competency questions used a 5-point Likert type scale ranging from emergent (0) to exemplary (5) and were also written as positive statements that aligned with study objectives.

Legal Frequencies

Legal frequencies assessed the hiring special education teachers, monitoring student IEPs, and the implementation of federal and state special education requirements, attendance at professional development related to legal issues in special education, and attendance at pre-referral meetings of the school-based service team (Frost & Kersten, 2011). Descriptive statistics were broken down by respondent for Legal Frequencies for all participants ($N=19$) were reported in Table 22.

Legal frequencies evaluated the hiring of special education teachers, IEP monitoring, state and federal guidelines, professional development issues, and attending pre-referral meetings (Frost & Kersten, 2011). Based upon the reported data, all principals rated hiring of special education teachers, monitoring the implementation of federal and state special education requirements, and monitoring of student IEPs in the often range with a mean span of 3.00 through 3.63. All principals reported they seldom attended professional development related to legal issues in special education ($\mu=2.47$) and they seldom attended pre-referral meetings for special education ($\mu=2.95$). Analysis of the data collected revealed both elementary and secondary principals were often involved in hiring special education teachers (elementary $\mu=3.57$; secondary $\mu=3.67$). Elementary school principals reported they often monitored student IEPs ($\mu=3.14$) while secondary principals seldom engaged in IEP monitoring ($\mu=2.92$). Elementary principals often attended meetings surrounding the pre-referral process for special education ($\mu=3.00$) while secondary principals reported this was a practice they seldom engaged in ($\mu=2.92$).

The Independent Samples *t*-test, see Table 23, was used to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for all three areas: legal, foundational, and contextual frequencies. The Independent Samples *t*-Test was used for Section II: Beliefs, Legal Frequencies (Table 23), Foundational Frequencies (Table 26) and Contextual Frequencies (Table 29) to test the statistical differences between the means of the elementary and secondary participant groups.

The analysis of variance (ANOVA) was used compare the means of two or more independent groups (length of service) in order to determine whether there was statistical evidence that the associated population means were significantly different for public-school principals based on years of service (See Table 24).

Table 22

Comparison of Mean and Standard Deviations between All Participants for Legal Frequencies

Survey Question	All Participants (<i>N</i> =19)			Elementary Participants (<i>n</i> =07)			High School Participants (<i>n</i> =12)		
	M	σ	σ^2	M	σ	σ^2	M	σ	σ^2
Hiring SPED Teachers	3.63	1.16	1.36	3.57	.98	.96	3.67	1.30	1.70
Monitoring IEPs	3.00	.88	.79	3.14	1.24	1.48	2.92	.67	.45
Monitoring federal/state requirements.	3.05	1.08	1.16	3.00	1.00	1.00	3.08	1.16	1.36
Attending annual PD	2.47	.77	.60	2.86	1.07	1.14	2.25	.45	.21
Attending pre-referral meetings	2.95	1.13	1.28	3.00	.58	.33	2.92	1.38	1.90

Note: M= mean; σ = standard deviation; σ^2 = variance, PD=professional development; SPED=special education

Table 23

Independent Samples T-Test Section II, Legal Frequencies, Survey Questions 28-32; comparing participant role

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	p.	t	df	Sig. (2-tailed)	Mean diff.	Std. error diff.	95% CI	
									LL	UL
LF 1	Q28	.867	.365	-.167	17	.869	-.09524	.570	-.297	1.106
LF 2	Q29	1.074	.315	.528	17	.604	.22619	.428	-.677	1.129
LF 3	Q30	1.319	.267	-.158	17	.876	-.08333	.528	-.196	1.030
LF 4	Q31	2.671	.121	1.744	17	.099	.60714	.34810	-.128	1.342
LF 5	Q32	5.787	.028	.151	17	.882	.08333	.552	-.082	1.248

Note: CI=confidence interval; LF= legal frequency question; LL= lower limit; UL= upper limit; Diff.=difference; Q=corresponding survey question

Table 24

ANOVA Section II, Legal Frequencies, Survey Questions 28-32; comparing years of service

		Sum of Squares	df	Mean Square	F	Sig.
Legal Frequency 1 Question 28:	Between Groups	5.376	3	1.792	1.411	.278
	Within Groups	19.045	15	1.270		
	Total	24.421	18			
Legal Frequency 2 Question 29:	Between Groups	6.155	3	2.052	3.922	.030
	Within Groups	7.845	15	.523		
	Total	14.000	18			
Legal Frequency 3 Question 30:	Between Groups	2.947	3	.982	.819	.503
	Within Groups	18.000	15	1.200		
	Total	20.947	18			
Legal Frequency 4	Between Groups	.991	3	.330	.509	.682

Question 31:	Within Groups	9.745	15	.650		
	Total	10.737	18			
Legal Frequency 5	Between Groups	4.520	3	1.507	1.226	.335
Question 32:	Within Groups	18.427	15	1.228		
	Total	22.947	18			

Foundational Frequencies

Foundational frequencies counted attendance at annual IEP meetings, reviewing annual special education workload, encouraging parental involvement, formal evaluations of special education teachers, and monitoring alignment of IEPs to state learning standards (Frost & Kersten, 2011). The 5-point Likert type scale ranged from never (1) to always (5) was used for foundational frequency tabulation. Descriptive statistics for foundational frequencies are found in Table 25.

Based upon the reported data, all principals rated attendance at IEP meetings, reviewing special education workload, parental engagement, and conducting formal evaluation of special education teachers in the often range with a mean span of 3.21 through 3.84. All principals rated monitoring IEP alignment as something they seldom engaged in with ranges with a mean score of 2.63.

Elementary principals reported they frequently attended IEP meetings ($\mu=3.86$) and encouraged parents of special education students to participate in school functions ($\mu=3.29$). Elementary principals reported frequent review of special education workload and formal evaluation of special education teachers in the often range ($\mu=3.71$). Elementary principals rated IEP monitoring as something they seldomly did ($\mu=2.71$).

High school principals reported attendance at IEP meetings ($\mu=3.83$), reviewing special education workload ($\mu=3.33$), parental engagement ($\mu=3.17$), and conducting formal evaluation

of special education teachers ($\mu=3.58$) as practices they often engaged in. High school principals reported they also seldomly monitored special education IEP alignment ($\mu=2.58$).

Levene's Test for Equality of Variance was used to determine homogeneity of variance for elementary and secondary principal participants for Section III: Foundational Frequencies (see Table 26). The researcher conducted an ANOVA for Section III: Foundational Frequencies, results can be seen in Table 27.

Table 25

Descriptive Statistics for Foundational Frequencies, Survey Questions 33-37

Survey Question	All Participants (N=19)			Elementary Participants (n=07)			High School Participants (n=12)		
	M	σ	σ^2	M	σ	σ^2	M	σ	σ^2
Attending IEPs Q33	3.84	1.01	1.03	3.86	.90	.81	3.83	1.11	1.24
Reviewing SPED assignments to ensure staff is retained. Q34	3.47	.96	.93	3.71	1.11	1.24	3.33	.89	.79
Encouraging parent participation. Q35	3.21	.92	.84	3.29	.95	.91	3.17	.94	.88
Conducting evaluations SPED teachers. Q36	3.63	1.42	2.02	3.71	1.25	1.57	3.58	1.56	2.44
Monitoring alignment of IEPs Q37	2.63	1.38	1.92	2.71	1.60	2.57	2.58	1.31	1.72

Note: IEP=Individualized education plan; M= mean; PD=professional development; Q=corresponding survey question; SPED=special education; σ = standard deviation; σ^2 = variance

Table 26

Section III; Foundational Frequencies: Independent Sample Test for Equality of Variances Based on Participant Role

		Levene's Test for Equality of Variances				t-test for Equality of Means				
							Mean	Std. Error	95% CI	
Code	Question	F	p.	T	df	Sig. (2- tailed)	Differen ce	Differen ce	LL	UL
FF 1	Q33	.339	.568	.048	17	.962	.024	.496	-.024	1.071
FF 2	Q34	.554	.467	.823	17	.422	.381	.463	-.595	1.357
FF3	Q35	.011	.918	.266	17	.794	.119	.448	-.826	1.065
FF 4	Q36	.994	.333	.188	17	.853	.131	.695	-.336	1.598
FF 5	Q37	.560	.464	.194	17	.849	.1315	.676	-.295	1.557

Note: CI=confidence interval; Diff.=difference; FF= foundational frequency question; LL= lower limit; UL= upper limit; Q=corresponding survey question

Table 27

Section III; ANOVA for Foundational Frequencies, Questions 33-36

		Sum of		Mean Square	F	Sig.
		Squares	df			
FF 1 Q33	Between Groups	2.826	3	.942	.900	.464
	Within Groups	15.700	15	1.047		
	Total	18.526	18			
FF2 Q34	Between Groups	.810	3	.270	.254	.857
	Within Groups	15.927	15	1.062		
	Total	16.737	18			
FF3 Q35	Between Groups	3.049	3	1.016	1.259	.324
	Within Groups	12.109	15	.807		

	Total	15.158	18			
FF4	Between	.539	3	.180	.075	.972
Q36	Groups					
	Within Groups	35.882	15	2.392		
	Total	36.421	18			

Note: FF= foundational frequency question; Q=corresponding survey question

Contextual Frequencies

Contextual frequencies ranked participant involvement in arranging monthly activities to build collegiality between special and general education staff, planning program improvement, weekly visits to special education classrooms, attendance at team meetings with special education staff to discuss concerns, and monitoring special education curriculum (Frost & Kersten, 2011). The 5-point Likert type scale ranged from never (1) to always (5) was used for contextual frequency tabulation. Descriptive statistics broken down by role for Contextual Frequencies for all participants are noted in Table 28.

Based upon the reported data, all principals rated they often made weekly visits to special education classrooms ($\mu=3.21$) and attended meetings with special education staff to address concerns ($\mu=3.16$). All principals reported they seldom arranged monthly activities to build collegiality between special and general education staff ($\mu=2.79$) and they planned improvements for special education programs ($\mu=2.47$). Lastly, all principals reported they seldomly engaged in the monitoring of special education programming and ensuring curriculum was research or evidence-based ($\mu=2.42$).

Analysis of the collected data indicated both elementary and secondary principals reported they often made visits to special education classrooms (elementary: $\mu=3.00$; secondary $\mu=3.33$) and they often attended meetings special education staff to discuss concerns (elementary: $\mu=3.00$; secondary $\mu=3.25$). Secondary school principals reported they often

arranged monthly activities to build collegiality between special and general education staff ($\mu=3.08$) while elementary principals seldom engaged in promoting staff collaboration ($\mu=2.29$). Elementary ($\mu=2.43$) and secondary ($\mu=2.42$) principals reported they seldomly assured that special education programs were evidence-based.

The Independent Samples *t*-Test (see Table 29) was used to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for foundational frequencies while the ANOVA was used to evaluate statistics for participant length of service (see Table 30).

Table 28

Descriptive Statistics for Contextual Frequencies, Survey Questions 38-42

Survey Question	All Participants (N=19)			Elementary Participants (n=07)			High School Participants (n=12)		
	M	σ	σ^2	M	σ	σ^2	M	σ	σ^2
Arranging activities to build collegiality between SPED/ general education staff. Q38	2.79	1.23	1.51	2.29	.76	.57	3.08	1.38	1.90
Planning program improvement for SPED. Q39	2.47	.96	.93	2.29	.95	.91	2.58	.99	.99
Making weekly informal visits to SPED classrooms. Q40	3.21	.98	.95	3.00	.58	.33	3.33	1.15	1.33
Attending meetings with SPED staff Q41	3.16	1.01	1.03	3.00	.82	.67	3.25	1.38	1.30
Monitoring SPED curriculum to ensure	2.42	.77	.60	2.43	.98	.95	2.42	.67	.45

that it is research- or
evidence-based. Q42

Note: M= mean; Q=corresponding survey question; SPED=special education; σ = standard deviation; σ^2 = variance

Table 29

Independent Samples T-test based on Participant Role for Contextual Frequencies, Survey Questions 38-42

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Diff.	Std. Error Diff.	95% CI	
									LL	UL
CF 1	Q38	2.708	.118	-1.401	17	.179	-.798	.569	-1.998	.403
CF. 2	Q39	.405	.533	-.638	17	.532	-.298	.466	-1.282	.686
CF 3	Q40	6.049	.025	-.708	17	.489	-.333	.471	-1.327	.660
CF 4	Q41	1.022	.326	-.507	17	.618	-.250	.493	-1.290	.790
CF.5	Q42	1.338	.263	.032	17	.975	.012	.376	-.782	.805

Note: CI=confidence interval; CF= contextual frequency question, Diff.=difference; LL= lower limit; UL= upper limit; Q=corresponding survey question

Table 30

ANOVA based on Length of Service for Contextual Frequencies, Survey Questions 38-42

		Sum of Squares	df	Mean Square	F	Sig.
CF 1 Q38	Between Groups	4.658	3	1.553	1.035	.405
	Within Groups	22.500	15	1.500		
	Total	27.158	18			
CF 2: Q39	Between Groups	.810	3	.270	.254	.857
	Within Groups	15.927	15	1.062		
	Total	16.737	18			
CF 3 Q40	Between Groups	5.158	3	1.719	2.149	.137
	Within Groups	12.000	15	.800		
	Total	17.158	18			
CF 4	Between Groups	.317	3	.106	.087	.966

Q41	Within Groups	18.209	15	1.214		
	Total	18.526	18			
CF 5	Between Groups	1.150	3	.383	.606	.621
Q42	Within Groups	9.482	15	.632		
	Total	10.632	18			

Note: CF= contextual frequency question; Q=corresponding survey question

Perceived Competencies

The final component of Section III was based on the work of Garrison-Wade, Sobel, and Fulmer (2001) and evaluated Pennsylvania public-school principals' perceived competencies for special education areas. Questions used a 5-point Likert type scale ranging from emergent (0) to exemplary (5). Descriptive statistics broken down by Perceived Competencies for all participants ($N=19$) are shown in Table 31.

Survey participants rated their perceived competencies as proficient (scores of 2 or more) and higher for all areas questioned. Review of the collected data indicated all principals rated their lowest competency as question 44, the ability to make and implement differentiated learning recommendations for learners with diverse needs ($\mu=2.79$); although this was the lowest competency, participants reported the level as proficient. All principals reported they were proficient at being able to develop school-wide positive behavior support programs ($\mu=2.95$; question 42). Question 43 analysis revealed all principals felt they had the ability to facilitate effective collaboration between general and special education teachers ($\mu=2.79$). All principals rated their ability to lead an initiative that created a learning environment that allowed for alternative styles of learning (question 45) as proficient ($\mu=3.00$). All participants rated themselves at proficient for question 46 (develop activities and make recommendations for professional development training regarding inclusive practices; $\mu=2.89$) and question 47 (the ability to generate options and possible solutions in resource management; $\mu=2.84$).

The Independent Samples *t*-test (see Table 32) was used to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for perceived competencies for the groups and the ANOVA was used to evaluate statistics for participant length of service (see table 33).

Table 31

Descriptive Statistics for Perceived Competencies, Survey Questions 43-49

Survey Question	All Participants (N=19)			Elementary Participants (n=07)			High School Participants (n=12)		
<i>I have the ability to:</i>	M	σ	σ^2	M	σ	σ^2	M	σ	σ^2
Develop school-wide PBS programs. Q43	2.95	.97	.94	2.86	1.35	1.81	3.00	.74	.55
Facilitate effective collaboration between general/SPED teachers. Q44	3.21	1.03	1.06	2.86	1.35	1.81	3.42	.79	.63
Make/implement differentiated learning. Q45	2.79	1.18	1.40	2.29	1.50	2.24	3.08	.90	.81
Lead an initiative that creates a learning environment that allows for alternative styles of learning. Q46.	3.00	.94	.89	2.71	1.37	1.91	3.17	.58	.33
Develop activities for PD regarding inclusive practices. Q47	2.89	1.05	1.01	2.57	1.40	1.95	3.08	.79	.63
Generate options and possible solutions in resource management Q48	2.84	1.17	1.36	2.43	1.51	2.29	3.08	.90	.81

Coach and provide constructive feedback and mentoring to special education and support service personnel. Q49	3.21	.85	.73	3.14	.90	.81	3.25	.87	.75
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Note: IEP=Individualized education plan; M= mean; PBS= positive behavior support; PD=professional development; Q=corresponding survey question; SPED=special education; σ = standard deviation; σ^2 = variance

Table 32

Section III; Perceived Competencies: Independent Sample Test for Equality of Variances Based on Participant Role, Survey Questions 43-49

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% CI	
									LL	UL
PC 1	Q42	3.099	.096	-.302	17	.767	-.143	.474	-1.14	.856
PC 2	Q43	1.891	.187	-1.151	17	.266	-.560	.486	-1.586	.466
PC 3	Q44	2.988	.102	-1.463	17	.162	-.798	.545	-1.949	.353
PC 4	Q45	7.827	.012	-1.009	17	.327	-.452	.448	-1.398	.493
PC 5	Q46	2.430	.137	-1.028	17	.318	-.512	.498	-1.562	.536
PC 6	Q47	3.694	.072	-1.193	17	.249	-.655	.549	-1.813	.501
PC 7	Q48	.104	.751	-.257	17	.801	-.107	.418	-.988	.774

Note: CI=confidence interval; Diff.=difference; LL= lower limit; UL= upper limit; PC= perceived competency question, Q=corresponding survey question

Table 33

Section III; Perceived Competencies: ANOVA Based on Participant Length of Service, Survey Questions 43-49

		Sum of Squares	df	Mean Square	F	Sig.
Perceived Competency 1; Q42	Between Groups	6.266	3	2.089	2.933	.068
	Within Groups	10.682	15	.712		
	Total	16.947	18			

Perceived Competency 2; Q43	Between Groups	4.549	3	1.516	1.557	.241
	Within Groups	14.609	15	.974		
	Total	19.158	18			
Perceived Competency 3; Q44	Between Groups	4.431	3	1.477	1.069	.392
	Within Groups	20.727	15	1.382		
	Total	25.158	18			
Perceived Competency 4; Q45	Between Groups	1.500	3	.500	.517	.677
	Within Groups	14.500	15	.967		
	Total	16.000	18			
Perceived Competency 5; Q46	Between Groups	3.353	3	1.118	1.020	.412
	Within Groups	16.436	15	1.096		
	Total	19.789	18			
Perceived Competency 6; Q47	Between Groups	.344	3	.115	.071	.974
	Within Groups	24.182	15	1.612		
	Total	24.526	18			
Perceived Competency 7; Q48	Between Groups	1.522	3	.507	.654	.593
	Within Groups	11.636	15	.776		
	Total	13.158	18			

Note: Q=corresponding survey question

Section IV: Open Ended Questions

In the qualitative data collection component, open-ended questions were used to elicit further description of Pennsylvania public-school principals' beliefs regarding the administration of special education (see Appendix F for the question protocol). The protocol consisted of nine questions developed by researchers Frost and Kersten (2011) and Garrison-Wade, Sobel, and Fulmer (2001) based on their literature reviews and surveys. Respondents were asked to describe specific behaviors and beliefs pertaining to the administration of special education. The open ended questions were chosen to (a) learn specific strategies and/or processes principals

believe future public-school principals need to learn to support special education practices (b) to gather data on the benefits and disadvantages of working within schools that serve students with diverse needs and backgrounds, (c) to identify specific principal beliefs on placement recommendations for special education students and (c) to offer specific strategies that they perceived were effective in working with students in special education.

Data was coded and analyzed to determine patterns in the responses. Data was divided into key themes assigned (through review of each response) using a coding system developed by the researcher. To obtain qualitative data, a semi-structured open-ended question protocol was used to elicit further description of Pennsylvania public-school principals' beliefs regarding the administration of special education. Respondents were asked to describe specific behaviors and beliefs in their daily administration of special education. The open-ended questions were included in the study to (a) learn specific strategies and/or processes Pennsylvania public-school principals believed future public-school principals need to learn to support special education practices (b) to gather data on the benefits and disadvantages of working within schools that serve students with diverse needs and backgrounds, (c) to identify specific concerns perceived when working in a school with learners having diverse backgrounds and needs (d) to identify any challenges experienced in working with special education teachers on issues related to inclusive practices or special education, (e) to offer specific strategies that they perceived were effective in working with students in special education , and (f) provide recommendations for principals and prospective principals to improve supportive special education practices.

Open ended questions were as follows:

1. What type of disabilities have you encountered most frequently in your experience as a principal/administrator (Frost & Kersten, 2011)?

2. What benefits do you perceive for yourself and your students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007)?
3. What concerns do you have for yourself and your students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007)?
4. Describe the working relationship with your administrator(s) (Garrison-Wade, Sobel, & Fulmer, 2007).
5. Describe a specific initiative/action/project that your administrator has undertaken to support inclusive services in your school building (Garrison-Wade, Sobel, & Fulmer, 2007).
6. Have you experienced any challenges in working with an administrator on issues related to inclusive practices? If so, please identify (Garrison-Wade, Sobel, & Fulmer, 2007).
7. What questions do you have regarding addressing the needs of learners with diverse needs and backgrounds that you feel should be addressed in an administrator preparation program (Garrison-Wade, Sobel, & Fulmer, 2007)?
8. Please identify specific strategies and/or processes that you believe future administrators need to learn to support inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007).
9. Please identify any projects that you believe could help future administrators become skilled supporting inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007).

Pennsylvania public-school principals were asked to disclose their current beliefs related to special education and diversity issues of students within their district. This study attempted to create an understanding of the beliefs and special education practices held by current Pennsylvania public-school principals. Section IV of the survey was qualitative in nature. Elliot, Fisher, and Rennie (1999) reported the “aim of qualitative research is to understand and represent the experiences and actions of people as they encounter, engage, and live through situations” (p. 216). The researcher attempted to be free from bias and used verbatim responses as the data collection tool to “observe, measure, and predict empirical phenomena and build tangible, material knowledge” (Tracy, 2013, p. 39). Participants were asked to express their beliefs and ideals in relation to special education issues given their current role within their respective school districts. Nineteen ($N=19$) participants were asked open-ended questions (Tracy, 2013) in the online survey to gain insight into what professional skills Pennsylvania public-school principals felt were needed to effectively lead special education.

Data analysis began with line by line open coding of the open-ended transcripts/responses (Tracy, 2013). The researcher started with word-based techniques to identify word repetitions and key-words-in-contexts (KWIC), see Table 34. Word repetitions were analyzed formally by generating a list of all the unique words in the text and counting the number of times each occurred. NVIVO was used to generate KWIC word lists. No clear patterns emerged from the word analysis.

The researcher then attempted to look for naturally occurring shifts in thematic content using thematic transitions and evaluating words and phrases that indicated relationships among other items. The researcher conducted an unfiltered word count for each of the nine questions to look for patterns and words that indicated causal relationships; the top ten most used words from

each question were counted and reviewed using NVIVO, see Table 35. Causal relationships are often indicated by such words and phrases as, *because*, *since*, and as *a result*. Words such as *if* or *then*, *rather than*, and *instead of* often signify conditional relationships. The phrase *is a* is often associated with taxonomic categories. Time-oriented relationships were expressed with words such as *before*, *after*, *then*, and *next*. The researcher attempted to discover themes by searching for such groups of word and looking to see what kinds of ideas the words connected. A sample analysis of a detailed review of question six's unfiltered words is shown in Table 35 for open-ended survey question number three (all questions were reviewed and analyzed the same way). The KWIC and unfiltered word counts did not provide clear patterns to any themes in the questions presented.

Table 34

Sample Analysis: A detailed display of Question Three's Key Words in Context:

Some top phrases containing 3 words (without punctuation marks) Occurrences	
differentiation of instruction	2
needs of students	2
to meet the	2
Some top phrases containing 2 words (without punctuation marks) Occurrences	
needs of	3
of students	3
to be	2
differentiation of	2
often times	2
of instruction	2
to meet	2
that the	2
instruction and	2
of the	2
meet the	2

Note: Open Ended Question 3: What concerns do you have for yourself and your students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007)?

Table 35

Sample Phrase Analysis of Open-Ended Question 3 (Have you experienced any challenges in working with special education teachers on issues related to inclusive practices or special education? If so, please identify.)

Order	Unfiltered word	count	Occurrences	Percentage
1.	to	11	4.72	10
2.	and	11	4.72	10
3.	the	11	4.72	10
4.	of	8	3.43	35
5.	needs	7	3.00	43
6.	students	7	3.00	43
7.	that	5	2.14	59
8.	are	5	2.14	59
9.	be	3	1.28	76
10.	have	3	1.28	76

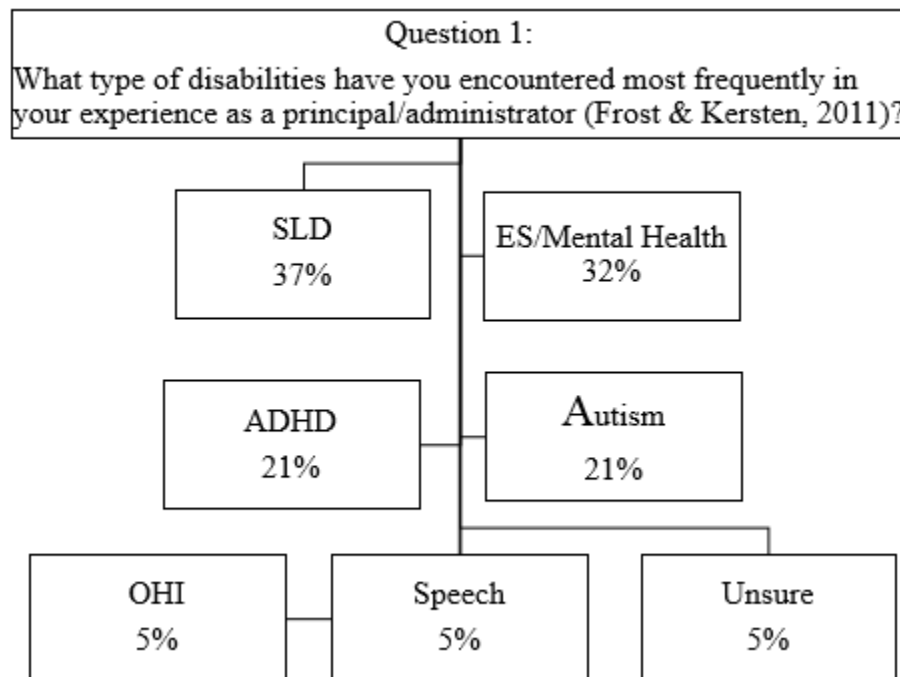
The qualitative data was collected via the process previously identified in Chapter 3. Data was converted to a graphic and/or chart to provide a visual representation of the information for each question. All visual data contained the categories the responses fit into as well. Each data set was analyzed both individually and collectively by question. After conducting the KWIC and unfiltered word counts, the researcher opted to complete line by line coding for each question to determine patterns. The initial stage of the data analysis consisted of internally reviewing the individual collections for any identifiable similarities or relationships among the responses. The second stage of the analysis consisted of comparing any identified relations among each of the individual questions between responses and looking for similarities, differences and relationships. In the presentation of the data, there is an individual chart and comment for each of the 9 open-ended response items.

The coded results from Question 1 (see Figure 4) indicated that as a group, Pennsylvania public-school principals identified two areas that were encountered most frequently in their

professional experiences. Note that some participant principals provided more than one item/area of need encountered for when answering question number one. Specific learning disability (37%) and emotional support/mental health needs (32%) were the top two areas that Pennsylvania public-school principals reported encountering the most often. Autism and ADHD both received a priority ranking by principals with 21%. Other health impairment (OHI) and speech-language disorders received rankings by 5% of participants. One participant (5%) was unsure what their top disability was.

Figure 4

Summary of collective principal responses to open ended question 1.



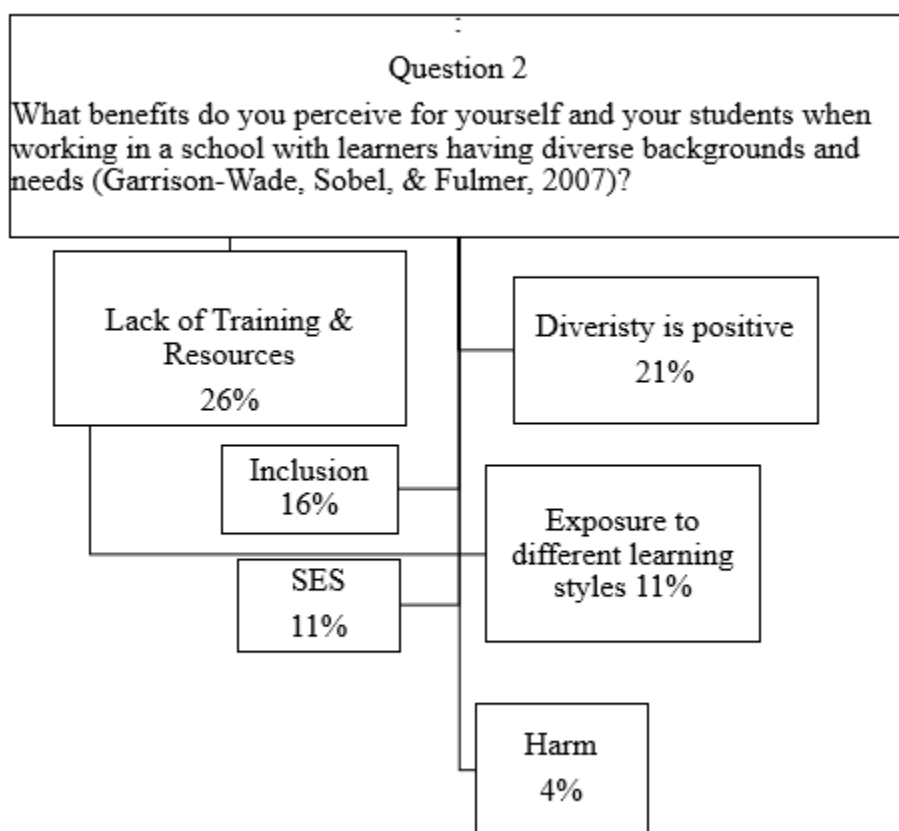
Note: ADHD= attention deficit hyperactivity disorder; ES= emotional; OHI= other health impairment; Speech= speech-language impairments; SLD= specific learning disability, support.

The second open-ended question asked principals to explain the perceived benefits to working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007). The results from Question 2 (see Figure 5) revealed that 26% of respondents reported there is a lack of training and resources needed for educators to be successful when

working with learners with diverse learning needs. Twenty-one percent had positive remarks and viewed working with diverse learners as a rewarding experience for all involved from staff to students. Sixteen percent of principals noted they had challenges when implementing inclusion program and 11% experienced challenges surrounding the varying levels of SES and exposure to different learning styles, see Figure 5. Four percent of participants said if the Pennsylvania public-school principal did not have the proper knowledge to implement and oversee special education programming they could do more harm than good.

Figure 5

Summary of collective principal responses to open ended question 2

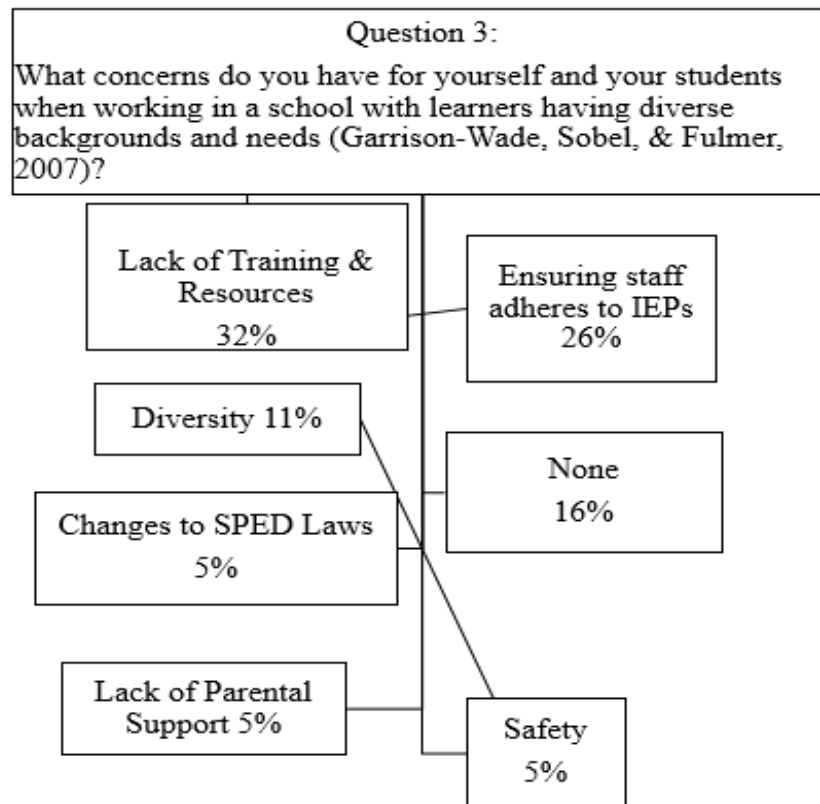


Note: SES= socioeconomic status

Open-ended question number three required Pennsylvania public-school principals to list their concerns for themselves and students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007). Sixteen percent of participants disclosed that they did not have any concerns working with learners with diverse learning needs, see Figure 6. A lack of training and resources was once again reported as high priority area with 32% of respondents citing areas of concern under this theme. Pennsylvania public-school principals also said it was difficult to ensure staff were following modifications and SDI in implemented IEPs. Having staff that was understanding of students differing needs and diversity was noted by 11% of survey participants. Five percent of survey respondents also expressed concerns for student safety, knowing changes to special education laws and regulations and a lack of parental support respectively.

Figure 6

Summary of collective principal responses to open ended question 3



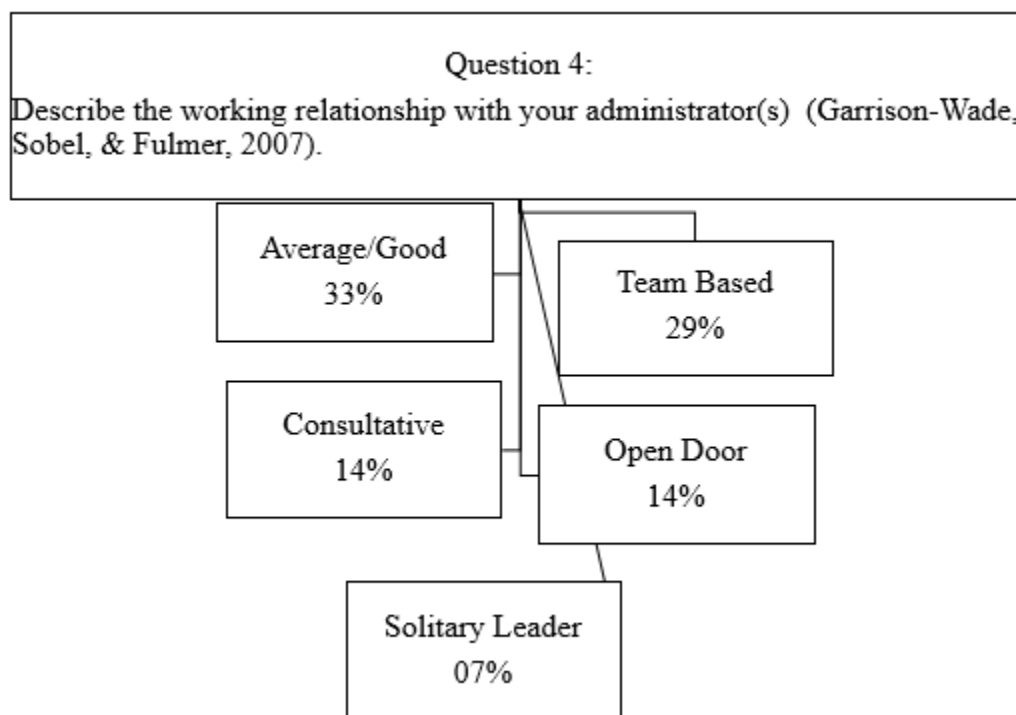
Note: IEP=individualized education plans; SPED=special education

The fourth open-ended question required survey participants to describe the working relationship between administrators and staff. A wide variety of answers were received, see Figure 7. Answers that referenced average, good, and positive working relationships were all included in the average/good category; 33% of respondents indicated experiencing positive working relationships with staff and between administrators in their districts. Twenty-nine percent revealed using a team-based approach when working with others in the district. Fourteen percent of participants said they engaged in an open-door policy with their co-workers and another 14% used a consultative approach. Seven percent of participants reported being the sole

decision maker in the district and no engagement with others was completed when making decisions and issuing directives.

Figure 7

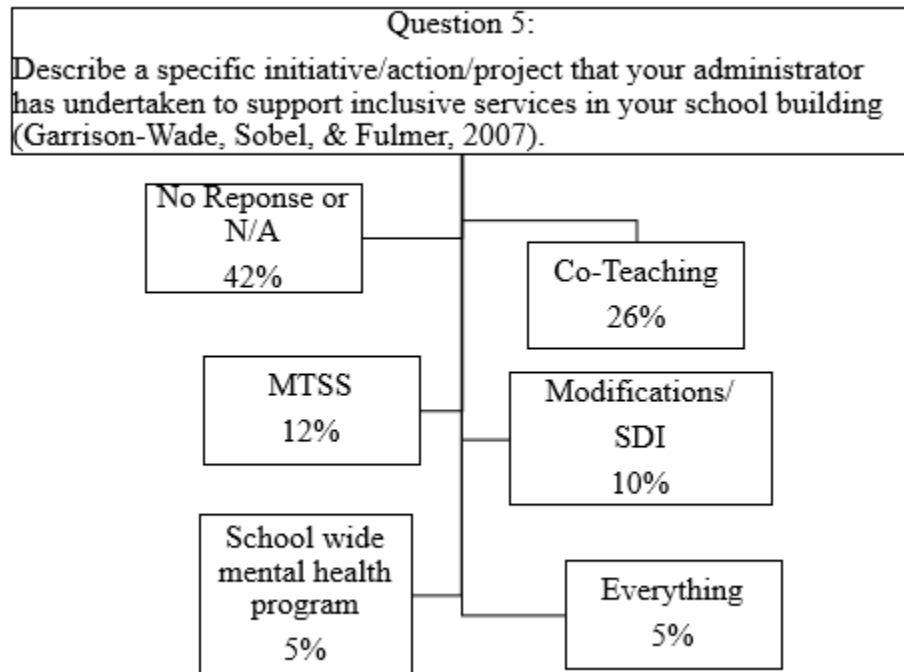
Summary of collective principal responses to open ended question 4



Open-ended question five had survey respondents describe and identify a specific project, action, or initiative that was being completed within their district to support inclusive practices for students with disabilities (Garrison-Wade, Sobel, & Fulmer, 2007). Forty-two percent of respondents chose not to answer question number five, see Figure 8. Twenty-six percent said that co-teaching was the initiative being incorporated to support inclusion and students with disabilities. Twelve percent related that MTSS was their initiative and 10% were using modifications and SDI as ways to support students. Five percent of participants had implemented school wide mental health initiatives to engage students. The final 5% reported everything they did throughout their programming and day supported inclusive practices within their district.

Figure 8

Summary of collective principal responses to open ended question 5.

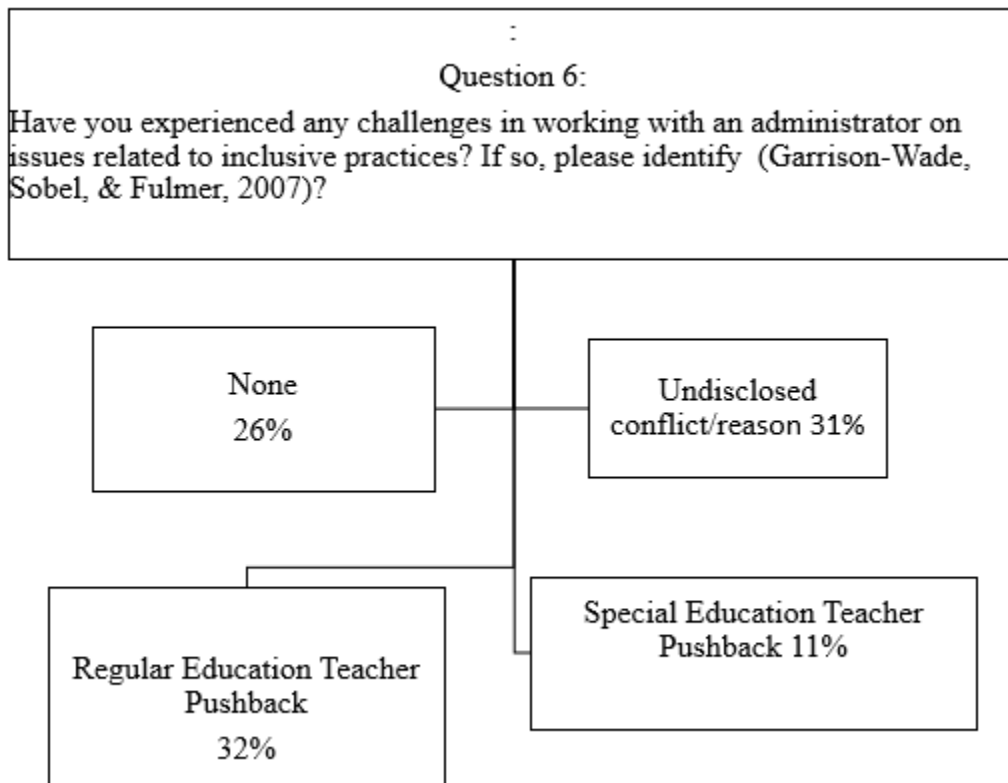


Note: SDI=specially designed instruction; MTSS= multi-tiered systems of support

Open-ended question number six requested principals to explain any challenges or difficulties they had experienced when working with another administrator on issues related to inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007). Twenty-six percent of those surveyed had not experienced any challenges; however, 31% related they had experienced issues but did not wish to expand upon the reason for the difficulties, see Figure 8. Multiple respondents indicated issues and/or conflicts between themselves and teaching staff (43%). Principals who noted challenges with faculty/staff indicated that regular education teachers were the highest group to challenge the principal when it came to inclusive practices (32%) and special education teachers came in at 11%.

Figure 9

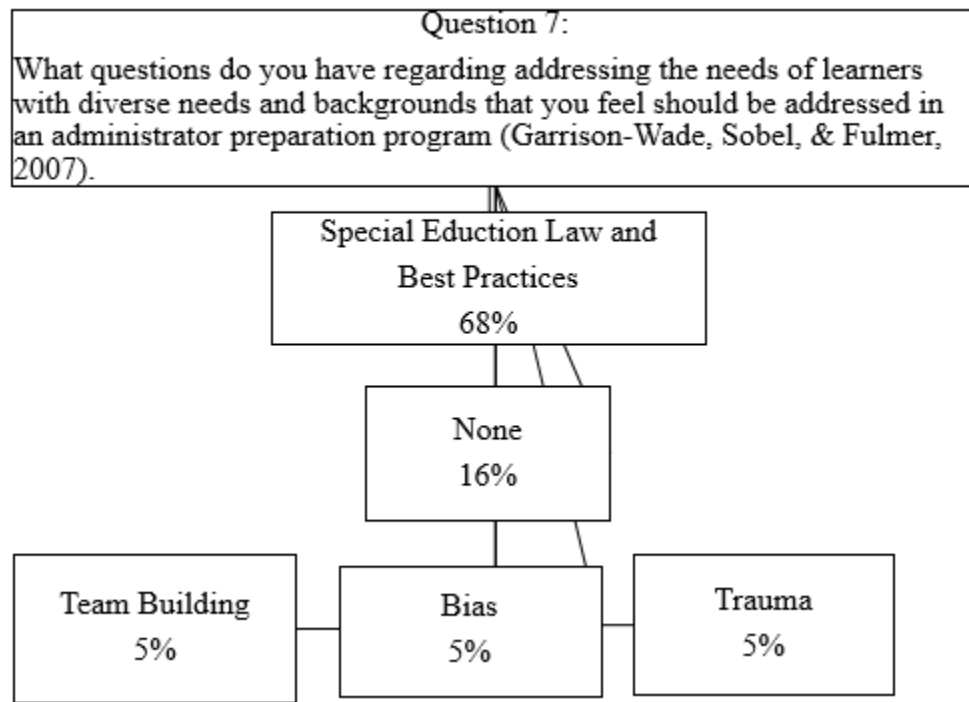
Summary of collective principal responses to open ended question 6.



Open-ended question number seven had Pennsylvania public-school principals generate specific questions they had regarding the needs of learners with diverse needs and backgrounds should be addressed in a principal certification/preparation program (Garrison-Wade, Sobel, & Fulmer, 2007). Most participants did not state specific questions, rather they commented on special education and gave suggestions. An overwhelming 68% of respondents indicated that special education should be included in principal certification and training programs, see Figure 10. Special education law, knowledge of best practices and eligibility requirements, and having a solid understanding of modifications and SDI were common responses received. Sixteen percent of those who completed the survey had no questions nor suggestions to improve preparation programs. Five percent felt that team-building should be addressed, 5% reported trauma training should be included, and the final 5% indicated that principals should be taught to address bias.

Figure 10

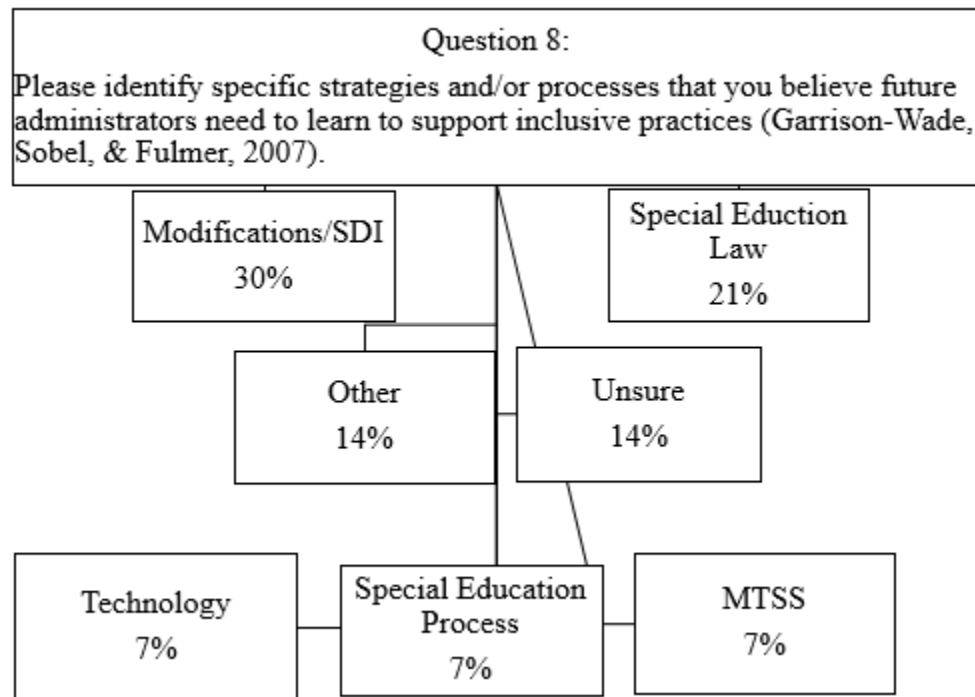
Summary of collective principal responses to open ended question 7



The eighth open-ended question wanted principals to identify specific strategies and/or processes they believed future Pennsylvania public-school principals needed to learn to support inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007). Figure 11 shows the results in graphical format. The top ranked area principals indicated that future public-school principals required was a solid understanding of modifications and specially designed instruction options that are available to special education students (30%). Knowledge of special education law (21%) was the second highest area reported by participants. Fourteen percent were unsure what areas they would recommend for learning, while another 14% reported other areas, such as professional development and continuing education requirements. A solid understanding of MTSS, the special education process, and technology all received priority ratings from 7% of respondents.

Figure 11

Summary of collective principal responses to open ended question 8

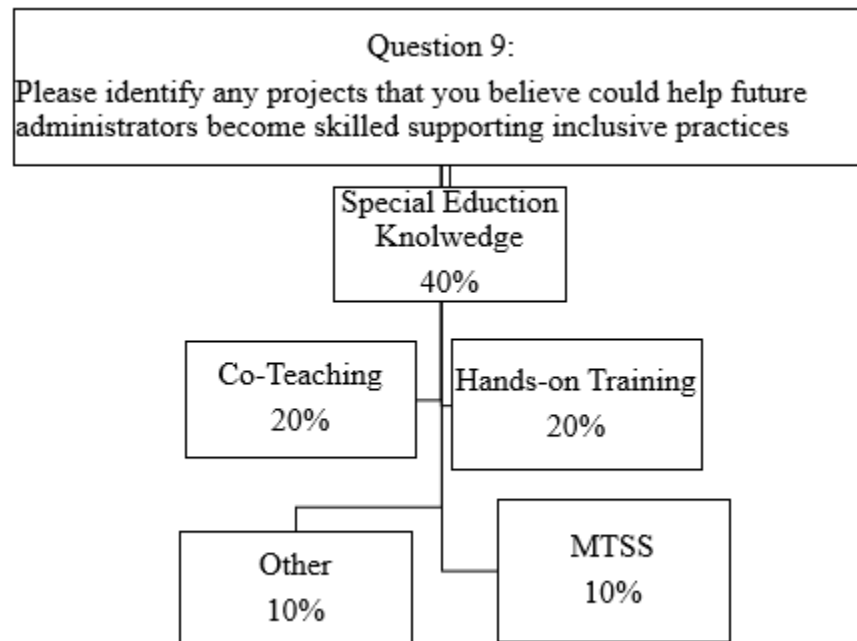


Note: SDI=specially designed instruction; MTSS= multi-tiered systems of support

The final open-ended question (number nine) had principals identify projects and areas they believed would help future Pennsylvania-public school principals feel competent when supporting inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007). Question nine was like question number six in that it asked principals for ideas surrounding inclusion. The results from Question 9 (see Figure 12) indicated that as a group, Pennsylvania public-school principals identified knowledge in special education as the top area needed for competency with inclusion, this included special education laws and best practices. Forty-percent of participants rated special education knowledge and proficiency as the number one area of need.

Figure 12

Summary of collective principal responses to open ended question 9

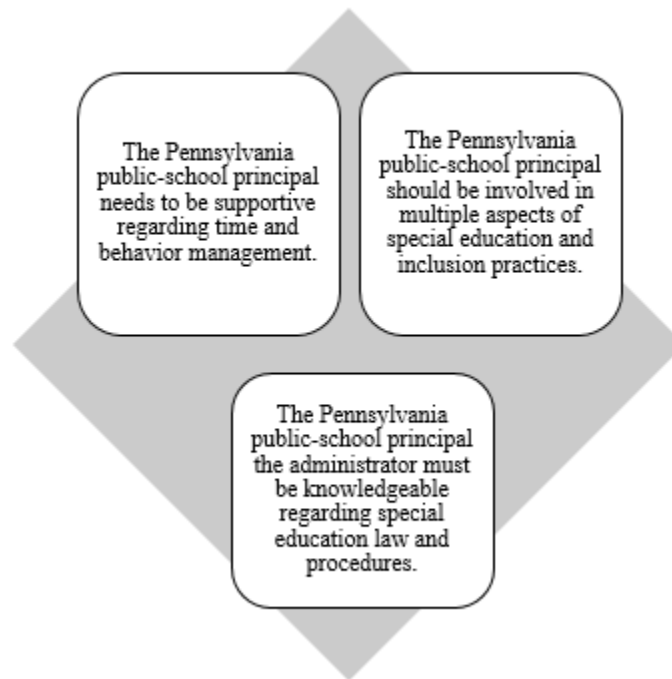


Note: MTSS= multi-tiered systems of support

Based upon the data the following three themes emerged, see Figure 13 and Table 35:

1. The Pennsylvania public-school principal needs to be supportive regarding time and behavior management.
2. The Pennsylvania public-school principal the administrator must be knowledgeable regarding special education law and procedures.
3. The Pennsylvania public-school principal should be involved in multiple aspects of special education and inclusion practices.

Figure 13
Qualitative Data Themes



A detailed discussion of the themes that emerged from the study can be found in Chapter five.

Pennsylvania public-school principals were asked nine open-ended questions to gain additional insights related to behaviors demonstrated by public-school principals relative to the inclusion of students with disabilities. The researcher analyzed responses from question transcripts using predefined codes from the main constructs discovered in the question review. Based upon frequency of the examples and categories from answers provided by the participants, three repeating themes emerged: the Pennsylvania public-school principal needs to be supportive, knowledgeable, and be involved in multiple aspects of special education and inclusion practices. (see Table 36). The categories collaboration, resources, and expectations

were found in the first that the principal must be supportive. Multiple Pennsylvania public-school principals provided examples of school wide initiative and ways they support faculty, staff, and students when administering special education and programming. Many principals expressed the need for increased resources, funding, and staffing to adequately run special education programs within their district. Respondents commented 30 times throughout the qualitative section under theme one.

The second resounding theme found within the qualitative component was that the Pennsylvania public-school principal must be knowledgeable regarding special education law. Knowledge of special education law and procedures surrounding special education were mentioned 21 times throughout the open-ended portion of the study. See Figure 13 and Table 35 for a breakdown of the coding as well as Chapter 5 for detailed discussion of results. Recall from the literature review that several studies have been conducted across the country researching public-school principals and their knowledge of special education (Angelle & Bilton, 2009; Davis, 1980; Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Garrison-Wade, Sobel, & Fulmer, 2001; Lasky & Karge, 2006; Lynch 2012; McHatton, Boyer, Shaunessy, & Terry, 2013; Wakeman, Browder, Flowers, and Ahlgrim-Delzell, 2006). This information was vital, to certify Pennsylvania public-school principals are provided the appropriate pre-certification coursework and learning experiences. One premise for the current research study was to ensure the Pennsylvania public-school principal has knowledge of special education law, policies, and procedures to diminish litigation opportunities. Research was warranted from the perspective of the Pennsylvania public-school principal to confirm Pennsylvania public-school districts are providing high-quality education to students who receive special education supports and services allowing them to reach their full

potential. Being that special education law was mentioned 21 times as a necessity for Pennsylvania public-school principals, it should be considered a priority for certification requirements.

The final theme that emerged from the study was that the Pennsylvania public-school principal should be involved in multiple aspects of special education and inclusion practices. Items coded under this theme were observed 27 times throughout the answer section, see Table 36. Knowledge of students' disabilities was the top priority in this area. Participants also felt principals must have a working knowledge of modifications and SDI that area available and frequently used within their districts. The final coded area included items that dealt with leadership, these items included experiences in training items such as trauma, behavior, and IEP alignment to state standards. IDEA is based on six major principles: zero reject, non-discriminatory identification and evaluation, FAPE, LRE, due process safeguards, and parental participation (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004); participants in this survey indicated a need for increased understanding of IEP procedures, implementation, and monitoring. Pennsylvania public-school principal preparation programs must be "designed to meet the challenges of school improvement, not just graduate certified managers who lack the depth to lead effective school change" (Reames, 2010, p. 440). A review of the literature affirmed what Pennsylvania public-school principals reported throughout the qualitative section of the current study; that school leaders acknowledge they have a limited understanding of all areas pertaining to special education (Angelle & Bilton, 2009; Davis, 1980; McHatton et al, 2010; Pazey & Cole, 2013).

Table 36
Codes, Categories, and Emerging Themes in Principals' Open-Ended Responses

Code Examples	Frequency	Category	Theme
Adequate resources and staff	13	Resources	The Pennsylvania public-school principal needs to be supportive regarding time and behavior management.
Team Building	10	Collaboration	
Co-Teaching and inclusion	7	Expectations	
Special education law	21	Special Education Law	The Pennsylvania public-school principal the administrator must be knowledgeable regarding special education law and procedures.
Special education best practices	11	Knowledge of disabilities	The Pennsylvania public-school principal should be involved in multiple aspects of special education and inclusion practices.
Modifying tests and projects to accommodate	7	Knowledge of IEPs, including modifications and SDI	
Experiences Training	9	Leadership	

Summary

The data gathered in this study were analyzed to examine knowledge, frequencies, perceptions and view of Pennsylvania public-school principals regarding special education topics. A survey with quantitative and qualitative measures was used to collect data. The researcher examined the knowledge, frequencies, and reported behaviors identified by

Pennsylvania public-school principals. Descriptive statistics were employed to describe the characteristics of the sample, check variables for violations of assumptions, and address the current study's research questions. Several data trends and tendencies were noted regarding study variables. Univariate analyses were performed on the survey responses regarding length of the current time in the principal position and number of special education classes taken. The mean, standard deviation, and variance were calculated for each data set to assess the respondent population and contained acceptable values. Qualitative data was coded by each question and then compared to identify common themes that emerged. A review of the hypotheses and results is shown in Table 36; the Hypothesis Matrix.

Hypothesis one (H^1) stated there will be a positive relationship between the Pennsylvania public-school principal's years of experience as principal and their actual knowledge of special education content and topics. There was not enough data to assume the relationship; thus, the researcher rejected the hypothesis. The Chi-Square Test utilized a contingency table to analyze the data collected. A cross-tabulation classified the collected data according to two categorical variables, length of service and role in the school system (see Table 10). Chi-Square ($\alpha = 0.05$) was selected to determine statistical independence or association between current participant role and length of service. The key result in the Chi-Square Tests (see Table 11) was the Pearson Chi-Square. Chi-square could not be computed since 7 cells had had an expected count of less than 5 cases. The research indicates there was not enough evidence to suggest an association between role in the school system (elementary/secondary) and length of service in the position.

The second hypothesis (H^2) stated there will be a positive relationship between the Pennsylvania public-school principal's years of experience as principal and their actual knowledge of special education content and topics. The researcher conducted frequency counts

for each question within survey section II, for legal, contextual, and foundational frequencies; the results were reported in text and tables. The researcher computed a Fisher's Exact Test of Independence to evaluate the differences between the amount of special education training received in the principals' certification program to each of the assessed questions in legal, foundational, and contextual knowledge. (The Fisher's exact test was used because one or more of cells in each category had a frequency of five or less.) Based upon the statistical analysis, there was no evidence to suggest an association between respondent role (elementary and secondary public-school principal) and the amount of special education training taken in a principal's certification program and length of service in the position (see Table 21). The research found no association between current principal special education classes taken and length of service ($\chi^2(2) = 10.84, p = 0.28$). The researcher accepted the null hypothesis: H^0 : There was no relationship between the Pennsylvania public-school principal's pre-service coursework and their actual knowledge of special education content and topics. Figure 3 shows the breakdown of participants based on years of service in the position and the number of special education classes take during their certification programs.

Hypothesis three (H^3) assumed there would be a positive difference in the reported knowledge of special education legal, foundational, and contextual knowledge reported between elementary and secondary public-school principals. To examine H^3 , the percentage, mean and standard deviation were calculated for the primary questions asked to gather information related to this hypothesis (see Tables 22, 25, and 28). Independent Samples *t*-tests were used (see Table 23, 26, and 29) to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for all three areas: legal, foundational,

and contextual frequencies. ANOVA was used compare the means of two or more independent groups (length of service) in order to determine whether there was statistical evidence that the associated population means were significantly different for public-school principals based on years of service (See Table 24, 27, and 30). Based on statistical analysis and comparison the null hypothesis was accepted: H^0 : There was no relationship between the Pennsylvania public-school principal's reported knowledge of special education legal, foundational, and contextual frequencies reported between elementary and secondary public-school principals.

The final hypothesis (H^4) assumed, there would be a positive difference in the reported perceived competencies reported between elementary secondary principals and years of service. To examine this hypothesis, the percentage, mean and standard deviation were calculated for the primary questions asked to gather information related to this hypothesis (see Table 31). An Independent Samples *t*-tests was used (see Table 31) to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for perceived competencies. ANOVA was used compare the means of two or more independent groups (length of service) in order to determine whether there was statistical evidence that the associated population means were significantly different for public-school principals based on years of service (See Table 33). Based on statistical analysis and comparison the null hypothesis was accepted: H^0 : There was no relationship between the Pennsylvania public-school principal's perceived competencies reported between elementary secondary principals and years of service.

Table 37
Hypothesis Matrix

Survey Section	Alternative Hypothesis	Statistical Tests Used	Accepted or Rejected
II	There will be a positive relationship between the Pennsylvania public-school principal's years of experience as principal and their actual knowledge of special education content and topics.	Cross Tabulation Chi-Square Fisher's Exact Test	Rejected; accept H ₀
III	There will be a positive difference in the reported knowledge of special education legal, foundational, and contextual knowledge reported between elementary and secondary public-school principals.	Frequency Counts Chi-Square Fisher's Exact Test	Rejected; accept H ₀
III	There will be a positive difference in the reported knowledge of special education legal, foundational, and contextual knowledge reported between elementary and secondary public-school principals.	Descriptive Statistics Independent Samples <i>T</i> -Test ANOVA	Rejected; accept H ₀
III	There will be a positive difference in the reported perceived competencies reported between elementary secondary principals and years of service.	Descriptive Statistics Independent Samples <i>T</i> -Test ANOVA	Rejected; accept H ₀

Data collected from Pennsylvania public-school principals yielded valuable information regarding the present state of special education training in higher education and on the job skills needed for principals to successfully lead special education programs within their districts.

Hypotheses 1, 2 3, and 4 were not supported by descriptive statistics, thus all hypotheses were rejected. A discussion of the findings of this study is detailed in Chapter 5. A review of the hypotheses and results is shown in Table 36; the Hypothesis Matrix.

Chapter V: Discussion

Study Overview

The intended purpose of the current research study was to provide Pennsylvania public-school principal a starting point to identify where their current knowledge base was lacking and identify critical areas principals should have a solid working knowledge required to be effective instructional leaders in their administrative roles. The researcher wanted to determine if Pennsylvania public-school principals received adequate training in special education in their certification programs which may have negatively influenced their instructional leadership practices regarding special education programs, inclusive practices, and supervising personnel. A detailed discussion of the analyzed results is included throughout chapter five.

Sample Participant Discussion

The sample participants for the research study were obtained from practicing elementary and secondary public-school principals across the Commonwealth of Pennsylvania. The researcher was able to obtain superintendent consent to conduct research in the district from 34% ($N=23$) public-school districts that permission letters were sent to. The researcher hoped to acquire consent from a larger number of districts in order to gather a robust, statewide sample of participants; however, this was not the case. All public-school principals within each identified district were sent an e-mail invitation (on 01/01/2019) to participate in the survey (see Appendices G, K, & M). A total 108 invitations were distributed, and 19 ($N=19$) responses were received and recorded. The researcher set the minimum response return rate at 10 participants for successful study analyzation; the researcher obtained survey responses from a total of 19 ($N=19$) participants out of 108 invitees (18% return rate) which exceeded expectations.

Pennsylvania public-school principals were invited to participate in the survey via e-mail (see Appendix G for consent form); and were given 30 days to respond to the electronic link and complete the survey. After 30 days; a second reminder notice was electronically sent to complete the survey to all participants who had not yet responded (see Appendix N for reminder e-mail letter). The second notice provided participants another 15 days to complete the survey for a total of 45 days for data collection; response rate may have increased if the researcher had sent reminders at 15 days and 30 days rather than one reminder as most responses were received on days the e-mail invitations were sent. After the initial sending 26% of responses were received and at the 30-day reminder another 53% were received; more results may have been obtained if a third reminder had been sent.

Once all responses had been collected, they were kept confidential; no one besides the researcher had access to information. Participants were assigned a number pseudonym by the data analysis software program, NVivo upon completion, this pseudonym was also assigned to responses when data was input into the SPSS program. Survey results were kept confidential, the researcher never associated a survey respondent's name or e-mail with their survey response in any reporting, any response that may have been used or cited in the survey was linked to the respondent's pseudonym.

Survey Results: Section I, Demographics

Nineteen Pennsylvania public-school principals opted to complete the survey; all surveys were completed in their entirety ($N=19$). Of those surveyed, 37% were currently serving as principals in a K-6 elementary setting and 53% were working as secondary administrators. Over half of the participants in the study were new principals serving between one and five years in their current position (58%; $n=11$). Forty-two percent ($n=8$) could be considered veteran

principals, serving on the job for six or more years. Five participants (26%) worked 6 to 10 years, two participants (11%) worked between 11 and 15 years, and one participant (5%) reported being on the job for 16 or more years. The population sample included a wide range of public-school districts size, with responses received from all district demographic categories. Responses were received from districts that served less than 500 students (11% of the participants) to those who were administrators in districts with student populations over 2,000 (26%). A larger sample size may have provided valuable insight into the differences experienced by rural versus urban principal roles and responsibilities. For purposes of this study, there were no statistical analyses conducted on district size, this may be an area for future research studies. Although there wasn't a larger sample in each sub-category, the researcher was satisfied that each categorical variable for a district's student body population was represented in the results.

No respondent completing the current survey was under the age of 30 suggesting participants should be well versed on the happenings of the public-school setting and knowledgeable in their current position. Thirty-two percent ($n=6$) reported their role in the public-school setting prior to becoming a principal was serving as a K-6 elementary school classroom teacher, 47% ($n=9$) reported teaching in a high-school setting, 16% listed prior teaching role as other, and 5% worked as guidance counselors. Nine respondents (47%) reported their age to be between the ages of 31 and 40. Seven participants (37%) were between the ages of 41 and 50. Three (16%) were over the age of 51. Participants' ethnicity results indicated 95% ($n = 18$) of principals were White; the remaining 5% identified as other ($n=1$) indicating the study lacked diversity. Any future studies should attempt to include principals of different ethnicities to identify differences that may be experienced.

Nineteen participants responded to demographic question number seven identifying where their public-school principal certification/degrees were obtained from. Principal certifications were issued by the following Colleges and Universities: Edinboro University of Pennsylvania (11%), California University of Pennsylvania (16%), Gannon University (21%), University of Pittsburgh (11%), University of Scranton (5%), Westminster College (16%), and other (21%). PDE listed 47 entities that offer principal certifications in Pennsylvania. The current study only received responses from 19 principals, with only 15% ($n=7$) of certifying bodies represented in the study. If further research is conducted, future studies should attempt to obtain participants from other certifying agencies in Pennsylvania to ensure all colleges, universities, and programs are represented. The current study centered on the premise that Pennsylvania public-school principal education programs are not fully preparing their participants to be instructional leaders for special education (Lasky & Karge, 2006; Lynch, 2012; McHatton, Boyer, Shaunessy, & Terry, 2010; Pazey & Cole, 2013). The researcher was unable to state for certain that principal certification programs in Pennsylvania are not preparing public-school principals to fulfil their administrative role without an accurate sampling of the targeted university population.

Survey respondents reported a range of exposure to special education in their principal certification programming. Twenty-six percent ($n=5$) reported they did not receive any special education training or components included in their educational programming prior to entering the field. Forty-seven (47%) percent of reported completing one class in special education during their certification program ($n=9$). Twenty-one (21%) percent of respondents reported two classes in special education training were included in their certification program ($n=4$). One participant

reported their schooling contained three classes in special education. To be leaders of special education programs, Pennsylvania public-school principals require training in special education law, procedure, programs, and students with disabilities (Garrison-Wade et al., 2007; Wakeman, Browder, Flowers, & Ahlgrim-Delzell, 2006). In Pennsylvania, out of the 47 principal preparation programs reviewed, only 30% ($n=14$) programs offered one special education class as part of their required curriculum; one program required two special education classes (00.02%; see Appendix O for the complete review). When comparing the current survey to other similar studies, results of this survey are higher than those obtained by Wakeman et al (2006) whose survey revealed 46% of participating principals had no formal training in special education during their graduate coursework and 28% had one class. Although not identified in the demographic pre-service teaching role, at least one participant had a background in special education. Respondent 10503568830 identified their background as part of one of his/her answers in the open-ended questions reporting they had “a special education background. (11 years as Emotional Support/Autistic Support Teacher) I seem to be the only administrator in 10 districts to have this background.” The researcher would like to reiterate the statement by Lasky and Karge (2006) which indicated “there is currently very little research examining the formal special education training or basic knowledge of special education laws and practices of school principals” (p. 21); after examining the information in the current study and completing review of principal preparation curriculum, this researcher has more question than answers; further research is seriously warranted on the topic.

One of the key findings from the literature review conducted by Pazey and Cole (2013) indicated public-school principals should receive training in twelve fundamental areas with special education (Angelle & Bilton, 2009; Bateman & Bateman, 2001; McHatton et al,

2010; Pazey & Cole, 2013) and professional development (Darling-Hammond et al., 2007; Pazey & Cole, 2013; Taylor-Backor & Gordon, 2015) listed as priorities. As previously stated throughout the literature review, the research has demonstrated that overall, public school principals receive limited educational experiences when it comes to special education in pre-service or on-going professional development (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012). Pennsylvania public-school principals appear to agree that more education is needed in the area of special education as 90% (n=17) of survey respondents sought out professional development opportunities in the area of special education to further their knowledge within the last year.

After a thorough review of the demographic data, the question arose whether there was any relationship between specific demographic values and the public-school principal. The researcher wanted to determine if a principals' current role (elementary versus secondary) was independent of length of service in the position. The researcher hypothesized:

H0: Current principal role is independent of length of service in the position.

H1: Current principal role is not independent of length of service in the position.

A Chi-Square Test of Independence ($\alpha = 0.05$) was used to determine whether there was an association between demographic categorical variables. Data analysis in chapter four indicated the value of the test statistic was 4.623 and a corresponding p-value of $p = 0.202$. Since the p-value was greater than the chosen significance level ($\alpha = 0.05$), the researcher did not reject the null hypothesis; rather, the researcher concluded that there was not enough evidence to suggest an association between role in the school system (elementary/secondary) and length of service in the position. Based on the results it was concluded there was no association found

between current principal role and length of service. The research confirmed more in-depth questioning should be used to determine the scale of the Pennsylvania public-school principal's knowledge base and their years of service. A better way to evaluate what a principal truly understands regarding the inner workings of special education, such as a competency/skills test, would provide more valuable insight than checking off yes/no and completing rating competencies and scales. When using a yes/no question format, the surveyed items left no room for delineation between minimal understanding versus being an expert in the area.

Section II; Knowledge Discussion

Section II, Beliefs contained 18 questions using a yes/no answer format that addressed the Pennsylvania public-school principals' beliefs regarding legal topics, foundational knowledge and contextual knowledge. The questions in Section II: Beliefs required participants to respond to binary categorical variables (yes or no value); as previously stated, the researcher feels a better way to have collected data for critical knowledge areas may have been to change to format of the questions instead of using a yes/no format. A study conducted by Christensen et al., (2013) determined 75% or more of principals felt they needed more knowledge in special education areas, specifically on how to modify curriculum, disciplining students under IDEA, state mandated testing accommodations, mentoring new special education teachers, inclusion, special education law, IEPs, and classroom discipline. Overall, the current study supported findings from other studies that principals do not feel adequately prepared, nor do they fully understand special education policies and procedures (Angelle & Bilton, 2009; Christensen et al., 2013; McHatton et al, 2010).

Legal Knowledge

Legal Knowledge addressed six legal topics pertinent to the public-school principal's job. Legal Knowledge topics questioned whether principals had reported proficiencies of special education provisions in NCLB (now ESSA), components of the Rehabilitation Act (Section 504) that affect public schools, how the ADA affects public schools, special education rules and regulations contained in the PA Administrative Code, and their district's Response to Intervention (RTI) plan (Frost & Kersten, 2011). Ninety-five (95%; $N=19$) of the current study's respondents reported they had a working knowledge of IDEA and its regulations. IDEA is based on six major principles: zero reject, non-discriminatory identification and evaluation, FAPE, LRE, due process safeguards, and parental participation (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004); one flaw in the questioning of the current study was that it did not address detailed information surrounding IDEA. The research was unable to determine or prove for certain participants had a true working knowledge of IDEA or whether their comprehension was rudimentary at best. Future studies should look at more detailed questioning of the public-school principal to fully check their comprehension of IDEA and the implications within the school system. Five percent (5%) of respondents (one participant) reported lacking knowledge of IDEA. The question should be delineated into knowing the key components of IDEA and what that entails; rather than simply stating having an awareness of IDEA.

Legal knowledge question two addressed the understanding of special education provisions in NCLB. Sixteen participants (84%) reported knowledge of NCLB while only 3 participants reported a lack of knowledge (16%). Pennsylvania public-school principals that participated in this survey reported they had knowledge of the components of Section 504 (63%; $n=12$) and 58% percent ($n=11$) reported proficiency of ADA law. The final questions in the legal

knowledge section addressed knowledge of special education rules and regulations contained in the PA Administrative Code and the principals' district's Response to Intervention (RTI) plan. Forty-seven percent (47%) reported they grasped special education rules and regulations contained in the PA Administrative Code ($n=9$) while 53% indicated they understood their districts' RTI plan, while 47% reported they did not.

The question remains why did participants report of mastery of the laws surrounding special education vary so much? It stands to reason principals who have less than five years' experience on the job, especially principals without a special education background, would not fully understand IDEA and NCLB. It was possible principals did not have the knowledge they reported, thus the difficulty in performing a survey that only contained dichotomous answer choices. Future studies may want to include follow-up options to determine what made a participant report no, they did not have the knowledge of the law. Again, if a competency skills assessment was included in the study, the researcher would be able to determine if Pennsylvania public-school principals truly understood the law, or just reported they did.

Foundational Knowledge

Foundational knowledge questioned whether Pennsylvania public-school principals believed themselves to have adequate foundational knowledge in special education topics to effectively serve students with disabilities. Foundational knowledge included six questions that addressed accommodation in the LRE, parental involvement in the IEP process, the district's special education placement continuum, identification and placement, discipline, and the district's related services model (Frost & Kersten, 2011).

IDEA is based on six major principles: zero reject, non-discriminatory identification and evaluation, FAPE, LRE, due process safeguards, and parental participation (Bateman &

Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). Eighty-four percent ($n=16$) of the surveyed Pennsylvania public-school principals felt they understood how to accommodate for the academic needs of students with disabilities in the LRE. All respondents ($N=19$) indicated they comprehended special education continuum and placement; however, only 79% ($n=15$) reported they understood their district's procedures for placing students in special education while. The discrepancy between those two answers made the researcher question if participants fully understood the LRE placement; if principals understand placement, but not how students obtain that placement, there may be a lack of comprehension for the construct. Under IDEA, Pennsylvania public-school districts must use unbiased evaluation methods to determine special education eligibility, administrative leaders (the principal) must be aware of the steps to achieve the supports granted under IDEA.

Pennsylvania public-school principals are responsible for school leadership and they are also accountable for referral and service delivery of special education programs within their school system (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004). Additionally, public-school principals must be aware of disability categories and related services offered. Seventy-nine percent ($n=15$) principals indicated they were familiar with their district's related service programs, such as speech-language pathology, occupational therapy, social work, etc. while 21% ($n=4$) reported a lack of awareness. IDEA guarantees all public-school students throughout Pennsylvania have access to FAPE in the LRE (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; McLeskey et. al, 2012; Wright & Wright, 2007; Yell, 2004). FAPE and LRE must be provided to students at no cost to the parent (Bateman & Bateman, 2001; Heward, 2000; IDEA, 2004; Wright & Wright, 2007; Yell, 2004). The Pennsylvania public-school principal must also be aware of discipline when it pertains to

special education to ensure the law is adhered to. Seventy-four percent ($n=14$) of principals reported they comprehended discipline and special education. The research indicates public-school principals should fully understand discipline as punishments of special education students, such as suspensions could result in changes of placement. Principals must be aware of the procedures and reasons a manifestation determination would need to be completed. To further evaluate the discrepancy presented in foundational knowledge more research needs to be conducted.

The research has suggested that the more involved the parents are, the higher the student achievement (Burke, 2017; Henderson & Berla, 1994; Olson & Fuller, 2010; Summers et al., 2005). Increased parental involvement is directly correlated with higher the grades, test scores, homework completion, and school attendance was (Burke, 2017; Henderson & Berla, 1994; Olson & Fuller, 2010; Summers et al., 2005). According to the current survey, Pennsylvania public-school principals indicated they had a solid understanding of the key role parents play for students with IEPs. Pennsylvania principals (84%; $n=16$) reported they understood the critical role parents play in in IEP development. Remember, the goal of the IEP process is to create a partnership; a team where everyone's opinions and input is valued (Bateman & Bateman, 2001; Burke, 2017; Krumins, 2009; Wright & Wright, 2007; Yell, 2004). Pennsylvania public-schools should strive to include parents in the process as much as possible to avoid due process litigation (Bateman & Bateman, 2001; Burke, 2017; Krumins, 2009; Wright & Wright, 2007; Yell, 2004). It is crucial Pennsylvania public-school principals fully understand how important the role parents play in IEP creation and development. Pennsylvania public-school principals are required to facilitate special education programming within their buildings; being knowledgeable is part of that role. Parents are guaranteed to be members of the team that develops the IEP for their

child (Burke, 2013, Wright & Wright, 2007; Yell, 2004) and mandated to be part of the decision-making process when it comes to placement decisions for their child (Burke, 2013, U.S. Department of Education, 2018; Wright & Wright, 2007; Yell, 2004).

Contextual Knowledge

The final knowledge section of the survey surrounded reported competency of contextual knowledge and special education. Six questions were presented to public-school principals to indicate if they perceived themselves to have contextual knowledge in special education to serve students with disabilities such as state learning standards, effective instructional practices, academic assessments, curriculum design, program improvement plans, and evaluation of IEPs by staff (Frost & Kersten, 2011). Public-school principals must be informed of evidence-based practices with special and regular education (Angelle & Bilton, 2009; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; McHatton et al, 2010; Pazey & Cole, 2013). Over half of survey respondent, 63% ($n=12$), reported they did not fully understand best instructional practices for students with disabilities and 37% reported proficiency ($n=7$). Over half of the public-school principals surveyed (53%; $n=10$) reported they understood assessments for students with disabilities while 47% ($n=9$) did not. On the other side, 47% ($n=9$) of respondents reported the ability to design curriculum for students with disabilities and 53% ($n=10$) reported they did not have the knowledge and skills to complete this task. Just under half of the public-school principals surveyed (47%; $n=9$) did not fully comprehend IEP development and evaluation within their district; while 42% ($n=8$) reported they had the skill set to develop a special education improvement plan.

For principals to ensure their students are receiving the proper supports and instruction, Pennsylvania public-school principals should receive training in special education areas. Public-

school leaders must have a solid grasp of IDEA, procedural safeguard and due process, zero reject, and discipline (Angelle & Bilton, 2009; Bateman & Bateman, 2001; McHatton et al, 2010; Pazey & Cole, 2013). When talking about inclusion, Pennsylvania public-school principals must look at IDEA. IDEA has two key factors when thinking about the least restrictive environment (LRE). First, IDEA mandates students should be with their peers in general education to the maximum extent that is appropriate (Burke, 2013; Wright & Wright, 2007; Yell, 2004) Secondly, special classes, separate schools or removal from the general education class should only happen when the disability is severe enough that supplementary aids and services can't provide an appropriate education (Burke, 2013; Wright & Wright, 2007; Yell, 2004). Both sides of the inclusion issue need to focus on the key word "appropriate". Appropriate can be a gray area for school districts; at times principals are constrained by budgets and use cost factors to determine what is appropriate. IEP teams must base inclusion decisions on the data; not only should inclusion be driven by the data, but teachers must have the proper training and supports to educate students in their classrooms. Pennsylvania public-school principals must be aware that with the proper modifications and adaptations, students with moderate to severe disabilities can be successful within the academic environment (Downing & Peckham-Harding, 2007).

The current survey also queried principals if they were comfortable with PA state learning standards for students with disabilities; 74% ($n=14$) reported they were and 26% ($n=5$) reported they lacked awareness in this area. Review of the research has shown special education law and procedures should become an integral part of certification programs (Angelle & Bilton, 2009; Bateman & Bateman, 2001; Lasky & Karge, 2006; McHatton et al, 2010; Pazey & Cole, 2013). Contextual knowledge questions also sought to determine if principals could develop a plan for program improvement in special education and how IEPs were evaluated by staff in the

school. Fifty-eight percent (58%; $n=12$) of participants reported they did not know how to develop a plan for program improvement in special education.

Recall from the review of literature, that Ball and Green (2014) reported “the attitudes of school leaders are important for inclusive practices, but not as important as the training and experience of the school leaders charged with implementing these practices” (p. 72). Frost and Kerston’s (2009) study also supported this assumption; their study revealed principals who had a prior background in special education viewed themselves as having more awareness and involvement in the special education department in their building. Special education needs to be at the forefront of principal training; “school leaders, principals, and assistant principals, are responsible for every function of the school environment. The attitudes of school leaders are critical, “without adequate preparation, school leaders may be detrimental to inclusive school programs, as their lack of preparation limits their ability to provide appropriate opportunities for students with disabilities, hinders decision making, and puts schools at greater risk for legal liability” (Ball & Green, 2014, p. 72).

Comparison of Special Education Classes Among Groups

The purpose of this research study was to provide a platform where current Pennsylvania public-school principals could identify where their knowledge was lacking and how to become a better instructional leader for their special education population. The research questions were designed to determine, what relationship, if any, existed between the amount of special education training received by Pennsylvania public-school principals in their certification program and their ability to effectively lead special education programs within their district. The researcher conducted a Chi-Square test to look at the analysis between the number of classes taken in a certification program and the length of service for participants.

The key result in the Chi-Square Tests table was the Fisher's Exact Test. The Fisher's Exact Test was used to evaluate the differences between the amount of special education training received in the principals' certification program to each of the assessed questions in legal, foundational, and contextual knowledge. The Fisher's exact test was used because one or more of cells in each category had a frequency of five or less. A chi-square test could not be performed because the chi-square test assumed that each cell had an expected frequency of five or more, but the Fisher's exact test had no such assumption and could be used regardless of how small the expected frequency was. The value of the test statistic was 10.84 with the corresponding p-value of $p = 0.28$. Since the p-value was greater than the chosen significance level ($\alpha = 0.05$), the researcher did not reject the null hypothesis (test value $0.28 < 1.83$ table value). Rather, the researcher concluded that there was no evidence to suggest an association between respondent role (elementary and secondary public-school principal) and the amount of special education training taken in a principal's certification program and length of service in the position. The test statistic was based on a 2 X 4 crosstabulation table. Based on statistical analysis, no association was found between current principal special education classes taken and length of service ($X^2(2) = 10.84, p = 0.28$).

Based on the statistics, the researcher concluded the following:

1. There was no relationship identified between the amount of special education training received by Pennsylvania public-school principals in their certification program and the ability to effectively lead special education programs within their district.

The null hypothesis was accepted: H10. There was no relationship between the Pennsylvania public-school principal's pre-service coursework and their actual knowledge of special education content and topics.

Section III; Frequencies Discussion

Pennsylvania public-school principals do not have to be experts in special education to effectively manage public-school districts; however, fundamental knowledge about disability, inclusive guidelines and laws are however, essential for successful administration of special education programming. Section III of the survey contained fifteen questions using a 5-point Likert type scale ranging from never (1) to always (5) that addressed the Pennsylvania public-school principals' reported frequencies in the areas of legal, foundational, and contextual knowledge.

Legal Frequencies

Legal frequencies assessed the hiring special education teachers, monitoring student IEPs, and the implementation of federal and state special education requirements, attendance at professional development related to legal issues in special education, and attendance at pre-referral meetings of the school-based service team (Frost & Kersten, 2011). Descriptive statistics broken down by age for Legal Frequencies for all participants ($N=19$) were reported in Table 26. Based upon the reported data, all principals rated hiring of special education teachers, monitoring the implementation of federal and state special education requirements, and monitoring of student IEPs in the often range with a mean span of 3.00 through 3.63. All principals reported they seldom attended professional development related to legal issues in special education ($\mu=2.47$) and they seldom attended pre-referral meetings for special education ($\mu=2.95$). Analysis of the data collected revealed both elementary and secondary principals were often involved in hiring special education teachers (elementary $\mu=3.57$; secondary $\mu=3.67$). Elementary school principals reported they often monitored student IEPs ($\mu=3.14$) while secondary principals seldom engaged in IEP monitoring ($\mu=2.92$). Elementary principals often attended meetings

surrounding the pre-referral process for special education ($\mu=300$) while secondary principals reported this was a practice they seldom engaged in ($\mu=2.92$).

The Independent Samples t-test (see Table 27) was used to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for all three areas: legal, foundational, and contextual frequencies. The Independent Samples t-Test is a parametric test. The Independent Samples t-Test was used for Section II: Beliefs, Legal Frequencies (Table 27), Foundational Frequencies (Table 30) and Contextual Frequencies (Table 33) to test the statistical differences between the means of the elementary and secondary participant groups. Since the Independent Samples t-Test can only compare the means for two (and only two) groups, and cannot make comparisons among more than two groups, the ANOVA was used to evaluate statistics for participant length of service (see Tables 28, 31, 37).

The independent t-Test was chosen because the survey data met the following requirements. The dependent variable was considered continuous (i.e., interval scale ranged from 1 to 5). The independent variable was categorical (i.e., elementary, secondary). The cases had values under both the dependent and independent variables. The Independent samples/groups demonstrated independence of observations; there was no relationship between the subjects in each sample. This meant that participants in the first group could not also be in the second group. Survey participants were only be assigned to one group; participants could only be coded as an elementary principal or a secondary principal. No survey participant in either group was able to influence subjects in the other group and neither group had any influence on the other group. Since the parameters/conditions were followed, the research assumed that the p value was accurate.

Levene's Test for Equality of Variance was used to determine homogeneity of variance for elementary and secondary principal participants for Section III: Legal Frequencies. The F statistic, degrees of freedom (df), and probability of obtaining these results was reported. If the alpha level was above .05, then equal variance was assumed, and the corresponding t -test was used. For each independent ANOVA, the test statistic, degrees of freedom (df), and p -value associated with obtaining the result was reported. An alpha level of .05 was used to determine statistically significant differences. The results were reported in text and tables. These analyses were used to test if the samples had equal variances to address the second research question seeking to determine what extent the differences in the frequencies, and perceptions of special education policies and procedures between elementary and high school principals were.

Analysis of question 28, reported attendance at annual IEP meetings for individual students, showed the f -ratio value was 0.87 with the p -value of .37, indicating the results were not statistically significant ($p < .05$). There was no statistical difference between attendance at IEP meetings between elementary and secondary public-school principals. For question 29, participants were asked to rate how often they engaged in reviewing special education workload assignments to ensure an adequate amount of staff was retained. Statistical analysis showed the f -ratio value was 1.07 with a p -value of .32 indicating no difference between elementary and secondary principals ($p < .05$). Question 30 asked participants how often they encouraged parents of students with disabilities to participate in school functions; the f -ratio value was 1.32 with a p -value at .27 indicating results were not significant ($p < .05$). Once again there was not a statistical difference between how elementary and secondary principals reported more involvement. Question 31 evaluated how often principals conducted formal evaluations of special education teachers. For question 32, the f -ratio value was 2.67 with the p -value at 0.121;

the result was not significant at ($p < .05$). Analysis of question 32 revealed the f -ratio value was 5.787 with a p -value at .03; the result was significant ($p < .05$) for how often principals attended pre-referral meetings for special education; elementary principals ($\mu=3.00$) reported attending pre-referral meetings more often than secondary principals ($\mu=2.92$).

The ANOVA was used compare the means of two or more independent groups (length of service) in order to determine whether there was statistical evidence that the associated population means were significantly different for public-school principals based on years of service. ANOVA was chosen to evaluate responses for length of service because the dependent variable was continuous (interval scale; 1 to 5) and the independent variable was categorical (i.e., two or more groups; years of service). Participants had values on both the dependent and independent variables and the participants were independent samples/groups (i.e., independence of observations). There was no relationship between the subjects in each sample; indicating that respondents in the first group were not in the second group so no subject in either group influenced subjects in the other group.

Analysis of question 28, reported attendance at annual IEP meetings for individual students, based on years of service showed the f -ratio value was 1.41 with the p -value of .28, indicating the results were not statistically significant ($p < .05$). There was no statistical difference between attendance at IEP meetings for length of service. For question 29, participants were asked to rate how often they engaged in reviewing special education workload assignments to ensure an adequate amount of staff was retained. Statistical analysis showed the f -ratio value was 3.92 with a p -value of .30 indicating no difference principals ($p < .05$). Question 30 asked participants how often they encouraged parents of students with disabilities to participate in school functions; the f -ratio value was .82 with a p -value at .50 indicating results

were not significant ($p < .05$). There was not a statistical difference between length of service and reported involvement. Question 31 evaluated how often principals conducted formal evaluations of special education teachers. For question 31, the f -ratio value was .51 with the p -value of .68; the result was not significant at ($p < .05$). Analysis of question 32 revealed the f -ratio value was 1.23 with a p -value at 0.34; the result was not significant ($p < .05$) for how often principals attended pre-referral meetings for special education based on years of service.

ANOVA Test of Homogeneity of Variance revealed that the variance between the elementary and secondary groups was not statistically different for legal frequencies. The researcher concluded:

H₀: There was no difference in the reported knowledge of special education foundational frequencies reported between elementary and secondary school principals.

Based on descriptive statistics, groups were similar in their perceptions and ratings; thus, the researcher accepted the null hypothesis that there was no difference in the reported knowledge of special education legal frequencies between elementary and secondary school principals and length of service in the position.

Foundational Frequencies

Foundational frequencies counted attendance annual IEP meetings, reviewing annual special education workload, encouraging parental involvement, formal evaluations of special education teachers, and monitoring alignment of IEPs to state learning standards (Frost & Kersten, 2011). The 5-point Likert type scale ranged from never (1) to always (5) was used for foundational frequency tabulation. Descriptive statistics for foundational frequencies were found in Table 29.

Based upon the reported data, all principals rated attendance at IEP meetings, reviewing special education workload, parental engagement, and conducting formal evaluation of special education teachers in the often range with a mean span of 3.21 through 3.84. All principals rated monitoring IEP alignment as something they seldom engaged in with ranges with a mean score of 2.63. Elementary principals reported they frequently attended IEP meetings ($\mu=3.86$) and encouraged parents of special education students to participate in school functions ($\mu=3.29$). Elementary principals reported frequent review of special education workload and formal evaluation of special education teachers in the often range ($\mu=3.71$). Elementary principals rated IEP monitoring as something they seldomly did ($\mu=2.71$). High school principals reported attendance at IEP meetings ($\mu=3.83$), reviewing special education workload ($\mu=3.33$), parental engagement ($\mu=3.17$), and conducting formal evaluation of special education teachers ($\mu=3.58$) as practices they often engaged in. High school principals reported they also seldomly monitored special education IEP alignment ($\mu=2.58$).

Levene's Test for Equality of Variance was used to determine homogeneity of variance for elementary and secondary principal participants for Section III: Foundational Frequencies. The F statistic, degrees of freedom (df), and probability of obtaining these results were reported (see Table 29). If the alpha level was above .05, then equal variance was assumed, and the corresponding t-test was used. These analyses were used to test if the samples had equal variances to address the second research question seeking to determine what extent the differences in the frequencies, and perceptions of special education policies and procedures between elementary and high school principals were. Results were as follows in table 30.

When analyzing the data using Levene's test, a value greater than .05 indicated the variability in the two conditions (elementary/secondary) was about the same. Levene's test

indicated the results obtained from one condition (elementary principal) did not vary much more than the results from the second condition (secondary principal). Put scientifically, it meant that the variability in the two conditions was not significantly different. For question 33 the f -ratio value was 0.34 and the corresponding p -value was .57. The result was not statistically significant ($p < .05$); thus, the assumption was made that there was no statistical difference between elementary and high school principals' attendance at IEP meetings. When evaluating question 34 the f -ratio value was 0.55 and the p -value was .47 indicating the result was not statistically significant ($p < .05$). Data analysis indicated there was not a statistical difference in the way elementary and secondary principals reviewed annual special education workload assignments to ensure an adequate amount of staff was retained. Analysis of question 35 revealed an f -ratio value of 0.99 and the p -value of .33 indicating results were not significant ($p < .05$) for how principals conducted formal evaluations of special education teachers. For question 36 the analysis showed the f -ratio value was 0.56. The p -value is .46 and the result was not significant ($p < .05$) for how often principals engaged in the monitoring of IEP alignment to state standards. The Sig (2-Tailed) value was greater than .05 for all questions; thus, the research indicated there was no statistically significant difference between the two conditions of elementary and secondary principals in the areas of foundational frequencies.

When analyzing the data using ANOVA, a p -value greater than .05 indicated the variability in the conditions (service length) was about the same (see table 31). For question 33 the f -ratio value was 0.90 and the corresponding p -value was .46 indicating result were not statistically significant ($p < .05$); thus, the assumption was made that there was not a statistical difference between years of service as a principal and attendance at IEP meetings. When evaluating question 34, the f -ratio value was 0.25 and the p -value was .86 indicating the result

was not statistically significant ($p < .05$). Data analysis indicated there was not a statistical difference in the years of service and how principals reviewed annual special education workload assignments to ensure an adequate amount of staff was retained. Review of question 35 revealed an f -ratio value of 1.26 and the p -value of .32 indicating results were not significant ($p < .05$) for how principals conducted formal evaluations of special education teachers. For question 36 the analysis showed the f -ratio value was 0.08 with a p -value of .97 indicating the result was not significant ($p < .05$) for how often principals engaged in the monitoring of IEP alignment to state standards. The Sig (2-Tailed) value was greater than .05 for all questions; thus, the research indicated there was no statistically significant difference between the two conditions of elementary and secondary principals in the areas of foundational frequencies.

ANOVA was used to test if the samples had equal variances to address the second research question seeking to determine what extent the differences in the frequencies, and perceptions of special education policies and procedures between participants were based in their years of service in the public-school principal position. The conclusion was made:

H₀: There was no difference in the reported knowledge of special education foundational frequencies reported between elementary and secondary school principals.

ANOVA Test of Homogeneity of Variance revealed that the variance length of service for participants was not statistically different for foundational frequencies. Both groups were similar in their perceptions and ratings; thus, the hypothesis was accepted that there was no difference in the reported knowledge of special education foundational frequencies between a principal's length of service and their engagement in special education practices.

Contextual Frequencies

Contextual frequencies looked at arranging monthly activities to build collegiality between special and general education staff, planning program improvement, weekly visits to special education classrooms, attendance at team meetings with special education staff to discuss concerns, and monitoring special education curriculum (Frost & Kersten, 2011). The 5-point Likert type scale ranged from never (1) to always (5) was used for contextual frequency tabulation. Descriptive statistics broken down by role for Contextual Frequencies for all participants are noted in Table 32.

Based upon the reported data, all principals rated they often made weekly visits to special education classrooms ($\mu=3.21$) and attended meetings with special education staff to address concerns ($\mu=3.16$). All principals reported they seldom arranged monthly activities to build collegiality between special and general education staff ($\mu=2.79$) and they planned improvements for special education programs ($\mu=2.47$). Lastly, all principals reported they seldomly engaged in the monitoring of special education programming and ensuring curriculum was research or evidence-based ($\mu=2.42$). Analysis of the collected data indicated both elementary and secondary principals reported they often made visits to special education classrooms (elementary: $\mu=3.00$; secondary $\mu=3.33$) and they often attended meetings special education staff to discuss concerns (elementary: $\mu=3.00$; secondary $\mu=3.25$). Secondary school principals reported they often arranged monthly activities to build collegiality between special and general education staff ($\mu=3.08$) while elementary principals seldom engaged in promoting staff collaboration ($\mu=2.29$). Elementary ($\mu=2.43$) and secondary ($\mu=2.42$) principals reported they seldomly assured that special education programs were evidence-based.

The Independent Samples *t*-Test (see Table 33) was used to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for foundational frequencies while the ANOVA was used to evaluate statistics for participant length of service (see Table 34).

When analyzing the contextual frequency data using Levene's test, a value greater than .05 indicated the variability in the two conditions (elementary/secondary) was about the same. Levene's test indicated the results obtained from one condition (elementary principal) did not vary much more than the results from the second condition (secondary principal). For question 37, arranging monthly activities to build collegiality between special and general education the *f*-ratio value was 2.71 and the corresponding *p*-value was .12. The result was not statistically significant ($p < .05$); thus, the assumption was made that there was no statistical difference between elementary and high school principals' involvement in building rapport between special and general education teachers. Planning program improvement for special education programs and services, question 38, the *f*-ratio value was 0.41 and the *p*-value was .53 indicating the result was not statistically significant ($p < .05$). Data analysis indicated there was not a statistical difference in the way elementary and secondary principals planned improvement for their programs. Analysis of question 39 (making weekly informal visits to special education classrooms) revealed an *f*-ratio value of 6.05 and the *p*-value of .03 indicating results were significant ($p < .05$) for how often principals conducted weekly visits to special education classrooms. Elementary principals reported $\mu=3.00$ and secondary $\mu=3.33$ for the mean score visitation to special education classrooms. For question 40, attendance at team meetings with special education staff to discuss concerns, the analysis showed the *f*-ratio value was 1.02. The *p*-

value is .33 and the result was not significant ($p < .05$) for how often principals met with staff to resolve dilemmas. Question 41, the monitoring of special education curriculum to ensure that it is research- or evidence-based, had an f -ratio value was 1.34. The p -value is .26 and the result was not significant ($p < .05$). The Sig (2-Tailed) value was greater than .05 for all questions; thus, the researcher concluded there was no statistically significant difference between the two conditions of elementary and secondary principals in the areas of foundational frequencies.

Data analysis using ANOVA, a p -value greater than .05 indicated the variability in the conditions (service length) was about the same. For question 37 the f -ratio value was 1.04 and the corresponding p -value was .41 indicating result were not statistically significant ($p < .05$); thus, the assumption was made that there was no statistical difference between years of service as a principal and how often principals arranged monthly activities to build collegiality between special and general education staff. Analyzation of question 38 (planning program improvement for special education programs and services), the f -ratio value was 0.25 and the p -value was .86 indicating the result was not statistically significant ($p < .05$). Data analysis indicated there was not a statistical difference in the years of service and how principals reviewed annual special education workload assignments to ensure an adequate amount of staff was retained. Review of question 39 revealed an f -ratio value of 2.15 and the p -value of .14 indicating results were not significant ($p < .05$) for how often principals informally visited special education classrooms. For question 40 the analysis showed the f -ratio value was 0.09 with a p -value of .14 indicating the result was not significant ($p < .05$) for how often principals reported attending team meetings with special education staff to discuss concerns. For question 41 the analysis showed the f -ratio value was 0.61 with a p -value of .62 indicating the result was not significant ($p < .05$) for how

often principals monitored special education curriculum to ensure that it was research- or evidence-based.

ANOVA was used to test if the samples had equal variances to address the second research question seeking to determine what extent the differences in the frequencies, and perceptions of special education policies and procedures between participants were based in their years of service in the public-school principal position. The conclusion was made:

H₀: There was no difference in the reported knowledge of special education contextual frequencies reported between elementary and secondary school principals.

ANOVA Test of Homogeneity of Variance revealed that the variance length of service for participants was not statistically different for contextual frequencies. Both groups were similar in their perceptions and ratings; thus, the researcher accepted the hypothesis that there was no difference in the reported knowledge of special education contextual frequencies between a principal's length of service and their engagement in special education practices.

Perceived Competencies

The final component of Section III was based on the work of Garrison-Wade, Sobel, and Fulmer (2001) and evaluated Pennsylvania public-school principals' perceived competencies for special education areas. Questions used a 5-point Likert type scale ranging from emergent (0) to exemplary (5). Descriptive statistics broken down by Perceived Competencies for all participants ($N=19$) are shown in table 35.

Survey participants rated their perceived competencies as proficient (scores of 2 or more) and higher for all areas questioned. Review of the reported data indicated all principals rated their lowest competency as question 44, the ability to make and implement differentiated

learning recommendations for learners with diverse needs ($\mu=2.79$); although this was the lowest competency, participants reported the level as proficient. All principals reported they were proficient at being able to develop school-wide positive behavior support programs ($\mu=2.95$; question 42). Question 43 analysis revealed all principals felt they had the ability to facilitate effective collaboration between general and special education teachers ($\mu=2.79$). All principals rated their ability to lead an initiative that created a learning environment that allowed for alternative styles of learning (question 45) as proficient ($\mu=3.00$). All participants rated themselves at proficient for question 46 (develop activities and make recommendations for professional development training regarding inclusive practices; $\mu=2.89$) and question 47 (the ability to generate options and possible solutions in resource management; $\mu=2.84$).

The Independent Samples *t*-Test was used to compare the means of the two independent groups (elementary versus secondary participants) in order to determine whether there was statistical evidence that the associated population means were significantly different for principals' perceived competencies while the ANOVA was used to evaluate statistics for participant length of service (see Tables 37).

Survey participants rated their perceived competencies as proficient (scores of 2 or more) and higher for all areas questions. Analysis revealed no statistical difference in length of service and a principal's rating of implementing a PBS system (question 42); the *f*-ratio value was 3.10 and the *p*-value was .10 ($p < .05$). Question 43 analysis showed principals believed they possessed the ability make and implement differentiated learning recommendations for learners with diverse needs; *f*-ratio value 3.00 and the *p*-value was .94 ($p < .05$). Question 44 (ability make and implement differentiated learning recommendations for learners with diverse needs) showed statistical difference between groups; *f*-ratio value was 7.83 and the *p*-value was .01 ($p <$

.05). Data analysis of question 45 revealed an f -ratio value was 3.00 and the p -value was .94 ($p < .05$). Principals felt they had the ability to facilitate effective collaboration between general and special education teachers (questions 46) the f -ratio value was 2.43 and the p -value was .14 indicating the result was not statistically significant ($p < .05$). All principals rated their ability to generate options and possible solutions in resource management (question 47) as proficient and there was no statistical difference between length of service; f -ratio value was 3.69 and the p -value was .07. For question 48, the ability to coach and provide constructive feedback and mentoring to special education and support service personnel, there was no statistical difference between groups f -ratio value of .10 and the p -value was .75

The ANOVA test was used to test if the samples had equal variances to address the second research question seeking to determine what extent, if any, there were in the differences in the perceived competencies of respondents based on years of service. Analysis of the data using ANOVA, a p -value greater than .05 indicated the variability in the conditions (service length) was about the same. For question 42 the f -ratio value was 2.93 and the corresponding p -value was .07 indicating the result was not statistically significant ($p < .05$); thus, the assumption was made that there was no statistical difference between years of service as a principal and principals rated their ability to develop school-wide positive behavior support programs. When evaluating question 43 (the ability to facilitate effective collaboration between general and special education teachers), the f -ratio value was 1.56 and the p -value was .26 indicating the result was not statistically significant ($p < .05$). Data analysis indicated there was not a statistical difference in the years of service and how principals rated their ability make and implement differentiated learning recommendations for learners with diverse needs (question 44). Analysis of question 45 revealed an f -ratio value of .52 and the p -value of .68 indicating results were not

significant ($p < .05$) for how principals rated their ability to develop activities and make recommendations for professional development training regarding inclusive practices. For question 46 the analysis showed the f -ratio value was 1.02 with a p -value of .41 indicating the result was not significant ($p < .05$) for how principals rated their ability to develop activities and make recommendations for professional development training regarding inclusive practices. No statistical difference was observed in the participants perceived ability to generate options and possible solutions in resource management reported (question 47) f -ratio value was 0.07 with a p -value of .97 ($p < .05$). The final perceived competency, question 48, (ability to coach and provide constructive feedback and mentoring to special education and support service personnel) showed no statistical difference between years of service by participants; f -ratio value was 0.65 with a p -value of .59 ($p < .05$).

It was initially assumed:

H₀: There was no difference in the reported perceived competencies reported between principals and years of service.

ANOVA Test of Homogeneity of Variance revealed that the variance for the compared groups was not statistically different for perceived competencies; based on the research, the null hypothesis was accepted.

Section IV; Open Ended Responses Discussion

The purpose of Section IV of the study was to examine the experiences of public-school principals throughout Pennsylvania. The goal was to identify the specific leadership characteristics and views of practicing public-school principals regarding special education. The study included qualitative research methods to evaluate the professional skills Pennsylvania public-school principals felt they needed to effectively lead special education programs. Three

key themes emerged from the data analysis: 1.) the administrator needs to be supportive regarding time and behavior management, 2.) the administrator must be knowledgeable regarding special education law and procedure, and 3.) the administrator should be involved in multiple aspects of special education and inclusion practices.

Theme 1: The public-school principal needs to be supportive regarding time and behavior management.

To face the many educational tasks and demands of the future, public-school principals must cultivate “skills and strategies that are critical for providing a positive learning environment for a highly diverse student population” (Miller & Martin, 2015, p. 129). Competent school principals should allocate time for “structuring the story of special education, ensuring that school practices on behalf of students with disabilities are grounded in the field’s conceptual core” (Crockett, 2002, p. 160). Survey participants reported the following:

Maintaining safety of the staff and other students while ensuring that the rights one mandates of students whom receive special education are followed. We have more and more students that display aggressive behaviors in the primary ages but our hands are tied in regards to meeting their needs through alternative placements. (Respondent 10543350599)

It is often times difficult to have the access or right services for multiple needs of students. Needs often times require money, and no one seems to be giving districts extra money to meet the ever growing, and various needs of students. (Respondent 10503664801)

I often ask, how can we, as administrators, build capacity among our teachers, to include all learners in the learning process and actually engage them intellectually. (Respondent 10543350600)

Crum, Sherman and Myran (2010) reported data drives leadership decisions principals make daily. Honesty and positive relationships with staff are paramount (Crum, Sherman, & Myran, 2010). Principals must recognize and develop leadership skills of their current staff (Crockett, 2002; Crum, Sherman, & Myran, 2010).

I have an open door for my staff and students. I know my students and can provide input to help staff meet their needs. (Respondent 10543350600)

In regard to feedback my teachers have reported liking an open line of communication with me, so they do not feel that they are handling the problems alone. Behaviors have been increasing, at least in the two districts I have worked, and teachers do not feel they have enough tools in their toolbox to be successful and to offer ideas to general education teachers. (Respondent 10507597596)

Principals must be aware of current instruction and be involved in planning (Crockett, 2002; Crum, Sherman, & Myran, 2010). The findings suggested school accountability and conversations must be the front runner of all activities involving leadership. Due the importance of data-based decision making, it is critical leaders obtain multiple data sets from staff to make decisions.

Administrators should have a strong working knowledge to understand eligibility criteria and the general versus special education process. They should learn what an IEP entails, providing FAPE and specifically what that means, understanding and identifying instructional practices, and understanding how specific disability areas can impact a student's ability to succeed. (Respondent 10507597596)

Administrators are expected to be experts in all fields and that is simply not feasible. There must be trusted colleagues who are in order to balance the workload. That said, there could definitely be more "current practices" in special ed law, or more of a special ed focus at some of the PILs institutes. (Respondent 10543350596)

The public-school principal has multiple duties; DiPaola, Tschannen-Moran, and Walther-Thomas (2004) identified two critical areas that must receive leadership attention and support that align with responses that were collected from the current study. To be an effective leader, the public-school principal should focus on improving professional skills and knowledge of their faculty and staff they lead and support (Crockett, 2002; DiPaola et al., 2004). Principals need to take the necessary time to provide supports and necessary professional development to beginning teachers to promote success and retention; teacher supports are a "critical leadership activity" that requires "systematic efforts" (Billingsley, 2004, p. 371).

Principals should be more aware of what strategies exist to support diverse learners. They need to know more about what the unique needs are and why. However, in the end, they can't have all of the answers. That is why they need to have their staff work as a collective group in order to determine the structure and support that a student needs to be successful. (Respondent 10507597596)

How can we, as administrators, build capacity among our teachers, to include all learners in the learning process and actually engage them intellectually? (Respondent 10543064145)

Public-school principals must strive to make connections within the community (Crockett, 2002; DiPaola et al., 2004,). To be considered an effective school leader for special education, principals must “(a) promote an inclusive school culture; (b) provide instructional leadership; (c) model collaborative leadership; (d) manage and administer organizational processes; and (e) build and maintain positive relations with teachers, families, and the community” (DiPaola et al., 2004, p. 3).

Theme 2: The public-school principal must be knowledgeable regarding special education law and procedure.

Public-school principals are expected to be instructional leaders for all students within their district. When it comes to leadership for students with disabilities, principals often lack pre-service experience in the field of special education and limited pre-service training in special education related issues. This lack of leadership can be attributed to the notion the public-school principal does not possess the proper skill set to lead special education, areas such as special education terminology, eligibility requirements, and outcomes (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012). These factors contribute to the diminished principal leadership role in the day to day operations that surround special education programming.

I believe all principals should also have a supervisory license for special education. (Respondent 10543350599)

It all goes back to intervention and data; we are told data should drive instructional decisions, but teachers are not given strategies that go above theory. I think that programs need to allow for more collaboration and shadowing those seeking the degree can see other components of the job that are not covered in the textbook. There needs to be more hands on training for special education. (Respondent 10507597596)

First they need to understand the entire special ed process and what it parts of their job are involved. Next, they need to learn how to best support teachers and give them suggestions for differentiation and other methods that could be of help. (Respondent 10543350600)

It is often times difficult to have the access or right services for multiple needs of students. Needs often times require money, and no one seems to be giving districts extra money to meet the ever growing, and various needs of students. (Respondent 10503664801)

Public-school principals are not only leaders of the school, they are instructional leaders for all. “To be an instructional leader, a school administrator must be knowledgeable about evidence-based practices within the field of both general and special education” (Pazey & Cole, 2012, p. 258). As mandated by law, public schools have the responsibility to identify students with learning and behavior deficits to enable them to receive supports needed to be academically successful (Hallahan, Kauffman, & Pullen, 2015). The 2004 reauthorization IDEA contended education students had the right to be educated in the general education classroom setting with their non-exceptional peers.

It is imperative that administrators have a solid knowledge of special education law and procedures. They must thoroughly comprehend Chapters 14, 15, and 16 and be able to apply that knowledge daily. All administrators should become aware of the special education process and timelines involved. They need to be aware of the common modifications and SDI used by their teachers. They should be current on inclusion practices and due process as well. (Respondent 10507597596)

I fear that so many teachers do not know how to accommodate students' needs on various levels and, as a result, lack the ability to differentiate instruction and meet all learners' needs. (Respondent 10543064145)

Special Education laws and best practices. More specific cases and experiences should be shared rather than just overall "textbook" information. (Respondent 10475503307)

Special education leadership should be a significant concern for public-school principals across the Commonwealth of Pennsylvania as their roles have increased to ensuring successful outcomes for all students, the increased number of students placed in special education, the high cost associated with educating students in special education, and the due process ramifications if educational outcomes are not achieved. The research has demonstrated that in general, public-school principals receive little to no formal training in leading special education in pre-service or on-going professional development (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012); results that were supported by findings in this study. Special education leadership should be at the forefront for public-school principals must ensure successful outcomes for all students (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012).

Theme 3: The public-school principal should be involved in multiple aspects of special education and inclusion practices.

Pennsylvania public-school principals should continually evaluate and critique their own buildings and practices to ensure students are receiving the best possible instruction (Riehl, 2000). Administrative practices have been said to be both moral and “epistemological” and those values should be taught in administrative training programs (Riehl, 2000). As mandated by law, public schools have the responsibility to identify students with learning and behavior deficits to enable them to receive supports needed to be academically successful (Hallahan, Kauffman, &

Pullen, 2015). Principals who comprehend IDEA and its principles, something that was questionable based on the results of the content knowledge section of this survey, should be able to make decisions regarding special education without difficulty.

Working with diverse learners requires adaptation from the teacher. Simply reciting textbook information is no longer acceptable in education. You need to tailor each lesson to meet your students, which also allows for the teacher to ensure that all students understand the material presented. A benefit for teachers and administrators alike is the exposure to cultures and beliefs that they otherwise would not see. (Respondent 10504377221)

I fear that so many teachers do not know how to accommodate students' needs on various levels and, as a result, lack the ability to differentiate instruction and meet all learners' needs. (Respondent 10543064145)

Inclusion is an essential component of IDEA and protects the rights of students with disabilities. Carpenter (2008) wrote inclusion is not that every “student is educated with peers at all times, but it does mean that the responsibility of discovering effective means for all students to learn together is taken very seriously, and deviations from this approach are made with reluctance and only after careful deliberation” (para. 4).

Being that we had a culture of pull out for so long people did not want to leave that notion behind. They truly believed that it was the only way to support special education students. It ended up creating voids and separations in the curriculum which simply lowered the standard. It was a fight to get them to see that the standard should be the same and the structure and support for these students is what needs to change. I will say that after two years, the staff is buying in because they are seeing growth in students that they never suspected they would see. (Respondent 10504377221).

Bell and Green found “the attitudes of school leaders are important for inclusive practices, but not as important as the training and experience of the school leaders charged with implementing these practices” (Behan, p. 57, 2016).

Some teachers are not supportive of moving kids back into regular classes when a pull-out service delivery model has been in place. Some regular education teachers have been resistant and not willing to implement changes and follow an IEP modification or SDI list. There are some teachers who believe that special education is a placement, not a continuum of services. I fear that so many teachers do not know how to accommodate

students' needs on various levels and, as a result, lack the ability to differentiate instruction and meet all learners' needs. (Respondent 10504377221)

Special Education laws and best practices are critical for principals. More specific cases and experiences should be shared rather than just overall "textbook" information. (Respondent 10543064145)

Special education law, best practices, inclusionary practices, and how to work collaboratively with content area teachers. (Respondent 10503452782)

Bargerhuff found the multitude of research that had been completed on principals' involvement in inclusion has centered around the work of Villa, Thousand, Meyers, and Nevin and was based off survey data. Research has supported the idea that administrators tend to believe should be "valued for who they were instead of for what they could do" (Bargerhuff, p. 11, 2001).

Bargerhuff has suggested schools consider restructuring to allow common planning time for teachers to ensure inclusion success. Principals must use the relational leadership style and provide staff the proper resources if inclusion is to be successful. For inclusion to be successful, there must be continuous communication between regular and special education staff and support personnel. One of the core objectives for educator preparation programs "is the development of teachers capable of providing individually designed instruction that is reasonably calculated to provide educational benefit to eligible students with disabilities" (Crockett, 2002, p. 161); administrator education programs should be no different. The main goal of special education is "finding and capitalizing on exceptional students' abilities" (Hallahan & Kauffman, 2000, p. 13).

Working with diverse learners and inclusion provides all students with a variety of experiences. Inclusion teaches all parties involved to be accepting of differences between others... This goes for both students and staff. Inclusion challenges teachers to become well versed in a variety of classroom strategies and behavior management. (Respondent 10504377221)

Preservice certification programs must educate future leaders on inclusive practices (Bargerhuff, 2001; Crockett, 2002). Additional research needs to be completed to fully determine the implications of principal beliefs on successful special education inclusion practices.

Respondents reported the following as suggestions for future principal certification programs:

First they need to understand the entire special ed process and what it parts of their job are involved. Next, they need to learn how to best support teachers and give them suggestions for differentiation and other methods that could be of help. (Respondent 10507597596)

More special education law classes. (Respondent 10543350599)

Technology integration with the help of promoting individual growth. (Respondent 10543350598)

Developing an MTSS program; developing a SWPBIS program. (Respondent 10543064145)

How to modify tests and projects to accommodate the individual needs of students so that they are not cookie cutter and differentiation of instruction and assessments. (Respondent 10504377221)

Knowledge of adaptations and accommodations. (Respondent 10503457654)

Understanding of individual student needs vs district resources and other resources outside of the district. (Respondent 10503452782)

Biases/Limitations

There were multiple limitations that existed within the current research study. Research limitations are characteristics that exist within the areas of the study that can alter the interpretation of the findings or analysis from the research (Tracy, 2013). Typically, limitations exist as a result of the study methodology, restrictions surrounding how generalizable the results and findings are, how applicable results may be to current educational practices, and how much the results may add to the current body of educational literature and research (Tracy, 2013).

Study limitations included:

1. Sample Size
2. Potential for unreliable data
3. Limited prior research
4. Inability to control the research environment

A significant limitation in the design of the study was the small sample size ($n=19$); the small sample size made the current study difficult to generalize to the entire state of Pennsylvania; however, the findings may be applicable to practices because the sampling method, supported the selection of all areas of Pennsylvania and differing district populations. The current sample did not include diverse participants; 95% of those who responded were white. The sample size was not large and may not reflect the actual population across the Commonwealth of Pennsylvania. The sample size ($n=19$) may have been too small, making it difficult to find significant relationships from the data. Certain statistical procedures were unable to be applied due to a lack of participants.

Additional benefits to the field of education may be gained by increasing the sample size. The researcher acknowledges it would have been more effective to have a larger sample to obtain a more representative view of public-school principals across the Commonwealth. A larger sample size would have permitted more reliable and in-depth analyses when responses were subdivided based on demographic features such as district size, years of overall experience, and professional development when searching for common themes based. Because this study was conducted with $n=19$ participants, results are limited when talking about the large number of principals currently working throughout the state of Pennsylvania. PDE has identified 500 public-school districts; the researcher was unable to say for certain this study represented 19 *districts* as results were anonymous and there was the potential some districts may have had

more than one participant that responded to the survey. Increased sample size would also have preferred to be able to compare principals who had a prior background in special education versus those who did not. Lastly, an increased sample size would have permitted a statewide analysis of certification programs as not all universities and colleges were represented in the study.

The second identified limitation was the potential that the data was unreliable. The researcher was not able to state with one hundred percent conviction participants answered questions truthfully. A more significant limitation of the study may have existed in the actual design of the survey itself. Rural, urban, or cyber-charter school districts may not present with the same issues as the participants of this study regarding curriculum and special education matters. Since the data was self-reported in an asynchronous manner (Tracy, 2013), the data may not be an accurate reflection of the public-school principal's true knowledge and beliefs regarding special education and programming. There was the potential for participants to "carefully construct a desired presentation" (Tracy, 2013, p. 166) rather than give answers directly.

There is limited prior research on the topic; the research review suggested that overall, public-school principals receive little to no formal training in leading special education in the public-school setting (Crockett, 2002; Cruzeiro & Morgan, 2006; DiPaola, Tschannen-Moran, & Walther-Thomas, 2004; Frost & Kersten, 2011; Lasky & Karge, 2006; Lynch 2012; Pazey & Cole, 2012); however, there are limited studies in this area (the researcher was unable to identify a study specific to Pennsylvania principals).

The final identified limitation of the study was the inability to control the research environment. The data collection process was conducted electronically via the internet with

email invitations and reminders that connected participants to the survey instrument that was accessible anywhere the participant could connect to the internet. The participants could answer the questions in any environment that they elected, and under any conditions. Additionally, the researcher could not respond to responses from the participants with any follow-up questions. Since the data was self-reported in an asynchronous manner (Tracy, 2013), the data may not be an accurate reflection of the principal's true knowledge and beliefs regarding special education and programming. There was the potential for respondents to "carefully construct a desired presentation" (Tracy, 2013, p. 166) rather than give answers directly. One example where additional questioning from the researcher would have provided much more significant information were responses from the Section I: Legal Knowledge regarding public-school principal's knowledge of the law, specific questions may have been asked to determine true understanding. Follow-up questions would have permitted insight in to some discrepancies noted between responses in various surveyed items. There were noted discrepancies between answers on knowledge and frequency questions and those reported in the open ended results; follow-up questioning would have permitted the research to have a more distinct focus.

Recommendations for future research:

Given the reality of study results and limitations, the following recommendations have been made for future research:

- A study to conduct the perceptions of new public-school principals (under 5 years' experience) regarding the effectiveness of their administrator training program to prepare them to be leaders for special education compared to those with five or more years' experience.

- The researcher should look at conducting a broader survey to focus on determining the amount of special education knowledge, background, and personal views on leadership the participants have. The researcher may want to revise the survey to include competency knowledge question that have a specific answer rather than a yes/no format. Further research could focus on determining the amount of special education knowledge, background, and personal views on leadership the participants have in one study to analyze results.
- The researcher may want to consider a survey that uses a pre-and post-test method with self-study materials on special education to determine if public-school principals are able to increase their knowledge after basic training in special education policies and procedures.
- Future research samples should attempt to increase the number of participants from elementary and secondary school principals across the Commonwealth of Pennsylvania. The sample should attempt to consist of diverse demographics including pre-service teaching role, gender, race, experience, certification, student population of each participant's school, and both rural/urban districts.
- A study to conduct an in-depth review of curriculum requirements and course descriptions for university programs offering administrator certifications.

Closing Remarks

Further studies and research will contribute to an understanding of the factors that contribute to the lack of special education training in special education programs by higher education entities. Curriculum and classes to become a certified principal “must be interrelated and tied to problems of practice. Internships must be substantive, extend over time, and require

aspiring principals to engage in the actual work of leadership” (Petzko, 2008, p. 241). Tubbs, Heard, and Epps (2011) reported every administrator must have the proper knowledge, skill set, and frame of mind to be an effective school leader. Public-school principals must have working knowledge of all aspects of a school including day to day operations that including curriculum, staffing, maintenance, and building/grounds.

More in-depth research can seek to understand and expand the current knowledge, programs, and training to identify elements and describe relationships among the elements that contribute to, or act as barriers, to the lack of courses offered for pre-service principals during their training programs. Future research can seek to identify how much prior participant knowledge impacts their leadership role regarding their special education teachers and programs, their comfort level, and how often instructional leadership is impacted by special education. It may be beneficial for researchers to attend statewide principal association conferences to gather data in breakout sessions where research can consist of various methods that include surveys, interviews, and open-ended responses. This researcher concludes there is more research that can be conducted to help improve practices throughout the Commonwealth of Pennsylvania.

What can be Done?

Instructional leadership is what the Pennsylvania public-school principal can do to foster and enhance learning and teaching for all students. What subgroup in any school district across the country needs more enhanced learning and specialized teaching than those served by special education? Today’s Pennsylvania public-school principals need to be actively seeking ways to boost the achievement of the special education population. The research conducted in the literature review provided many insights into how principals view special education, the law, and inclusion. The common thread in the literature demonstrated if a principal had prior experience

in special education or a related field, they were more likely to be involved in the day to day happenings of special education. All Pennsylvania public-school principals should have the desire to be actively involved in special education; whether they are a facilitator or the team leader, principals must be informed. Pennsylvania public-school principals need to be aware of where their knowledge is lacking.

Often Pennsylvania public-school principal positions are filled by capable staff; however, they have limited or no experience in special education. School districts then experience a transition period where the principal is trying to become the respected new school leader and learn special education policy at the same time; both can be trying and difficult feats in and of themselves. Principals who understand special education law, policy, and procedure prior to filling the administrative role will have a smoother transition. Future principals must be aware there is not always a special education director on staff or in the building to handle special education related matters; ultimately the public-school principal is in charge and final decisions must go through them.

What is the educational impact? To produce qualified staff who are ready to be the instructional leaders for any building they enter; Pennsylvania public-school principal training programs must add a special education component into their certification process to eliminate the lack of knowledge many new principals have. Mandating one class be taken to achieve competency in special education is not enough. More stringent coursework should be added to address special education topics and initiatives. A principal who has a solid understanding of special education procedures, IDEA, and the PA School Code is more likely going to have a special education staff that is supportive and in favor of their directives. They will have staff wanting to be actively involved in curriculum planning, developing policy change, and striving

for professional excellence. If the leader of the school does not have the proper knowledge of special education law and policy, it does not garner adequate respect and trust from special education staff as decisions can be called into question due to lack of understanding. Having special education background knowledge will enable Pennsylvania public-school principals to better understand the IEP process, empowering them to help make IEP team decisions as they arise, and help the principal convey to regular education staff (if needed) the IEP team's decisions.

After conducting the review of the literature and completing the study, the researcher indicates that PDE must look at increasing special education related areas as part of the principal certification program to combat the hypothesized knowledge gaps in special education. One way to combat this would be to require all future certification candidates to also obtain their special education supervisory certificate. At the present time, this would not be difficult, the statewide certifying assessments are the same, and there would be an additional three classes required to complete the supervisory certificate. Having Pennsylvania public-school principals complete more training in special education will not only make them more well-rounded professionally, it will add credibility to their decisions when it comes to special education policies and student decisions made in the district. Knowledge is power.

Some Pennsylvania public-school principals fear due process; having a public-school principal who is knowledgeable in special education law and procedure will make the IEP team a more cohesive unit. Members of each Pennsylvania public-school district must work together to bring about a positive change in the lives of their students and boost academic achievement. The Pennsylvania public-school principal must have the influence over their faculty/staff to motivate all parties towards the common goal. A good leader will seek input from all team members; they

will bring about positive change by asking for input from all, developing/implementing new policy/procedures, curriculum, and continuously striving to improve morale and work performance.

In summary, after reviewing the literature and completing the study, the research indicates that special education knowledge is lacking in Pennsylvania public-school principals. More research is warranted to fully examine gaps in knowledge and programming. To combat this lack of knowledge, special education competency needs to be a mandatory component in Pennsylvania public-school principal's preparation training programs. Special education has been evolving for over 35 years and will continue to do so; having a solid foundation in special education will ensure Pennsylvania's instructional leaders of tomorrow are prepared today.

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Appendix A: University Data**PDE Approved Principal Certification Programs**

1. Alvernia University
2. Arcadia University
3. Bloomsburg University of Pa
4. Cabrini University
5. California University of Pa
6. Carbon-Lehigh Intermediate Unit 21**
7. Carlow University
8. Carnegie-Mellon University
9. Chestnut Hill College
10. Cheyney University of Pa
11. Delaware Valley University
12. Drexel University
13. Duquesne University
14. East Stroudsburg University of Pa
15. Eastern University
16. Edinboro University of Pa
17. Gannon University
18. Gwynedd Mercy University
19. Holy Family University
20. Immaculata University
21. Indiana University of Pa/Main
22. Kutztown University of Pa
23. Lehigh University
24. Lincoln University
25. Lock Haven University
26. Marywood University
27. Millersville University of Pa
28. Moravian College
29. Neumann

30. State University/Main Philly PLUS**
31. Point Park University
32. Relay Graduate School of Education**
33. Robert Morris University
34. Rosemont College
35. Saint Francis University
36. Saint Joseph's University
37. Saint Vincent College
38. Shippensburg University of Pa
39. Temple University/Main
40. University of Pennsylvania
41. University of Pittsburgh/Pittsburgh Campus
42. University of Scranton
43. Waynesburg University
44. Westminster College
45. Widener University
46. Wilkes University
47. York College of Pa

Appendix B: Consent to Use Frost & Kersten Survey

July 20, 2018
Dr. Thomas A. Kersten. Ed.D.
Associate Professor Emeritus
Roosevelt University
847-226-6816

Dear Dr. Kersten:

I am a Special Education Doctoral student from Slippery Rock University, Pennsylvania writing my dissertation titled *The Instructional Leadership Role of Pennsylvania Public-School Principals and Their Effect on Special Education Practices*, under the direction of my dissertation committee chaired by Dr. Richael Barger-Anderson, who can be reached at (724) 738-2873 or richael.barger-ander@sru.edu. The Slippery Rock University IRB Committee Chair, Ann Romanczyk, Ph.D., can be contacted at (724) 738-4846 or by mail at 1 Morrow Way, Slippery Rock, PA 16057.

I would like your permission to use the survey instrument from the *International Journal of Educational Leadership Preparation* (2011) entitled "The Role of Principals with Special Education Teacher Survey" in my research study. I would like to use and print questions for my research study to be conducted with public-school principals in Pennsylvania. I will use the survey questions under the following conditions:

- I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will include the copyright statement on all copies of the instrument.
- I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: amandajtruit@gmail.com. If you would like to examine a draft copy of the survey to determine what questions from *The School Leadership Study* will be used, please let me know and I can send it to you via email.

Sincerely,

Amanda J. Truitt-Smith, M.S. CCC-SLP
Doctoral Candidate
77 Truitt Lane
Fairmount City, PA 16224
amandajtruit@gmail.com

Appendix C: Permission To Frost & Kersten Survey Response

Tom Kersten <tkersten@roosevelt.edu>

Fri, Jul 20, 2018,
10:18 AM

to me

Amanda,

You have my permission to use the survey. Good luck with your dissertation.

Tom Kersten

Thomas A. Kersten. Ed.D.
Associate Professor Emeritus
Roosevelt University
847-226-6816

From: Amanda Truitt <amandajtruitt@gmail.com>
Sent: Friday, July 20, 2018 7:50 AM
To: Tom Kersten
Subject: Permission to use survey

Appendix D: Consent to Use Garrison-Wade, Sobel, & Fulmer Survey

July 20, 2018

Dorothy F. Garrison-Wade, PhD
Associate Dean for Faculty Affairs & Associate Professor
School of Education & Human Development
University of Colorado Denver
303-315-4957
dorothy.garrison-wade@ucdenver.edu

Dear Dr. Garrison-Wade:

I am a Special Education Doctoral student from Slippery Rock University, Pennsylvania writing my dissertation titled *The Instructional Leadership Role of Pennsylvania Public-School Principals and Their Effect on Special Education Practices*, under the direction of my dissertation committee chaired by Dr. Richael Barger-Anderson, who can be reached at (724) 738-2873 or richael.barger-ander@sru.edu. The Slippery Rock University IRB Committee Chair, Ann Romanczyk, Ph.D., can be contacted at (724) 738-4846 or by mail at 1 Morrow Way, Slippery Rock, PA 16057.

I would like your permission to use the survey instrument from the 2007 *Educational Leadership and Administration Journal* entitled "Inclusive Leadership: Preparing Principals for the Role that Awaits Them" in my research study. I would like to use and print questions 3-19 from the survey; question one contains personally identifiable information and will be excluded and question two is not relevant for the state of Pennsylvania. I will use the survey questions under the following conditions:

- I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will include the copyright statement on all copies of the instrument.
- I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: amandajtruitt@gmail.com. If you would like to examine a draft copy of the survey to determine what questions from *The School Leadership Study* will be used, please let me know and I can send it to you via email.

Sincerely,

Amanda J. Truitt-Smith, M.S. CCC-SLP
Doctoral Candidate
77 Truitt Lane
Fairmount City, PA 16224
amandajtruitt@gmail.com

Appendix E: Permission to use Garrison-Wade, Sobel, & Fulmer Survey Response

Garrison-wade, Dorothy Dorothy.Garrison-Wade@ucdenver.edu via olucdenver.onmicrosoft.com
to Donna, Connie, me

Fri, Jul 20, 2018,
12:54 PM

Hello Ms. Truitt,
I have included the co-authors (Dr. Donna Sobel & Dr. Connie Fulmer) of the publication you're referencing. I'm glad you are interested in our survey. You have my permission to use the survey. Dr. Sobel and Dr. Fulmer, please let Ms. Truitt know if she has your permission as well.

Sincerely,
Dr. Dorothy F. Garrison-Wade

Dorothy F. Garrison-Wade, PhD | Associate Dean for Faculty Affairs & Associate Professor
School of Education & Human Development
University of Colorado Denver
303-315-4957 | dorothy.garrison-wade@ucdenver.edu | www.ucdenver.edu/education

Sobel, Donna Donna.Sobel@ucdenver.edu via olucdenver.onmicrosoft.com
to Dorothy, me, Connie

Fri, Jul 20, 2018,
12:56 PM

Hello Ms. Truitt:
I too am pleased that you are able to use or work. This correspondence is to confirm that my permission is granted.
Warm regards,
Donna

Donna M. Sobel, Ph.D.
Associate Professor Emerita
Assistant Director, Center for Faculty Development
720.352.7495
donna.sobel@ucdenver.edu

Fulmer, Connie Connie.Fulmer@ucdenver.edu via olucdenver.onmicrosoft.com
to Donna, Dorothy, me

Fri, Jul 20, 2018,
1:17 PM

Ditto my colleagues! Go for it!

CLF

Appendix F: Public-School Principal Survey
The Pennsylvania Public-School Principal's Special Education Role as it Pertains to
Instructional Leadership Survey

Dr. Richael Barger-Anderson
Professor
Department of Special Education
Slippery Rock University
1 Morrow Way
Slippery Rock, PA 16057
richael.barger-ander@sru.edu

Amanda J. Truitt-Smith
Doctoral Candidate
Department of Special Education
Slippery Rock University
77 Truitt Lane
Fairmount City, PA 16224
axt1034@sru.edu

To Pennsylvania Public-School Principals:

I am a Special Education Doctoral student from Slippery Rock University, Pennsylvania writing my dissertation titled *The Instructional Leadership Role of Pennsylvania Public-School Principals and Their Effect on Special Education Practices*, under the direction of my dissertation committee chaired by Dr. Richael Barger-Anderson. As a current Pennsylvania public-school principal, you are being invited to participate in a research study to determine if pre-service public-school principal degree and certification programs provide adequate special education training to ensure future public-school principals can make instructional leadership decisions regarding special education confidently.

Special education leadership should be a significant concern for public-school principals across the Commonwealth of Pennsylvania as their roles have increased to ensuring successful outcomes for all students, the increased number of students placed in special education, the high cost associated with educating students in special education, and the due process ramifications if educational outcomes are not achieved. The research has demonstrated that in general, Pennsylvania public-school principals receive little to no formal training in leading special education in pre-service or on-going professional development.

The purpose of this research study will be twofold. It is the researchers' intention this research will be helpful to colleges and universities when developing plans of study and programming for future principal and leadership training degrees and certificates. This research will also provide a platform where current Pennsylvania public-school principals can identify where their knowledge is lacking and how to become a better instructional leader for their special education population.

The researchers will collect data to obtain background knowledge from each participant to determine skill and comfort level as it pertains to special education. Information will be input into a mixed methods software program for analysis. As analysis proceeds, the data that emerges will be compared; data will be coded, reviewed, and modified by comparing different participant's views, situations, actions, accounts and experiences to determine emerging themes based on years of service and demographic features. **Your responses are voluntary, and your**

information will be kept strictly confidential. All responses will remain confidential, compiled together, and analyzed as a group.

Instructions for Completing the Survey: *The Pennsylvania Public-School Principal's Special Education Role as it Pertains to Instructional Leadership Survey* is broken into four sections: demographics, special education knowledge, frequencies of special education activities, and open-ended questions. Please complete the following questions to reflect your opinions as accurately as possible. Survey completion should take approximately 30 minutes. If you choose to not answer a specific question, leave it blank and move on to the next question.

If you have any questions or concerns, please contact Dr. Richael Barger-Anderson, dissertation chair (724) 738-2873 or richael.barger-ander@sru.edu or Amanda J. Truitt-Smith, SRU Doctoral Candidate at (814) 590-7862 or axt1034@sru.edu. If you have any questions concerning your rights as a research subject, you may contact the Institutional Review Board at Slippery Rock University at (724) 738-4846 or irb@sru.edu.

Thank you,

Dr. Richael Barger-Anderson

Dr. Richael Barger-Anderson
Professor
Department of Special Education
Slippery Rock University
1 Morrow Way
Slippery Rock, PA 16057
richael.barger-ander@sru.edu

Amanda J. Truitt-Smith

Amanda J. Truitt-Smith
Doctoral Candidate
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77 Truitt Lane
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**The Pennsylvania Public-School Principal's Special Education Role as it Pertains to
Instructional Leadership Survey**

**SECTION I:
DEMOGRAPHICS**

1. My current administrative role in the public-school setting is?
 - ☐ Elementary Principal K-6
 - ☐ Middle School Principal 6-8
 - ☐ High School Principal 9-12
 - ☐ High School Principal 7-12
2. How long have you served as an administrator in your current position?
 - ☐ 1-5 Years
 - ☐ 6-10 Years
 - ☐ 11-15 Years
 - ☐ 16+ Years
3. What is the size of the school district in terms of number student enrollment?
 - ☐ Less than 500 Students
 - ☐ 501-1,000 Students
 - ☐ 1,001 to 1,500 Students
 - ☐ 1,501-2,000 Students
 - ☐ More than 2,001 students
4. Age
 - ☐ 25-30
 - ☐ 31-40
 - ☐ 41-50
 - ☐ Over 51
5. Ethnicity of Origin
 - ☐ White
 - ☐ Hispanic or Latino
 - ☐ Black or African American
 - ☐ Native American or American Indian
 - ☐ Asian / Pacific Islander
 - ☐ Other

6. Prior to working as an administrator, I worked as:

- | | |
|---|---|
| <input type="checkbox"/> Elementary Teacher (K-6) | <input type="checkbox"/> High School Teacher, |
| <input type="checkbox"/> Elementary Teacher, | Science/Biology |

- | | |
|---|--|
| <input type="checkbox"/> Special Teacher (Music, PE, Art, Technology) | <input type="checkbox"/> High School Teacher, Special Teacher (Music, PE, Art) |
| <input type="checkbox"/> Guidance Counselor K-6 | <input type="checkbox"/> High School Teacher, Industrial Arts |
| <input type="checkbox"/> Guidance Counselor 7-12 | <input type="checkbox"/> Librarian |
| <input type="checkbox"/> High School Teacher, English/Language Arts | <input type="checkbox"/> School Psychologist |
| <input type="checkbox"/> High School Teacher, History | <input type="checkbox"/> Speech-Language Pathologist |
| <input type="checkbox"/> High School Teacher, Math | <input type="checkbox"/> Other |

7. I obtained my principal certification from the following college, university, or program:

- | | |
|---|---|
| <input type="checkbox"/> Alvernia University | <input type="checkbox"/> Marywood University |
| <input type="checkbox"/> Arcadia University | <input type="checkbox"/> Millersville University of Pa |
| <input type="checkbox"/> Bloomsburg University of Pa | <input type="checkbox"/> Moravian College |
| <input type="checkbox"/> Cabrini University | <input type="checkbox"/> Neumann University |
| <input type="checkbox"/> Cairn University | <input type="checkbox"/> Pennsylvania State University/Main |
| <input type="checkbox"/> California University of Pa Carbon-Lehigh Intermediate Unit 21** | <input type="checkbox"/> Philly PLUS** |
| <input type="checkbox"/> Carlow University | <input type="checkbox"/> Point Park University |
| <input type="checkbox"/> Carnegie-Mellon University | <input type="checkbox"/> Relay Graduate School of Education** |
| <input type="checkbox"/> Chestnut Hill College | <input type="checkbox"/> Robert Morris University |
| <input type="checkbox"/> Cheyney University of Pa | <input type="checkbox"/> Rosemont College |
| <input type="checkbox"/> Delaware Valley University | <input type="checkbox"/> Saint Francis University |
| <input type="checkbox"/> Drexel University | <input type="checkbox"/> Saint Joseph's University |
| <input type="checkbox"/> Duquesne University | <input type="checkbox"/> Saint Vincent College |
| <input type="checkbox"/> East Stroudsburg University of Pa | <input type="checkbox"/> Shippensburg University of Pa |
| <input type="checkbox"/> Eastern University | <input type="checkbox"/> Temple University/Main |
| <input type="checkbox"/> Edinboro University of Pa | <input type="checkbox"/> University of Pennsylvania |
| <input type="checkbox"/> Gannon University | <input type="checkbox"/> University of Pittsburgh/Pittsburgh Campus |
| <input type="checkbox"/> Gwynedd Mercy University | <input type="checkbox"/> University of Scranton |
| <input type="checkbox"/> Holy Family University | <input type="checkbox"/> Waynesburg University |
| <input type="checkbox"/> Immaculata University | <input type="checkbox"/> Westminster College |
| <input type="checkbox"/> Indiana University of Pa/Main | <input type="checkbox"/> Widener University |
| <input type="checkbox"/> Kutztown University of Pa | <input type="checkbox"/> Wilkes University |
| <input type="checkbox"/> Lehigh University | <input type="checkbox"/> York College of Pa |
| <input type="checkbox"/> Lincoln University | <input type="checkbox"/> Other |
| <input type="checkbox"/> Lock Haven University | |

8a. I completed special education training as part of my principal induction process.

- ☐ Yes
☐ No

8b. During my principal certification program, I received the following number of special education classes:

- ☐ 0
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5+

9a. I have completed professional development activities within the last year in the area of special education.

- ☐ Yes
☐ No

9b. If you answered yes to the previous question, please identify the areas you have obtained ongoing special education training within the last 12 months:

- ☐ College class/credit
☐ Self-Study; Book Readings
☐ Self-Study; online training
☐ Webinars
☐ Conferences/Workshops
☐ School District Act 80 Days

SECTION II: **Knowledge**

Do you feel you have enough knowledge of the following topics to properly serve your students?

Check Yes or No for each question.

Legal Knowledge (Frost & Kersten, 2011)

Individuals With Disabilities Education Act (IDEA)

- ☐ Yes
☐ No

Special education provisions in the No Child Left Behind Act (NCLB)

- ☐ Yes
☐ No

Components of the Rehabilitation Act (Section 504) that effect public schools.

- ☐ Yes
☐ No

Components of the Americans With Disabilities Act (ADA) that effect public schools. ☐ Yes
☐ No

Special education rules and regulations contained in the PA Administrative Code ☐ Yes
☐ No

Your district's Response to Intervention (RTI) plan. ☐ Yes
☐ No

Foundational Knowledge (Frost & Kersten, 2011)

How to accommodate for the academic needs for students with disabilities in the least restrictive environment. ☐ Yes
☐ No

Parents' role in developing Individualized Education Plans. ☐ Yes
☐ No

Your district's special education continuum from least to most restrictive. ☐ Yes
☐ No

Your district's educational placement procedure for special education. ☐ Yes
☐ No

Your district's disciplinary interventions and supports for students with disabilities. ☐ Yes
☐ No

Your district's related services delivery model (social work, speech, etc.). ☐ Yes
☐ No

Contextual Knowledge (Frost & Kersten, 2011)

State learning standards for students with disabilities. ☐ Yes
☐ No

Most effective instructional practices for students with disabilities. ☐ Yes
☐ No

Academic assessments for students with disabilities. ☐ Yes
☐ No

How to design curriculum for students with disabilities. ☐ Yes
☐ No

How to develop a plan for program improvement in special education. ☐ Yes
☐ No

How student Individualized Education Plans are evaluated by staff in your school.

☐ Yes

☐ No

SECTION III: **Frequencies**

Indicate the how often you engage in specific instructional leadership behaviors with special education teachers.

Scale: 1=never 2=seldom 3=often 4=frequently 5=always

Legal Frequencies (Frost & Kersten, 2011)						
Hiring special education teachers.	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	
Monitoring student IEPs	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	
Monitoring the implementation of federal and state special education requirements.	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	
Attending annually professional development related to legal issues in special education.	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	
Attending pre-referral meetings of the school-based service team.	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	
Foundational Frequencies (Frost & Kersten, 2011)						
Attending annual IEP meetings for individual students.	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	
Reviewing annually special education workload assignments to ensure an adequate amount of staff is retained.	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	
Encouraging parents of students with disabilities to participate in school functions.	Never	Seldom	Often	Frequently	Always	
	1	2	3	4	5	

Conducting formal evaluations of special education teachers.	Never	Seldom	Often	Frequently	Always
	1	2	3	4	5
Monitoring alignment of IEPs to state learning standards.	Never	Seldom	Often	Frequently	Always
	1	2	3	4	5

Contextual Frequencies (Frost & Kersten, 2011)

Arranging monthly activities to build collegiality between special and general education staff.	Never	Seldom	Often	Frequently	Always
	1	2	3	4	5
Planning program improvement for special education programs and services.	Never	Seldom	Often	Frequently	Always
	1	2	3	4	5
Making weekly informal visits to special education classrooms.	Never	Seldom	Often	Frequently	Always
	1	2	3	4	5
Attending team meetings with special education staff to discuss concerns.	Never	Seldom	Often	Frequently	Always
	1	2	3	4	5
Monitoring special education curriculum to ensure that it is research- or evidence-based.	Never	Seldom	Often	Frequently	Always
	1	2	3	4	5

Perceived Competencies (Garrison-Wade, Sobel, & Fulmer, 2007)

I have the ability to develop school-wide positive behavior support programs.	Emergent		Proficient		Exemplary	
	0	1	2	3	4	5
I have the ability to facilitate effective collaboration between general and special education teachers.	Emergent		Proficient		Exemplary	
	0	1	2	3	4	5
I have the ability make and implement differentiated learning recommendations for learners with diverse needs.	Emergent		Proficient		Exemplary	
	0	1	2	3	4	5
I have the ability to lead an initiative that creates a learning environment that allows for alternative styles of learning.	Emergent		Proficient		Exemplary	
	0	1	2	3	4	5

I have the ability to develop activities and make recommendations for professional development training regarding inclusive practices.	Emergent	Proficient	Exemplary
	0	1 2 3	4 5

I have the ability to generate options and possible solutions in resource management (i.e., planning time, paperwork demands, and alternative scheduling).	Emergent	Proficient	Exemplary
	0	1 2 3	4 5

I have the ability to coach and provide constructive feedback and mentoring to special education and support service personnel.	Emergent	Proficient	Exemplary
	0	1 2 3	4 5

I have the ability to foster collegial relationships between special and general education personnel.	Emergent	Proficient	Exemplary
	0	1 2 3	4 5

I have the ability to understand and make recommendations regarding the challenges parents of children with disabilities frequently encounter.	Emergent	Proficient	Exemplary
	0	1 2 3	4 5

I have the ability to understand and make recommendations regarding legal issues related to special education.	Emergent	Proficient	Exemplary
	0	1 2 3	4 5

I have the ability to develop and implement inclusionary practices in schools.	Emergent	Proficient	Exemplary
	0	1 2 3	4 5

SECTION IV:
Open Ended Responses

1. What type of disabilities have you encountered most frequently in your experience as a principal/administrator (Frost & Kersten, 2011)?
2. What benefits do you perceive for yourself and your students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007)?
3. What concerns do you have for yourself and your students when working in a school with learners having diverse backgrounds and needs (Garrison-Wade, Sobel, & Fulmer, 2007)?
4. Describe the working relationship with your administrator(s) (Garrison-Wade, Sobel, & Fulmer, 2007).
5. Describe a specific initiative/action/project that your administrator has undertaken to support inclusive services in your school building (Garrison-Wade, Sobel, & Fulmer, 2007).
6. Have you experienced any challenges in working with an administrator on issues related to inclusive practices? If so, please identify (Garrison-Wade, Sobel, & Fulmer, 2007).
7. What questions do you have regarding addressing the needs of learners with diverse needs and backgrounds that you feel should be addressed in an administrator preparation program (Garrison-Wade, Sobel, & Fulmer, 2007)?
8. Please identify specific strategies and/or processes that you believe future administrators need to learn to support inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007).
9. Please identify any projects that you believe could help future administrators become skilled supporting inclusive practices (Garrison-Wade, Sobel, & Fulmer, 2007).

THANK YOU FOR YOUR TIME.
**YOUR RESPONSES WILL PROVIDE VALUABLE INSIGHT INTO THE
FUTURE OF SPECIAL EDUCATION LEADERSHIP PLANNING IN THE
COMMONWEALTH OF PENNSYLVANIA.**

Appendix G: Online Survey Consent Form

Dr. Richael Barger-Anderson
Professor
Department of Special Education
Slippery Rock University
1 Morrow Way
Slippery Rock, PA 16057
richael.barger-ander@sru.edu

Amanda J. Truitt-Smith
Doctoral Candidate
Department of Special Education
Slippery Rock University
77 Truitt Lane
Fairmount City, PA 16224
axt1034@sru.edu

To Pennsylvania Public-School Principals:

You are being invited to participate in a research study titled ***The Principal's Special Education Role as it Pertains to Instructional Leadership in Public Schools***. This study is being conducted by **Amanda J. Truitt-Smith M.S. CCC-SLP, Doctoral Candidate** from Slippery Rock University under the direction and guidance of Dr. Richael Barger-Anderson, Professor in the Department of Special Education at Slippery Rock University of Pennsylvania. As a current Pennsylvania public-school principal, you are being invited to participate in a research study to determine if pre-service public-school principal degree and certification programs provide adequate special education training to ensure future public-school principals can make instructional leadership decisions regarding special education confidently.

The purpose of this research study is to determine if pre-service public-school degree and certification programs provide adequate special education training to ensure Pennsylvania public-school principals can make instructional leadership decisions regarding special education confidently. If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask about each Pennsylvania public-school principal's potential lack of efficacy about their specific leadership role as it pertains to special education laws, unfamiliarity about the unique aspects and key features of special education, and a lack of technical competence for special education terminology, eligibility requirements, and outcomes. It will take you approximately 20-30 minutes to complete.

You may not directly benefit from this research; however, we hope that your participation in the study may help you determine how much of a role special education plays in the day to day operations of the public-school system. Your answers may help improve current pre-service certification programs regarding special education curriculum and content.

We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize any risks by ensuring that data will be coded, disaggregated, and categorized into meaningful units using the software program NVivo so that responses remain confidential. Participants may elect at any time to be excluded from the analyses without penalty. Principals who elect to complete the survey will remain confidential; names and other identifiable information will be removed, and e-mail addresses of participants will not be published and will remain confidential. The survey will not use any means of deception or coercion and e-mail addresses will not be published or shared; all addresses will be deleted upon study completion.

Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any question that you choose.

If you have questions about this project or if you have a research-related problem, you may contact the researcher(s), Dr. Richael Barger-Anderson, who can be reached at (724) 738-2873 or richael.barger-ander@sru.edu or **Amanda J. Truitt-Smith M.S. CCC-SLP at (814) 590-7862**. If you have any questions concerning your rights as a research subject, you may contact the Institutional Review Board at Slippery Rock University at (724) 738-4846 or irb@sru.edu.

Thank you,

Dr. Richael Barger-Anderson

Dr. Richael Barger-Anderson
Professor
Department of Special Education
Slippery Rock University
1 Morrow Way
Slippery Rock, PA 16057
richael.barger-ander@sru.edu

Amanda J. Truitt-Smith

Amanda J. Truitt-Smith
Doctoral Candidate
Department of Special Education
Slippery Rock University
77 Truitt Lane
Fairmount City, PA 16224
axt1034@sru.edu

By clicking “I agree” below you are indicating that you are at least 18 years old, have read and understood this consent form and agree to participate in this research study. Please print a copy of this page for your records.

I Agree

**I Do Not
Agree**

Appendix H: Acronyms

Common Acronyms and Terms Used in Special Education in Pennsylvania

Acronym	Meaning
504	504 of the Rehabilitation Act
ADA	Americans with Disabilities Act
ADR	Alternative Dispute Resolution
ALJ	Administrative Law Judge
AT	Assistive Technology
DOE	U.S. Department of Education
DOR	Department of Rehabilitation
DREDF	Disability Rights Education and Defense Fund
FAPE	Free and Appropriate Public Education
FERPA	Family Educational Rights and Privacy Act
IDEA	Individuals with Disabilities Education Act
IEE	Independent Educational Evaluation
IEP	Individualized Educational Program
IFSP	Individualized Family Service Plan
LEA	Local Education Agency
LRE	Least Restrictive Environment
NCLB	No Child Left Behind
NORA	Notice of Recommended Assignment
NOREP	Notice of Recommended Educational Placement
OCR	U.S. Office for Civil Rights
ODR	Office of Dispute Resolution
OEO	Office of Equal Opportunity / CDE
OSEP	U.S. Office of Special Education Programs / DOE
OSERS	U.S. Office of Special Education & Rehabilitation
OT	Occupational Therapy
PATTAN	PA Training and Technical Assistance Network
PDE	Pennsylvania Department of Education
PSSA	PA System of School Assessment
PSRS	Procedural Safeguards and Referral Services / CDE
PT	Physical Therapy
PWN	Prior Written Notice
SDC	Special Day Class
SEPRN	Special Education Plan Revision Notice
SERR	Special Education Rights and Responsibilities
SLP	Speech Language Pathologist
SPED	Special Education

Appendix I: Definitions

Definitions

For the purposes of this study, the following definitions apply:

Administrator: Individual charged with seeing to the day to day operations of a school district; research participants can either be a principal or superintendent. Administrators will advocate for all students within their district, set goals improve education, and create lifelong learners.

Autonomy: Participants in a research study have the right to participate; participants can opt in or out of the study at any given time without risk. Participants will be given full disclosure prior to making any participation decision (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano and Raulin, 2013).

Belmont Report: Created by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research in 1978, The Belmont Report summarizes ethical principles and guidelines for research involving human subjects. The three principles identified are respect for persons (includes autonomy), beneficence, and justice (Office for Human Resource Protections, “The Belmont Report”, 1979)

Beneficence: Research study participants are treated in an ethical manner and protected from harm during the study. Participants are treated ethically no matter if they choose to opt out of the research study. Researchers continually strive to ensure participant well-being. Beneficence can also be noted to cover acts of kindness or charity that go beyond research obligation. (Office for Human Resource Protections, “The Belmont Report”, 1979; Graziano and Raulin, 2013).

College: Independent institution of higher learning offering instruction in a professional school administrator program, synonymous with university (college, n.d.)

Curriculum: Plan of study for a degree or certificate program at the collegiate level; list of classes and requirements necessary for completion of coursework.

Data: Facts and information collected during the research study.

Diminished Autonomy: An individual with restricted or diminished capacity; persons not capable of deliberation regarding personal goals (Office for Human Resource Protections, “The Belmont Report,” 1979; Graziano and Raulin, 2013).

ESEA: Created in 1965 by President Johnson, ESEA is the country’s education law which provides equal opportunities for all students. ESEA was reauthorized in 2001 and is now known as No Child Left Behind (Wright & Wright, 2007).

Free and Appropriate Public Education (FAPE): Individualized educational program that is designed to meet the child's unique needs and from which the child receives educational benefit, and prepares them for further education, employment, and independent living (Wright & Wright, 2007).

Least Restrictive Environment (LRE): Under IDEA 2004 schools are “required to educate children with disabilities with children who are disabled, “to the maximum extent appropriate.” A child may only be removed from the regular education setting if the nature or severity of the disability is such that the child cannot be educated in regular classes, even with the use of supplementary aids and services” (Wright & Wright, 2007, p. 23)

Individualized Education Program (IEP): Legal document defining and describing a special education student’s course of study for one calendar year; important sections include

present levels of academic achievement, transition planning, goals/objectives, and program modifications and specially designed instruction.

Individuals with Disabilities Education Act (IDEA): Law ensuring services to children with disabilities throughout the nation age birth to twenty-one. IDEA mandates how “states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities. Infants and toddlers with disabilities (birth-2) and their families receive early intervention services under IDEA Part C. Children and youth (ages 3-21) receive special education and related services under IDEA Part B” (OSEP, 2006, para. 1).

Mixed Methods Research Design: A research method for conducting research that involves collecting, analyzing and integrating quantitative and qualitative research data into one study.

No Child Left Behind (NCLB): NCLB was in effect from 2002–2015; NCLB was the reauthorization of the Elementary and Secondary Education Act (ESEA). NCLB was replaced by the Every Student Succeeds Act in 2015. NCLB included provisions to help students in poverty, minorities, students in special education programs, and those with limited English proficiency (Wright & Wright, 2007).

NVivo: NVivo is software that supports qualitative and mixed methods research. NVivo is a platform to organize, analyze and find insights in unstructured, or qualitative data like in survey responses and web content (“What is NVivo, n.d.).

Parent: IDEA Regulations 34 C.F.R. §300.30 (a)) define parent as the “biological or adoptive parent, a guardian, a person acting as a parent of the child (e.g. grandparent, stepparent)

who lives with the child, a foster parent (unless prohibited by state law), or a surrogate parent who has been appointed following the procedures of the law” (Yell, 2004, p. 262).

Population: The group to which the research sample belong; population for this study will include all certified principals and superintendents who are actively using their degree/certificates at the time of this study in the Commonwealth of Pennsylvania.

Principal: The individual with the most authority within the public-school building; responsible for supervision of personnel, curriculum decisions, and discipline of students.

Public-School: A school that receives funding from the public; this includes elementary, junior-senior, middle, secondary, and vocational schools.

Qualitative Research Design: Denzin and Lincoln (2005) describe qualitative research as involving “... an interpretive naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them.” (p. 3)

Quantitative Research Design: Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon. It may emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques.

Rehabilitation Act of 1973: “Civil rights statute designed to protect individuals with disabilities from discrimination; purposes are to maximize employment, economic self-sufficiency, independence, inclusion and integration into society” (Wright & Wright, 2007, p. 430).

Sample: Subgroup of the population; the research participants who are certified and working as school administrators from the target population.

School District: Entity charged with providing a free and appropriate public education within a set geographical area. There are over 500 school districts in Pennsylvania; see Appendix F for a full list.

Socioeconomic Status (SES): A total of person/families' combined economic and sociological work experience in relation to others; it is based on household income, earners' education, and occupation.

Special Education: "Specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability" (Wright & Wright, 2007, p. 21).

Statistical Package for the Social Sciences (SPSS). SPSS Statistics is a software package used for interactive, or batched, statistical analysis.

University: Independent institution of higher learning offering instruction in a Pennsylvania public-school degree or certificate acknowledged by the Pennsylvania Department of Education. University is synonymous with college.

Appendix J: List of PA Intermediate Units

Source: <https://www.paiu.org/ius.php>

*****Bolded and italicized IUs Chosen by random selection to participate in the study***

Intermediate Unit 1

Pittsburgh-Mount Oliver IU 2

Allegheny IU 3

Midwestern IU 4

Northwest Tri-County IU 5

Riverview IU 6

Westmoreland IU 7

Appalachia IU 8

Seneca Highlands IU 9

Central IU 10

Tuscarora IU 11

Lincoln IU 12

Lancaster-Lebanon IU 13

Berks County IU 14

Capital Area IU 15

Central Susquehanna IU 16

BlaST IU 17

Luzerne IU 18

Northeastern Educational IU 19

Colonial IU 20

Carbon-Lehigh IU 21

Bucks County IU 22

Montgomery County IU 23

Chester County IU 24

Delaware County IU 25

School District of Philadelphia, IU 26

Beaver Valley IU 27

ARIN IU 28

Schuylkill IU 29

Appendix K: List of PA Districts Selected for Survey Invitation**Midwestern IU 4**

Butler Area School District
110 Campus Lane
Butler, PA 16001
Phone: (724) 287-8721

Commodore Perry School District
3002 Perry Highway
Hadley, PA 16130
Phone: (724) 253-3255

Greenville Area School District
9 Donation Road
Greenville, PA 16215
Phone: 724-588-2502

Grove City Area School District
511 Highland Avenue
Grove City, PA 16127
Phone: 724-458-6733

Karns City Area School District
1446 Kittanning Pike
Karns City, PA 16041
Phone: (724) 756-2030

Mercer Area School District
545 West Butler Street
Mercer, PA 16137
Phone: 724-662-5100
Fax: 724-662-5109

Neshannock Township School District
3834 Mitchell Road
New Castle, PA 16105
Phone: (724) 658-4793

Riverview IU6

Allegheny-Clarion Valley School District
Allegheny-Clarion Valley
PO Box 347
Foxburg, PA 16036
Phone: (724) 659-3555

Brockway Area School District

Reynolds Area School District
531 Reynolds Road
Greenville, PA 16125
Phone: (724) 646-5501
FAX: (724) 646-5505

Seneca Valley Area School District
124 Seneca School Road
Harmony, PA 16037
Phone: (724) 452-6040
Fax: (724) 452-6105

Sharon City Area School District
215 Forker Boulevard
Sharon, PA 16146
Phone: (724) 981-6390
FAX: (724) 981-0844

Sharpsville Area School District
1 Blue Devil Way
Sharpsville, PA 16150
Phone: (724) 962-8300
FAX: (724) 962-7873

West Middlesex Area School District
3591 Sharon Road
West Middlesex, PA 16159-9799
Phone: (724) 634-3030
FAX.: (724) 528-0380

Franklin Area School District
Franklin Area
246 Pone Lane
Franklin, PA 16323
Phone: (814) 432-2121

Keystone Area School District

Brockway Area 100 Alexander Street Brockway, PA 15824	700 Beatty Avenue Knox, PA 16232 Phone: (814) 797-1261
Brookville Area School District Brookville Area 96 Jenks Street Brookville, PA 15825 Phone: (814) 849-1106	North Clarion County Schools 10439 Route 36 Tionesta, PA 16353 Phone: (814) 744-8544
Clarion Area School District Clarion Area 800 Boundary Street Clarion, PA 16214 Phone: (814) 226-8118	Oil City Area School District 10 Lynch Boulevard Oil City, PA 16301 Phone: (814) 676-2771
Clarion-Limestone Area School District Clarion-Limestone Area 4091 CL School Road Strattanville, PA 16258 Phone: (814) 764-5111	Punxsutawney Area School District 500 North Findley Street Punxsutawney, PA 15767 Phone: (814) 937-5151
Cranberry Area School District Cranberry Area 1 Education Drive Seneca, PA 16346 Phone: (814) 616-8504	Redbank Valley Area School District 910 Broad Street New Bethlehem, PA 16242 Phone: (814) 275-2424
DuBois Area School District DuBois Area 404 Liberty Boulevard DuBois, PA 15801 Phone: (814) 375-8770	Titusville Area School District 415 Water Street Titusville, PA 16354 Phone: (814) 827-2715
	Union Area School District 354 Baker Street, Suite 1 Rimersburg, PA 16248 Phone: (814) 473-3121
Forest Area School District 120 West Birch Street Marienville, PA 16239 Phone: (814) 927-6688	Valley Grove Area School District 389 Sugarcreek Drive Franklin, PA 16323 Phone: (814) 432-3861
<hr/>	
Central IU 10	
Bald Eagle Area School District 710 S. Eagle Valley Road Wingate, PA 16823 Phone: (814) 355-4868 Fax: 814) 355-4869	Keystone Central School District 86 Administration Drive Mill Hall, PA 17751 (570) 893-4903

Bellefonte Area School District
318 North Allegheny Street
Bellefonte, PA 16823
Phone: 814-355-4814

Moshannon Valley School District
4934 Green Acre Road
Houtzdale, PA 16651
Phone: 814-378-7609
Fax: 814-378-7100

Clearfield Area School District
2831 Washington Avenue
Clearfield, PA 16830
Phone: 814-765-5511 ext. 6000
Fax: 814-765-5515

Penns Valley Area School District
4528 Penns Valley Road
Spring Mills, PA 16875
Phone 814-422-2000
Fax 814-422-8020

Curwensville Area School District
650 Beech Street
Curwensville, PA 16833
(814) 236-1100

Philipsburg-Osceola Area School District
200 Short Street
Philipsburg, PA 16866
Phone: (814) 342-1050
Fax: (814) 342-7208

Glendale School District
1466 Beaver valley Road
Flinton, PA 16640
Phone: 814-687-3402
Fax: 814-687-3341

State College Area School District
240 Villa Crest Dr.
State College, PA 16801
Phone: (814) 231-1011

Harmony Area School District
5239 Ridge Road
Westover PA, 16692
Phone: 814-845-2300
Fax: 814-845-7811

West Branch Area School District
516 Allport Cutoff
Morrisdale, PA 16858
Phone: (814)345-5615

Luzerne IU 18

Crestwood Area School District
281 South Mountain Boulevard,
Mountain Top, PA 18707
Phone: (570) 474-6782
Fax: (570) 474-2254

Pittston Area School District
5 Stout Street
Pittston, PA 18640
Phone: (570) 654-2415
Fax : (570) 654-5548

Dallas Area School District
2000 Conyngham Avenue
Dallas, PA 18612
Phone: (570) 675-5201

Tunkhannock Area School District
41 Philadelphia Avenue
Tunkhannock, PA, 18657
Phone: (570) 836-3111

Hanover Area School District
1600 Sans Souci Parkway
Hanover Twp., PA 18706.
Telephone: (570) 831-2313
FAX: (570) 831-2322

Wilkes Barre Area School District
730 South Main Street
Wilkes-Barre, PA 18711-0376
Phone: (570)826-7111

Wyoming Area School District

Hazleton Area School District
1515 West 23rd Street
Hazle Township, PA 18202
Phone: (570) 459-3111

252 Memorial Street
Exeter, PA 18643
Phone: (570) 655-3733 (Business &
Administration)
Fax: (570) 883-1280

Lake Lehman Area School District
1237 Market Street
Lehman, PA 18627
Phone: (570) 675-2165

Wyoming Valley West Area School District
450 North Maple Avenue
Kingston, PA 18704
Phone: (570) 288-6551

Nanticoke Area School District
425 Kosciuszko St,
Nanticoke, PA 18634
Phone: (570) 735-1270
Fax: (570) 735-1350

Northwest Area School District
243 Thorne Hill Road
Shickshinny, PA 18655-4412
Phone: (570) 542-4126

School District of Philadelphia, IU 26
The School District of Philadelphia
440 N. Broad Street
Philadelphia, PA 19130
Phone: (215) 400-4000

Appendix L: Superintendent Approval Letter

Dear Superintendent [Insert Name]

I am a Special Education Doctoral student from Slippery Rock University, Pennsylvania writing my dissertation titled *The Leadership Role of School Administrators and Their Effect on Special Education*, under the direction of my dissertation committee chaired by Dr. Richael Barger-Anderson, who can be reached at (724) 738-2873 or richael.barger-ander@sru.edu. The Slippery Rock University IRB Committee Chair, Ann Romanczyk, Ph.D., can be contacted at (724) 738-4846 or by mail at 1 Morrow Way, Slippery Rock, PA 16057.

I respectfully seek your permission to conduct a Special Education Survey with the Principals and Assistant Principals in your district. As part of my doctoral dissertation, a validated and reliable survey will be used to determine the level of special education knowledge amongst Principals and Assistant Principals. The survey will be sent electronically to participants. All responses will be completely confidential and no identifying information will be sought or shared.

This study is very valuable to the profession and may be used to help identify areas that need to be included in administrative credentialing course work and/or determine professional development opportunities and needs.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: amandajtruit@gmail.com. If you would like to examine a draft copy of the survey to determine what questions from *The School Leadership Study* will be used, please let me know and I can send it to you via email.

Sincerely,
Amanda J. Truitt-Smith, M.S. CCC-SLP
Doctoral Candidate
77 Truitt Lane
Fairmount City, PA 16224
amandajtruit@gmail.com

If you have questions about this project or if you have a research-related problem, you may contact the researcher(s), **Amanda J. Truitt-Smith M.S. CCC-SLP at (814) 590-7862**. If you have any questions concerning your rights as a research subject, you may contact the Institutional Review Board at Slippery Rock University at (724) 738-4846 or irb@sru.edu.

Appendix M: List of Superintendents Consents**Riverview IU 6**

Clarion Area School District

800 Boundary Street
Clarion, PA 16214
Phone: (814) 226-8118

Clarion-Limestone Area School District
Clarion-Limestone Area
4091 CL School Road
Strattanville, PA 16258
Phone: (814) 764-5111

Cranberry Area School District
Cranberry Area
1 Education Drive
Seneca, PA 16346
Phone: (814) 616-8504

Keystone Area School District
700 Beatty Avenue
Knox, PA 16232
Phone: (814) 797-1261

Oil City Area School District
10 Lynch Boulevard
Oil City, PA 16301
Phone: (814) 676-2771

Punxsutawney Area School District
500 North Findley Street
Punxsutawney, PA 15767
Phone: (814) 937-5151

Titusville Area School District
415 Water Street
Titusville, PA 16354
Phone: (814) 827-2715

Midwestern IU 4

Butler Area School District
110 Campus Lane
Butler, PA 16001
Phone: (724) 287-8721

Reynolds Area School District
531 Reynolds Road
Greenville, PA 16125
Phone: (724) 646-5501
FAX: (724) 646-5505

Commodore Perry School District
3002 Perry Highway
Hadley, PA 16130
Phone: (724) 253-3255

Seneca Valley Area School District
124 Seneca School Road
Harmony, PA 16037
Phone: (724) 452-6040
Fax: (724) 452-6105

Greenville Area School District
9 Donation Road
Greenville, PA 16215
Phone: 724-588-2502
Grove City Area School District

Sharon City Area School District
215 Forker Boulevard
Sharon, PA 16146
Phone: (724) 981-6390

511 Highland Avenue
Grove City, PA 16127
Phone: 724-458-6733

FAX: (724) 981-0844

Karns City Area School District
1446 Kittanning Pike
Karns City, PA 16041
Phone: (724) 756-2030

Sharpsville Area School District
1 Blue Devil Way
Sharpsville, PA 16150
Phone: (724) 962-8300
FAX: (724) 962-7873

Mercer Area School District
545 West Butler Street
Mercer, PA 16137
Phone: 724-662-5100
Fax: 724-662-5109

West Middlesex Area School District
3591 Sharon Road
West Middlesex, PA 16159-9799
Phone: (724) 634-3030
FAX.: (724) 528-0380

Neshannock Township School District
3834 Mitchell Road
New Castle, PA 16105
Phone: (724) 658-4793

Central IU 10

Moshannon Valley School District
4934 Green Acre Road
Houtzdale, PA 16651
Phone: 814-378-7609
Fax: 814-378-7100

Penns Valley Area School District
4528 Penns Valley Road
Spring Mills, PA 16875
Phone 814-422-2000
Fax 814-422-8020

Philipsburg-Osceola Area School District
200 Short Street
Philipsburg, PA 16866
Phone: (814) 342-1050
Fax: (814) 342-7208

Luzerne IU 18

Northwest Area School District
243 Thorne Hill Road
Shickshinny, PA 18655-4412
Phone: (570) 542-4126

Appendix N: Reminder E-mail

Dr. Richael Barger-Anderson
Professor
Department of Special Education
Slippery Rock University
1 Morrow Way
Slippery Rock, PA 16057
richael.barger-ander@sru.edu

Amanda J. Truitt-Smith
Doctoral Candidate
Department of Special Education
Slippery Rock University
77 Truitt Lane
Fairmount City, PA 16224
axt1034@sru.edu

Enter Date

Dear [Principal Name],

Last month you were sent a link to complete the survey entitled ***The Principal's Special Education Role as it Pertains to Instructional Leadership in Public Schools***, asking for your opinions on your instructional leadership practices and special education beliefs. If you have already completed and submitted the survey, **thank you for your insightful input**. If not, please complete your survey using the following link: www.principalsroleinspecialeducation.com and submit your responses no later than 9:00 p.m. on February, 16, 2019.

Your responses are much appreciated as they will help provide valuable input into future programing for administrator training programs. Your insight will also help us learn more about the current beliefs active school administrators have regarding special education and their current pedagogical practices.

If you have any questions, please contact the researcher, Amanda J. Truitt, at axt1034@sru.edu or (814) 590-7862

Sincerely,

Dr. Richael Barger-Anderson

Dr. Richael Barger-Anderson
Professor
Department of Special Education
Slippery Rock University
1 Morrow Way
Slippery Rock, PA 16057
richael.barger-ander@sru.edu

Amanda J. Truitt-Smith

Amanda J. Truitt-Smith
Doctoral Candidate
Department of Special Education
Slippery Rock University
77 Truitt Lane
Fairmount City, PA 16224
axt1034@sru.edu

Appendix O: University Curriculum Data

***Special Education Classes are in bold for ease of location.*

College/University	Curriculum/Coursework	Special Education Curriculum Classes
<u>Alvernia University</u> 400 Saint Bernardine Street Reading, PA 19607	<i>Post-masters certification: 21 Credits</i> MED 515 Differentiated Instruction in Inclusive Classrooms MED 550 Introduction to Educational Administration MED 553 The School Administrator MED 610 School Law & Social Advocacy MED 611 School Finance MED 650 Functions of School Supervision MED 685 Principal Internship I and II - 3 credits	0
<u>Arcadia University</u> 450 S. Easton Road Glenside, PA 19038	ED505 Cultural Foundations in Education ED645 Human Resources and Negotiations ED633 School Law ED635 Supervision of Teaching and Learning ED647 Data Driven Decision Making Practica ED580 Intro to Inclusive Education Practica ED634 Managing School Organizations and Change ED565 Intro to Instructional Technology ED637 Instructional Leadership School Finance ED599 Culminating Masters Project	0
<u>Bloomsburg University of Pa</u> 400 E. Second St. Bloomsburg, PA 17815-1301 570-389-4000	<i>Core Courses (9 credits)</i> EDL.500 Introduction to Educational Leadership EDL.501 Organizational Behavior and Program Development EDL.503 School Law and Finance or EDL.524 Ethical, Legal & Leadership Issues in CSA <i>Research Core (6 credits)</i> EDL.502 Data, Driven Decisions or EDL.523 Assessment and the College Student Exp EDL.590 Educational Research and Writing <i>K-12 School Principal Certificate (18 credits)</i>	1

EDL.504 Supervision of Curriculum and Instruction
 EDL.507 Home School Community Relations
 EDL.508 Administrative Leadership in Education
 EDL.595 Principal Practicum/Internship
SPEC ED.501 Special Education for Administrators

Cabrini University
 610 King of Prussia Road
 Radnor, PA 19087
 United States 610.902.8100

Core Courses (9 credits)

1

EDG 501 - Educational Research
 EDG 521 - Sociocultural Foundations of Education
 EDG 540 - Philosophical Foundations of Education

Principal Certification Courses (24 credits)

EDG 640 - The Principalship (30 hours)
 EDG 644 - Instructional Leadership (30 hours)
 EDG 647 - School Law
 EDG 643 - Management and Decision Making (30 hours)
 EDG 645 - Supervision and Performance Evaluation (30 hours)
 EDG 646 - Technology and Communications (30 hours)
EDG 658 - Special Education Administration (30 hours)
 EDG 659 - Principal Internship (180 hours)

Cairn University
 200 Manor Avenue
 Langhorne, PA 19047

M.S. Degree Program:

1

EDL 741 Principalship PK-12
 EDU 703 Teaching Models and Instructional Strategies
 BIB 621 Introduction to Biblical Integration for Educators
 THE 601 Overview of Christian Theology
SPE 664 Issues in Special Education for School Leaders
 EDU 717 Theoretical & Philosophical Foundations
 EDL 745 Organizational Theory and Team Building
 EDU 712 Curriculum Theory, Design & Assessment
 EDL 743 Financial and Business Management

EDL 742 Data Management and Technology
Integration for School Leaders PK-12
EDL 744 School Law
EDU 713 Educational Research
EDL 791 Action Research Project

Certificate Program:

EDL 741 Principalship PK-12
EDL 745 Organizational Theory and Team
Building
EDL 742 Data Management and Technology
Integration for School Leaders PK-12
EDL 743 Financial and Business Management
EDL 744 School Law

**SPE 664 Issues in Special Education for
School Leaders**

Ongoing
EDL 784 PK-12 Internship

California University of
Pennsylvania

250 University Avenue
California, PA 15419

M.S.

ADP 641 G0 – School Community Relations
Seminar
ADP 647 G0 – Orientation and Assessment
ADP 621 G0 – Curriculum Leadership
ADP 661 G0 – Educational Leadership
ADP 631 G0 – School Law & Ethics 3 ADP
670 G0 – Internship Part 1
ADP 626 G0 – Instructional Strategies
ADP 664 G0 – Field Project/ Leadership
(M.Ed. students only)
ADP 673 G0 – Field Project/Research &
Evaluation (M.Ed. students only)
ADP 670 G0 – Internship Part 2 – Final
Requirement for Certification

0

Certification Track:

ADP 641 G0 – School Community Relations
Seminar
ADP 647 G0 – Orientation and Assessment
ADP 621 G0 – Curriculum Leadership
ADP 661 G0 – Educational Leadership
ADP 631 G0 – School Law & Ethics ADP
670 G0 – Internship Part 1
ADP 626 G0 – Instructional Strategies
ADP 670 G0 – Internship Part 2

<u>Carbon-Lehigh Intermediate Unit 21</u> 4210 Independence Drive Schnecksville, PA 18078	Core Curriculum: Effective School Principalship Leadership for Student Achievement The Management of Education School Administration Legal Issues Leadership for Continuous Improvement Curriculum Essentials School and Community Relations School Finance and Resources Instructional Leadership 10 Learning Communities	0
<u>Carlow University</u> 3333 Fifth Avenue, Pittsburgh, PA 15213	Curriculum & Instruction Degree: No Principal certification listed on website; Cannot access curriculum and coursework	N/A
<u>Carnegie-Mellon University</u> 5000 Forbes Avenue Pittsburgh, PA 15213	Not listed on CMU website	N/A
<u>Chestnut Hill College</u> 9601 Germantown Avenue Philadelphia, PA 19118	EDUC 520 Educational Research and Evaluation (Required for M.Ed.) EDLR 600 Conceptual Foundations for School Leadership EDLR 610 Curriculum Theory, Development and Issues, Part 1 EDLR 611 Curriculum Theory, Development and Issues, Part 2 EDLR 615 The Improvement of Instruction, Staff Development, and Supervision EDLR 620 The Principal as an Effective Agent of Change EDLR 630 School and Community Relations EDLR 635 School Law EDLR 640 Personnel and Pupil Administration and Management EDLR 701 Educational Leadership Internship I EDLR 702 Educational Leadership Internship II	0
<u>Cheyney University of Pa</u> 1837 University Circle P.O. Box 200 Cheyney, PA 19319	XCW 506 Intro to Educational Leadership XCW 606 Principalship I XCW 626 Principle & Practices of Curriculum Development XCW 607 Principalship II	1

XCW 641 School Law
XCW 611 Internship I

XCW 643 Basic Concepts in Special Education

XCW 601 School Resource Management
XCW 612 Internship II
XCW 625 Supervision of Instruction
XCW 613 Internship III

Delaware Valley University
700 E. Butler Avenue
Doylestown, PA 18901

M.S. in educational leadership: school administration (K-12 principal:)
GE-6015 Introduction to Statistical Data and Research
GE-6030 Theory and Application of Educational Administration
GE-6035 Teaching and Supervising Diverse Student Populations
GE-6060 Organizational Development, Change Theory and Staff Development
GE-6070 Instructional Leadership and Supervision
GE-6115 Principles, Methods, Development and Assessment of Curriculum
GE-6130 School and Community Relations
GE-6140 School Personnel Administration
GE-6211 Building Exemplary School Curriculum by Design
GE-6220 School Law
GE-6240 School Finance and Accounting

0

M.S. in educational leadership: supervisor of curriculum and instruction:
GE-6015 Introduction to Statistical Data and Research
GE-6030 Theory and Application of Educational Administration
GE-6035 Teaching and Supervising Diverse Student Populations
GE-6060 Organizational Development, Change Theory and Staff Development

GE-6070 Instructional Leadership and Supervision
 GE-6080 Foundations of Instructional Technology for Teaching and Learning
 GE 6091 Assessment Theory and Design to Support 21st Century Learning
 GE-6115 Principles, Methods, Development and Assessment of Curriculum
 GE-6130 School and Community Relations
 GE-6211 Building Exemplary School Curriculum by Design
 GE-6220 School Law

Drexel University
 3141 Chestnut Street
 Philadelphia, PA 19104

EDAM 702 School Leadership & Decision Making
 EDAM 705 School Law and Politics
 EDAM 708 Integration of Technology with School Instruction and Management
 EDAM 710 School Finance and Facilities
 EDAM 712 School and Community Partnerships and Relations
 EDAM 714 Instructional and Curriculum Leadership
 EDAM 715 School Principal Internship: Technology
 EDAM 716 School Principal Internship: Finance
 EDAM 717 School Principal Internship: Leadership
 EDAM 718 School Principal Internship: Relations

Duquesne University
 600 Forbes Avenue
 Pittsburgh, PA 15213

GADS 700 Orientation to School Leadership*
 GADS 557 Supervision
 GADS 681 School Law
 GADS 574 Pupil Personnel
 GADS 701 Principal Field Experience #1
 GADS 671 Elementary School Admin. & Management
 GADS 575 Middle Level School Practice & Organization
 GADS 675 Secondary School Admin. & Management
 GADS 702 Principal Field Experience #2
 GREV 500 Statistics in Behavioral Research

0

	GADS 547 Advanced Curriculum	
	GADS 703 Administration and Practice	
<u>East Stroudsburg University of Pa</u> 200 Prospect Street East Stroudsburg, PA 18301-2999	<p><i>Core Requirements - 21 credits</i></p> <p>PSED 510 Teacher- School and Community</p> <p>PSED 515 Educational Data</p> <p>PSED 516 Learner & the Learning Process</p> <p>PSED 554 Foundations of Curriculum Construction</p> <p>PSED 584 Middle and High School Curriculum</p> <p>PSED 588 School Law</p> <p>PSED 590 Supervision of Instruction</p> <p><i>Educational Leadership (15 credits)</i></p> <p>PSED 573 Field Experience in Educational Leadership</p> <p>PSED 574 Field Experience in School Organization and Management</p> <p>PSED 575 Field Experience in Curriculum and Student Achievement</p> <p>PSED 595 Elementary and Secondary Educational Leadership</p>	0
<u>Eastern University</u> 1300 Eagle Road St. Davids, PA 19087	<p>EDUC 590 The Principalship I</p> <p>EDUC 591 The Principalship II</p> <p>EDUC 588 Principal as Instructional Leader I</p> <p>EDUC 589 Principal as Instructional Leader II</p> <p>EDUC 598 Leadership Models for Effective Education I</p> <p>EDUC 599 Leadership Models for Effective Education II</p>	0
<u>Edinboro University of Pa</u> 219 Meadville Street Edinboro, PA 16444	<p><i>Post Masters Certificate:</i></p> <p>EDLR 700 Introduction to Educational Leadership</p> <p>EDLR 721 Collaborative Leadership for Evaluation</p> <p>EDLR 731 School and Community Relations</p> <p>EDLR 741 Curriculum Leadership</p> <p>EDLR 760 Legal Aspects of Educational Leadership</p> <p>EDLR 765 Financial Aspects of Educational Leadership</p>	0

	EDLR 775 Educational Leadership Theory and Practice	
	EDLR 789 Elementary Principal Internship*	
	EDLR 794 Secondary Principal Internship*	
<u>Gannon University</u> 109 University Square Erie, PA 16541	GEDU 720 Quality Teaching, Continuous Learning, Professional Accountability	0
	GEDU 725 Principal Introductory Internship	
	GEDU 722 School Financial Management	
	GEDU 726 Finance Developmental Internship	
	GEDU 730 Diverse Learner Competencies for School Leaders	
	GEDU 731 Diverse Learner Developmental Internship	
	GEDU 721 Principal as Agent of School Reform	
	GEDU 723 Legal Aspects of Educational Administrators	
	GEDU 727 Legal Aspects Developmental Internship	
	GEDU 728 Principal Mastery Internship	
	GEDU 732 Principal Leadership Cohort Mentor Portfolio Advisor	
<u>Gwynedd Mercy University</u> 1325 Sumneytown Pike Gwynedd Valley, PA 19437	EDU 571 The Principalship	0
	EDU 572 Curriculum and Instructional Supervision	
	EDU 573 Communications and School-Community Relations	
	EDU 574 School Law and Policy Issues	
	EDU 576 Human Resources and Staff Development	
	EDU 577 School Resources Management	
	EDU 578 Educational Leadership	
	EDU 579 Seminar on Current Issues in Education	
	EDU 595 Practicum I: Leadership and School Administration	
	EDU 596 Practicum II: K-12 Principalship	
<u>Holy Family University</u> 9801 Frankford Avenue Philadelphia, PA 19114	<i>30 Credits Total</i>	0
	Core Curriculum (9 credits)	
	EDUC 527 Process and Pedagogy of Communication	
	EDUC 578 Legal, Social and Political Issues	

Research course, either
 EDUC 607 Seminar in Reading Research
 EDUC 505 Introduction to Research 3

Educational Leadership – Leads to
 Pennsylvania Principal Certification (21
 credits)
 EDUC 580 Theories in Educational
 Leadership
 EDUC 582 Supervision and Performance
 Evaluation
 EDUC 583 The Principalship
 EDUC 584* Practicum I: Prin. K-6
 EDUC 585* Practicum II: Prin. 7-12 1 EDUC
 588 School Finance
 EDUC 589 Seminar in School Lead 3 EDUC
 591* Practicum III: Prin. K-12
 EDUC 620 Curriculum Development

Immaculata University
 1145 King Road
 Immaculata, PA. 19345

21 Credits

1

EDL 621 Administration
 EDL 622 Curriculum and Instruction
 EDL 623 Supervision
 EDL 625 School Law and the Legal
 Process
 EDL 626 School and Community
 Relations
**EDL 643 Special Education for School
 Leaders**
 EDL 690 Practicum Experience

Indiana University of
 Pa/Main
 1011 South Drive
 Indiana, PA. 15705

EDAD 756

0

EDAD 798 elementary level
 EDAD 798 secondary level

Kutztown University of Pa
 15200 Kutztown Road
 Kutztown, PA 19530

Course of Study - 24 Credits

0

*I. Planning and Preparation: Curriculum - 6
 credits*

SEU 567: Curriculum in a Standard Aligned
 System
 EDU 541: Supervision and Finance

II. Environment - 6 credits

EDU 599: School Leadership in a Diverse
 Society

EDU 528: Student Diversity and Critical Pedagogy

III. Instruction - 6 credits

EDU 526: Data-Driven Decision Making

SEU 544: Action Research for Teacher Leaders

IV. Professionalism - 7 credits

EDU 562: School Law

EDU 593: Internship

Lehigh University

Iacocca Hall

111 Research Drive

Bethlehem, PA 18015

*Curriculum for K-12 Principal Certification
(37 Credits)*

0

Core Requirements - 12 credits

EDL 400 Organizational Leadership and Change Management

EDL 424 Leadership: Self and Groups

EDL 421 Instructional Leadership

EDL 420 Data Based Decision Making

Leadership & Management Skills - 15 credits

EDL 422 Curriculum Management for the School Executive

EDL 467 Supervision and Professional Development

EDL 476 School Resources Management

EDL 479 School Law and Ethics

EDL 423 Leading Inclusive Learning Systems

Apprenticeship - 10 Credits

(All Core Requirements & Leadership & Management Skills coursework must be completed before proceeding to this section)

EDL 404 The Principalship I

EDL 405 The Principalship II

EDL 414 Principal Internship I

EDL 415 Principal Internship II

Note: In order to attain the Master's degree and Pennsylvania K-12 Principal Certification, students need to also take the following courses in addition to the courses listed above:

<u>Lincoln University</u> 1570 Baltimore Pike Lincoln University, PA 19352	Educ 471 Diversity and Multicultural Perspectives	0
	Educ 403 Research	
	<i>Course Requirements (36 credit hours, research track; 42 credit hours, certification track)</i>	
	<i>Required Administrative Courses (30 credit hours)</i>	
	EDU 631 Human Resource Management in Education 3	
	EDU 632 Ethics in Educational Leadership and Practice 3	
	EDU 634 School Law 3	
	EDU 636 K-12 School Administration and Assessment 3	
	EDU 638 Curriculum Design & Instructional Improvement 3	
	EDU 642 Supervision and Instruction in K-12 Schools 3	
	EDU 647 School Finance and Fiscal Affairs 3	
	EDU 656 The Principalship 3	
	EDU 657 Instructional Leadership 3	
	EDU 658 School & Community Relations 3	
	<i>Required Capstone (6 credit hours)</i>	
	EDU 661 Research Methods in Education 3	
	EDU 662 M.Ed. EL Thesis Project, or	
	EDU 663 M.Ed. EL Comprehensive Examination Prep. 3	
	<i>Required Field Experience for Certification Track Only (6 credit hours)</i>	
	EDU 659 K-12 Principal Internship I 3	
	EDU 660 K-12 Principal Internship II 3	
<u>Lock Haven University</u> 401 N. Fairview Street Lock Haven, PA 17745	EDLD600 Intro to Educational Leadership	1
	EDLD602 School Law	
	EDLD605 Curriculum and Program Evaluation	
	EDLD607 Professional Development in Schools	
	EDLD612 Instructional Strategies	
	EDLD615 Supervision: Child Development Issues	
	EDLD620 Leadership and Supervision	

**EDLD625 Special Education Leadership
and Administration**

EDLD630 Leadership Skills for Curriculum
Development

EDLD650 Supervision: Curriculum Issues in a
Standards Aligned System

EDLD680 Supervision: Leadership and
Administration

EDLD685 Supervision Leadership and
Administration Issues - Advanced Field
Experience

EDLD692 Reflective Practice and the Design
of Action Research

EDLD694 Supervised Advanced Field
Experiences

Marywood University
2300 Adams Avenue
Scranton, PA 18509

Masters Level Program: 36 Credits

0

I. Professional Education and Core Courses

EDUC 501 Research Theory

COUN 532 Multicultural Issues in Counseling

EDUC 605 Communication Theory and
Organizational Dynamics

EDUC 555 Professional Contribution

II. Concentration

EDUC 545 Administrative Theory for School
Leaders

EDUC 546 Seminar: Problems and Issues in
Education

EDUC 547 Curriculum Planning For Schools

EDUC 548 Supervision and Evaluation of
Instruction

EDUC 549 Law and the School

EDUC 551 School Finances

EDUC 552 Personnel Leadership in Schools

EDUC 593 Administrative Internship

3 Elective Credit Classes

Certification Requirements (18 Credits)

EDUC 545 Administrative Theory for School
Leaders

EDUC 547 Curriculum Planning For Schools

EDUC 548 Supervision and Evaluation of
Instruction

EDUC 549 Law and the School

<u>Millersville University of Pa</u> P.O. Box 1002 Millersville, PA 17551	EDUC 551 School Finances	0
	EDUC 593 Administrative Internship <i>M.Ed. is a 36 credit program.</i>	
<u>Moravian College</u> 1200 Main Street Bethlehem, PA 18018	EDFN 545 Advanced Educational Psychology	0
	EDFN 601 Methods of Research	
	EDFN 603 Philosophy of Education	
	EDLD 610 Leadership Theory and Organizational Behavior	
	EDLD 614 School and Community Relations	
	EDLD 620 School Law, Public Policy and the Principal	
	EDLD 667, EDLD 668 and EDLD 669 Leadership Seminars	
	EDSU 700 Functions of Supervision	
	EDSU 701 Introduction to Supervision	
	EDSU 703 Curriculum and Supervision	
	EDLD 798 Applied Supervision	
	EDLD 799 Applied Practicum	
	<i>30-credit post-graduate program</i>	
	EDUC 617 Special Education: Identification & Effective Intervention	
	EDUC 618 Effective Inclusionary Practices	
	EDUC 622 School Law and Professional Ethics	
	EDUC 655 Standards-Based Curriculum Design	
	EDUC 658 Building a Culture of Learning	
	EDUC 667 Teacher Supervision and Evaluation	
	EDUC 668 Data-Driven Instructional Systems	
	EDUC 723 Organizational Leadership	
	EDUC 724 Principal Certification Practicum I	
	EDUC 725 Principal Certification Practicum II	

Neumann University
One Neumann Drive
Aston, PA 19014-1298

21 graduate credits; admission into the program requires six credits in special education.

EDU 506 School Policy and Law
EDU 507 The Principalship
EDU 508 Fiscal and Facility Management
EDU 509 Administration and Staff
Development EDU 520 Curriculum Design
and Evaluation
EDU 577 Principal Certification Internship

The Pennsylvania State University
128 Outreach Building
University Park, PA 16802

*Online Credits Required: 18 or
Master's degrees are a 30-credit M.Ed.
program*

0

General Educational Leadership: core M.Ed
program, has seven course strands:

Leadership & Administration
Organizational Theory & Practice
Diversity & Equity
Educational Policy & Politics
Law & Ethics
Educational Resource Allocation
Data Use & Research

School Leadership-- using the general
educational program as a foundation, this
emphasis in our M.Ed. program is geared
towards students who are interested in being
school leaders. Embedded in this program is
the Pennsylvania principal certification
coursework.

Point Park University
201 Wood Street
Pittsburgh, PA 15222

18-credit, post-baccalaureate program

1

EDUC 538 Educational Administration
EDUC 545 The Principalship
EDUC 546 Curriculum Supervision &
Leadership EDUC 549 Applied Research
Practicum I: School Administrator - School
Principal K-12
EDUC 550 Applied Research Practicum II:
School Administrator - School Principal K-12
**SPED 534 Differentiated Instructional
Practices**

<u>Relay Graduate School of Education</u> 40 W. 20th Street., Floor 7 New York, NY 10011	<i>The National Principals and Principal Supervisors Academy consists of a two-week summer intensive in June or July and four weekend “intersessions” throughout the academic year.</i>	0
	Developing a vision for strategic leadership Executing effective instructional planning Using data to drive instruction Creating a positive culture of high expectations for students Building an aligned staff culture Leading adult professional development Delivering effective observation and feedback sessions	
<u>Robert Morris University</u> 6001 University Boulevard Moon Township, PA 15108	<i>M.S. in Instructional Leadership degree program: 30 Credits</i> <i>Principal Certification Certificate: 15 credits</i>	0
	Curriculum Design & Assessment Foundations of Online Teaching Theory Learning & Classroom Management Enterprise Operating Systems Enterprise Database Systems Advanced Cobol Programming	
<u>Rosemont College</u> 1400 Montgomery Avenue Bryn Mawr, PA 19010	<i>Certification Requirements: 24 Credits</i> EDU 4525 - Educational Leadership EDU 4528 - Standards-Aligned Curriculum & Instruction EDU 4590 - Classroom Assessment and Analysis EDU 4545 - Supervision and Evaluation EDU 4540 - Special Education Legal Requirements EDU 4536 - Finance and Resource Management EDU 4537 - School Law and Ethics EDU 4615 - Administrative Internships	1
	<i>M.A. Requirements: 6 Additional Credits</i> EDU 4595 -Action Research in Education EDU 4518 -Social and Political Issues in Education	
<u>Saint Francis University</u>	<i>Program is 33 credits.</i>	0

117 Evergreen Drive
Loretto, PA 15940

Core:

15 credits required. No substitutions.

MBA 500 - Perspectives on Management

MBA 504 - Managerial Communications

EDUC 532 - Educational Statistics

EDUC 533 - Educational Research Procedures

EDUC 512 - The Social Psychology of Learning

(+1 if special
education
supervisor
certificate is
added to
coursework.)

Enrichment: 3 credits required.

EDUC 560 - Successful Inclusion for Educational Leaders (Principal certification track)

EDUC 557f - Administration of Special Education (Special Ed Supervisor track)

Specialization: 15 credits required.

MHRM 512 - Employment Law

MHRM 520 - Collective Bargaining

MHRM 521 - Human Resource Management

EDUC 582 - Teaching and Learning with

Technology

EDUC 553 - School and Community Development

EDUC 515 - Curriculum Development and

Management

EDUC 556 - School Law

EDUC 581 - Ethics in Education

EDUC 605 - Instructional Supervision

EDUC 604 - School Principalship

Saint Joseph's University
5600 City Avenue
Philadelphia, PA 19131

Educational Leadership - Education M.S.: 36 credits

1

EDL 600 EdLeader Resrch & Reflect Pract

EDL 655 Interpersonal Relations

EDL 660 Measurement & Evaluation

EDL 665 Administration Planned Change

EDL 670 Human Resource Development

EDL 675 Curriculum Develop & Practice

EDL 680 Law & American Ed

	EDL 685 Seminar in Admin of Curriculum	
	EDL 690 Managing Financial Resources	
	EDL 695 Advanced Fieldwork/Seminar I	
	EDL 696 Advanced Fieldwork/Seminar II	
	EDL 697 Advanced Fieldwork/Seminar III	
	SPE 620 Fund SE Prac for School Ldrs	
<u>Saint Vincent College</u>	<i>Master of Science Degree in School</i>	0
300 Fraser Purchase Road	<i>Administration and Supervision: 39-credits</i>	
Latrobe, PA 15650		
	GCED 600 Educational Leadership and Professional Development	
	GCED 605 Statistics and Research Design	
	GCED 610 Current Issues and Trends	
	GCED 615 Curriculum and Systems Design	
	GCED 620 Assessment and Diagnostics	
	GCED 630 Managing Financial and Material Resources	
	GCED 645 Philosophical and Ethical Perspectives in Education	
	GCED 655 Educational Jurisprudence	
	GCED 675 Inclusionary Education	
	GCED 680 Supervision of Instruction	
	GCSE 607 Family and Professional Collaboration	
	GCSE 697 Teaching Culturally Diverse Students with Limited English Proficiencies	
	GCAD 676 Internship in School Administration: Fall Term	
	GCAD 686 Internship in School Administration: Spring Term	
	GCAD 696 Internship in School Administration: Summer Term	
<u>Shippensburg University of Pa</u>	<i>Post-Master's Degree Certification Program for School Principals: 15 Credits</i>	0
1871 Old Main Drive	ELP514 Practicum I Leadership Field Experiences at the Building Level (PILs)	
Shippensburg, PA 17257	ELP516 Curriculum Assessment and Instruction PK-12 for Diverse Student Populations (PILs)	
	ELP518 The Role of Supervision in Promoting Student Achievement (PILs)	

ELP519 Advanced Leadership and the School
Principal PK-12 (PILs)
ELP520 School Finance and Student Learning
(PILs)
ELP521 Legal and Ethical Issues that Impact
on Student Learning (PILs)
ELP522 Practicum II Advanced Leadership
Field Experiences at the Building Level (PILs)

Temple University/Main
1801 N. Broad Street
Philadelphia, PA 19122

M.Ed. in School Leadership: 30 Credits

0

EDAD 5300 Intro Issues Sch Ldship 3
EDAD 5301 Leadership for Learning
EDAD 5303 Ldshp in Diverse Context
EDAD 5304 Sch Operations, Mgmt, Tech
EDAD 5305 Knowledge Sch Improve
EDUC 5101 Critical Understanding of
Social Science Research

Principal Leadership Concentration Courses

EDAD 5302 Contexts for Sch Reform
EDAD 5306 Change Leadership
EDAD 5307 Clin Exp in Sch Ldship
EDAD 5308 Clinical Experiences in School
Leadership

University of Pennsylvania
3440 Market Street
Philadelphia, PA 19104

Certification Track: 15 Credits

0

EDSL 506: Instructional Leadership to
Promote Learning
EDSL 509: Field Internship Seminar: Inquiry
Into Leadership for School Improvement
EDSL 503: Developing Instructional
Leadership in Practice
EDSL 504: Field Internship Seminar:
Inquiring Into Organizational and Legal
Dimensions of Principal Leadership
EDSL 505: Aligning Fiscal, Human, and
Community Resources in Support of the
School's Instructional Mission

Master's Degree Additional Credits:

EDSL 508: Applying Teaming and Moral
Decision-Making Concepts in Schools
EDSL 510: Critical Issues in Education

	EDSL 507: Practitioner Research EDSL 502: Leadership in Public, Independent, and Parochial Schools EDSL 501: Sustainability in Schools	
<u>University of Pittsburgh</u> 230 South Bouquet Street Pittsburgh, PA 15260	<i>15-month cohort-based program; the Leadership Initiative for Transforming Schools (LIFTS) program</i>	2
	ADMPS 2123 Summer Leadership Institute ADMPS 2402 Health, Mental Health, and Safety Internship ADMPS 2404 Instructional Leadership Internship ADMPS 2406 Assessment and Accountability ADMPS 2407 Politics of Education/School Community Partnerships ADMPS 2405 School Law ADMPS 2408 Positive Behavior Support (PBIS) Internship ADMPS 2410 Institutional Leadership ADMPS 2412 Leadership for Inclusive Schools Internship	
<u>University of Scranton</u> 800 Linden Street Scranton, PA 18510	<i>M.S. in School Leadership: 27 Credits</i> Educational Research Course (3 credits) EFND 506 - Educational Research and Statistics Foundations of Education Course (6 credits) EFND 516 - Advanced Educational Psychology EFND 521 - Advanced Foundations of Education Curriculum and Instruction Course (6 credits) ECUI 506 - Curriculum Theory and Development ECUI 542 - Literacy and Diversity Administration Courses (24 credits) EADM 501 - Educational Administration	0

EADM 506 - Problems in School
Administration and Supervision
EADM 511 - School Finance
EADM 516 - School Law
EADM 521 - Principal as Administrator
EADM 526 - Principles & Practices of
Supervision
EADM 531 - Practicum in Elementary School
Administration
EADM 536 - Practicum in Secondary School
Administration
ECUI 506 - Curriculum Theory and
Development

Waynesburg University
51 W College Street
Waynesburg, PA 15370

Post-masters certification: 24 Credits

1

EDU 507 Curriculum and Instructional
Leadership
EDU 579 Leadership Filed Experience
EDU 516 Assessment, Data Collection, and
Technology
EDU 579 Leadership Field Experience
EDU 578 School, Community Relations
EDU 579 Leadership Field Experience
EDU 577 Supervision and Management
EDU 579 Leadership Field Experience
EDU 575 Special Education Leadership
EDU 579 Leadership Field Experience
EDU 568 Internship
EDU 585 Seminar in Educational Leadership
(taken concurrently with EDU 568)

*M.ED. in Educational Leadership requires an
additional 12 credits*

EDU 508 Contemporary Issues in Technology

EDU 517 Instructional Leadership and
Program Evaluation
EDU 599 Educational Research
Elective

Westminster College
319 S Market Street
New Wilmington, PA
16172

M.Ed. in School Leadership: 33 Credits

1

ED 710 History and Philosophy of Education
EP 740 Human Development
ED 940 Research
1 OF THE ABOVE 3 COURSES

EAD 810 School and Community Relations
 EAD 826 Curriculum and Instruction
 EAD 830 Principles of Educational Leadership
 EAD 840 Supervision of Curriculum
 EAD 850 School Law
 EAD 860 Public School Finance and
 Economics
 EP 810 Assessment and Data Analysis
**EP 820 Special Education for School
 Leaders**
 CS 710 Computers in Education (or
 demonstrated proficiency)
 EAD 980 Internship in Administration and
 Supervision

Widener University
 One University Place
 Chester, PA 19013

M.Ed. in School Leadership: 39 Credits

1

Research (3 semester hours)
 ED 510 Applications of Educational Research

Foundations (12 semester hours)
 ED 502 Politics of Education or
 ED 504 Social Foundations of Education
 ED 503 Foundations of Educational
 Measurement
 ED 506 School Law & Child Rights
 ED 508 History & Philosophy of Education

Professional Core (18 semester hours)
 ED 545 Supervision in Public Education
 ED 546 Analysis, Innovation, & Evaluation
 of Curriculum
 ED 547 Seminar in School Leadership
 ED 555 Current Issues in Elementary &
 Secondary Education
**ED 666 The School Leader's Role in Special
 Education**
 ED 747 Personnel Management for School
 Administrators
 ED 750 Organization & Administration of K–
 12 Schools

Practicum (6 semester hours)
 ED 810/811 Practicum in School
 Administration I & II

Wilkes University
84 W South Street
Wilkes-Barre, PA 18701

*M.S. in Educational Leadership: 36 Credit;
certification only: 27 Credits*

1

Certification Track:

ED 517: The Principal as Educational Leader

ED 523: Administrative Leadership in
Curriculum and Instruction

**ED 571: Special Education Programming
and Administration**

ED 573: Evaluation of Educational Programs

ED 575: School Law for Principals

ED 576: School Management and
Communications

ED 578: Staff Development and Supervision

ED 592: Administrative Internship and
Applied Research Project

Additional credits for M.S.:

ED 508: Intercultural Communication

ED 525: Introduction to Educational Research

ED 587: Technology Leadership

York College of Pa
441 Country Club Road
York, PA 17403

*M.Ed. in Educational Leadership: 36 Credit;
certification only: 24 Credits*

0

Certification Track: 24 Credits

MED 502 Advanced Educational Psychology

MED 550 Legal and Ethical Issues in
Education for Administrators

MED 560 The Principalship

MED 561 Introduction to Organizational
Leadership

MED 562 Supervision of Instruction

MED 565 School Financial Management

MED 572 Supervision of Educational
Personnel

MED 594 Administrative Internship

M.Ed. in Educational Leadership: 33 Credit;

MED 501 Introduction to Educational
Research

MED 502 Advanced Educational Psychology

MED 503 Curriculum Trends and Issues

MED 504 Group Processes in Education

MED 550 Legal and Ethical Issues in
Education for Administrators

MED 560 The Principalship

MED 561 Introduction to Organizational
Leadership

MED 562 Supervision of Instruction

MED 565 School Financial Management

MED 572 Supervision of Educational
Personnel

MED 594 Administrative Internship

Appendix P: IRB Approval Letter

From: irb
Sent: Thursday, December 6, 2018 3:28:13 PM
To: Barger-Anderson, Richael.
Subject: IRB Protocol Approved

Dr. Barger-Anderson,

Protocol #: 2019-020-88-B

Protocol Title: The Instructional Leadership Role of Pennsylvania Public School Principals and Their Effect on Special Education Practices

The Institutional Review Board (IRB) of Slippery Rock University has received and reviewed the requested modification(s) to the above-referenced protocol utilizing the expedited review process. The IRB has approved the protocol effective December 6, 2018.

You may begin your project as of December 6, 2018. Your approved protocol will be subject to review within one year from the date of approval by the IRB.

If you complete the study within the next year, please notify the IRB with a Final Report. The Final Report form and instructions can be found on the IRB website.

Please contact the IRB Office by phone at (724)738-4846 or via email at irb@sru.edu should your protocol change in any way. Your formal letter will be sent via interoffice mail.

Thanks,

Casey

Casey Hyatt

Grants and Sponsored Research/
Institutional Review Board (IRB)/
Institutional Animal Care and Use Committee (IACUC)
Secretary
IRB & IACUC Office Direct Line: 724-738-4846
Fax: 724-738-4857