A Comparative Study of Student Achievement and Teacher Perceptions Between Differently Structured Special Education School Districts

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A Comparative Study of Student Achievement and Teacher Perceptions Between Differently Structured Special Education School Districts

by

Leigha Wetter

A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of Doctor of Education School of Education
A Comparative Study of Student Achievement and Teacher Perceptions Between Differently Structured Special Education School Districts

by

Leigha Wetter

This dissertation has been approved in partial fulfillment of the requirements for the degree of Doctor of Education at Lindenwood University by the School of Education

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Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

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Abstract

In order to provide recommendations for special education service organization practices, the researcher investigated student achievement and teacher perceptions of differently structured special education school districts that collaborated with a special school district to provide special education services and schools that provided their own special education services. Through evaluating the varying school districts, this study aimed to address possible best practices within the structuring of the organizations to increase student achievement for students with special needs. In order to evaluate the organization of the school districts, the researcher analyzed the student achievement of special education students at the elementary and secondary level, as measured by the English Language Arts and mathematics Missouri state assessment, as well as teacher perceptions of administrator support, resources, and professional development opportunities. The researcher determined the number of special education students scoring in the below basic category of the state assessment for each grade level during the spring of 2018 and 2019 in order to determine if there was a difference in student achievement levels or a difference in growth between schools that collaborated with a specialized district and schools that provided their own special education services. By completing quantitative analyses, the researcher determined that there was no difference in student achievement between the special education organizations on English Language Arts or math assessments at the elementary level, but there was a difference at the secondary level, with the schools that collaborated with a specialized district performing higher. Additionally, there was no difference in student growth during the spring of 2018 and 2019 for either special education organization. Through analyses of qualitative data
the researcher determined that there was no difference between the organizations in terms of administrator support, resources, or professional development. The findings of this study could be used as a catalyst for special education organization reform.
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Chapter One: Introduction

Background of the Study

Over the past 60 years, the United States attempted to increase school access for students with disabilities. Due to procedural safeguards and principles of law, a free appropriate public education to eligible children with disabilities, a foundation was established for an educational system to provide more effective and equitable educational services to a variety of students, especially those students with disabilities (Cramer, Hatton, & McHatton, 2018). However, policy makers failed to take into account the external obstacles and factors that have impeded the implementation of these elements (Cramer, Hatton, & McHatton, 2018). Nevertheless, students with disabilities were continuing to perform below their grade level peers. One district attempted to increase student achievement and close the achievement gap for individuals with disabilities by working collaboratively with 22 other partner districts in the county to provide services to students with special education needs within those district schools (Special School District, n.d.a.), while adjacent school districts organized their special education employment in a different manner. The researcher was interested in determining if student achievement and teacher perceptions differed from schools in districts that collaborated with a specialized district to provide special education services and schools in districts that employed their own special education services.

Within a Midwestern county, there were 23,097 students that received special education services from 2,712 teachers in the researcher’s district. These students were spread throughout 265 various elementary, middle, and high schools in 22 partner districts. This one district worked collaboratively with the 22 other partner districts in the
county to provide special education services to students with special education needs within those district schools (Special School District, n.d.a.). For example, a student with a learning disability that attended an elementary school in the Rockwood School District would have received special education services outlined in his or her Individualized Education Plan (IEP) by an employee of a separate specialized school district. However, various other school districts adjacent to the county did not provide special education services in this manner. Rather, these districts employed their own special educators from within their own school buildings. For instance, a student with a learning disability that attended an elementary school in the Wentzville School District would have received special education services outlined in his or her IEP by an employee of the Wentzville School District.

Within these two different structures, resources, professional development opportunities, and administrator assignments differed. For school districts that collaborated with a specialized district, resources, professional development opportunities, and administrator assignments were provided within the specialized district organization, rather than the partner district. Special educators hired by the specialized district received all resources from the specialized district. When school supplies, instructional materials, or technology were to be provided, this was accomplished through the specialized district. In other words, orders were made by the specialized district and paid for through the budget. The materials were then used within the partner school and returned, if necessary, to the specialized district.

Professional development opportunities were organized and paid for by the specialized district as well. These workshops and learning experiences included new
teacher mentoring, ongoing learning in the areas of autism, literacy, numeracy, specialized instruction, measurement and assessment, behavior intervention, and family engagement (Special School District, n.d.c.). The resources and professional development opportunities provided by the partner district simply served as a supplement to the primary ones given by the specialized district.

In terms of administrator assignments, within the schools that collaborated with a specialized district, special education teachers reported to a special education administrator rather than to the school principal. A special education administrator was responsible for all items related to special education within the assigned schools. These individuals supervised all special education staff, including special education teachers, related services staff, such as speech and language pathologists, occupational therapists, and physical therapists, and school psychologists who conducted eligibility testing for students. Special education administrators also collaborated with school principals to ensure the child received full access to general education as deemed appropriate. Often, school principals were only in charge of staff at one building, while special education administrators supervised special education staff at several partner district schools (Special School District of St. Louis County, 2018). The researcher aimed to determine if student achievement and teacher perceptions of resources to support inclusive education, professional development opportunities, and administrator support differed from schools in districts that collaborated with a specialized district to provide special education services and schools in districts that employed their own special education services.
Purpose of the Study

The purposes of this mixed method study was to relate the academic influence of schools with a separate specialized district that supply special education services on student achievement and academic growth by determining if students who attended schools in districts with a specialized district had difference MAP scores than students who attended schools in districts that supplied their own special education services and explored the perceptions of administrator support, resources to support inclusive education, and professional development opportunities among the schools that collaborated with a specialized district and those that supplied their own special education services. The study aimed to identify if there were differences between scores of students who attended schools in districts that collaborated with a specialized district and schools that employed their own special education teachers in the subtests of Mathematics and English Language Arts on the Missouri Assessment Program (MAP). Through this comparison, the study intended to identify current strengths and weaknesses of the organizations of the current special education service providers. To compare the ability of students in districts that collaborated with a specialized district and students in districts that hired their own special education teachers the researcher investigated MAP results of students in each type of district.

By completing a quantitative analysis examining of the secondary student achievement data on the MAP, the researcher hoped to compare the student achievement of special education students in the area of reading and math. The researcher examined both student achievement scores for the 2018 and 2019 school years, as well as student growth over a two-year period from 2018-2019. The results could potentially assist
districts in providing special education services to help increase student achievement of special education students, so students performed in closer proximity to that of grade-level peers.

Additionally, the researcher attempted to determine if there was a difference among teacher perceptions of administrator support, resources to support inclusive education, and professional development opportunities and how these related to student achievement among the schools that collaborate with a specialized district to provide special education services to those school districts who employ their own special education services. According to Hattie (2012), leadership had a positive effect size of 0.32 on student achievement. Additionally, anything which has an effect size of 0.40 or above is considered to have a “high” effect on student achievement. Nevertheless, anything over 0.20 Hattie considered to have a positive effect. Karadag, Bektas, Çogaltay, and Yalçin (2015) stated that a school leader is the person who plans and maintains program development, allocates resources, improves the performance of employees and students by encouraging them, and guides them to meet the objectives of the school. Hattie (2012) also noted in his meta-analyses that professional development opportunities had a positive effect size of 0.41. Scarparolo and Hammond (2018) noted in over the past 15 years research reported that in order for professional development to be effective it needed to take teachers’ existing knowledge and experience and attitudes towards the professional development into consideration, account for school administrative factors, and allow for opportunities for classroom-based follow-up and gather data concerning student achievement to measure the outcome of the professional development experience. In a meta-analysis of 60 studies, Greenwald, Hedges, and Laine
(1996), concluded school resources were related to student achievement and the relationship was substantial enough to be educationally important. Greewald et al. (1996) continued on to note resource allocation did not depend on the amount of money spent by a school, but on the organization of the resources and how the school choose to spend the money that related to student achievement.

Through qualitative analyses of responses from a dissertation-team created survey, the researcher hoped to determine the perceived differences in administrator support, professional development, and resources to support inclusive education of current special education teachers within the two organizations. The information gained from the surveys could assist districts in determining the strengths and weaknesses of the types of assistance provided to special education teachers in helping students achieve success.

**Rationale**

This study was based on the need for more information related to the academic difference in schools with a separate specialized district to supply special education services on student achievement and growth. While the collaboration of instruction in education has grown, collaboration is still very limited in terms of research (Bailey, Jacobs, & Jenkins, 2004). Educational institutions contract services, including teachers, for financial savings, providing higher-quality services, flexibility, and lessened responsibility (Dietz & Enchelmayer, 2001). Due to the minimal amount of research conducted on schools with a separate specialized district to supply special education services to support student achievement, the study was original in nature. According to Berlinger (1997), a single organization cannot transform into a successful learning
organization alone. In order to provide successful differentiated instruction, positive behavioral supports, and universal design for learning, schools needed to work closely with one another (Hernandez, 2013). While special education partnerships produced better service, more expansive programs, and funding (Bailey, Jacobs, & Jenkins, 2004), researchers have yet to analyze the relationship between student achievement and growth at the elementary and secondary level (Bailey, Jacobs, & Jenkins, 2004). This research will contribute to the field by being one of the first studies to analyze how district collaboration of special education services, including employment of teachers, is different related to student achievement, administrator support, professional development, and resources.

**Hypotheses**

*Hypothesis 1*: There will be a difference in English Language Arts and math scores on state aptitude tests for special education students in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services.

*Hypothesis 2*: There will be a difference in student growth on English Language Arts and math state aptitude tests for special education students in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services.
SEPARATE SPECIALIZED DISTRICTS

Research Questions

Research Question 1: What are teacher perceptions of administrative support (instructional improvement, feedback, and reflection) in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

Research Question 2: What are teacher perceptions of professional development opportunities in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

Research Question 3: What are teacher perceptions of resources to support inclusive education (specialized personnel, physical classroom materials, information resource centers or systems) in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

Limitations

While the researcher ensured that the selected schools related closely in terms of race percentage, enrollment, and free and reduced lunch percentage, no two schools were identically matched. Originally, the researcher examined the demographics of a wider-range of adjacent schools in the area that hire their own special education teachers and matched them to schools that collaborate with a specialized district. However, further along into the study the researcher was unable to obtain permission from some of these districts. When making the comparison, the researcher attempted to match schools that provided permission based on race percentage and free and reduced lunch percentage within 10%.
The researcher created the study survey. While the survey was validated prior to being sent to participants, the survey had not been proven reliable or validated in previous research. Additionally, some participants did not complete the survey, due to the method of delivery or the length of the survey. While the survey was disseminated to 145 respondents, only 26 teachers participated. The returned surveys, included detailed responses within the open-ended response sections with an equal amount of surveys from special education teachers that worked in schools that collaborated with a specialized school district and surveys from special education teachers that worked in schools that provided their own special education services.

Furthermore, some of the questions could have been misleading or difficult for individuals to answer. One respondent emailed the researcher inquiring about further clarification regarding what was considered an administrator. The respondent did not know whether he or she should answer the question keeping in mind his or her special education administrator or school principal. Due to the confusion of some of the questions, depending on where the respondents were employed, some answers to the survey could have been skewed.

Definitions of Terms

Advanced: Students performing at the Advanced level on the MAP who demonstrate a thorough command of the skills and processes identified in the Missouri Learning Standards (MODESE, 2018).

Special Education Administrator: an individual responsible for all items related to special education within his or her assigned school. He or she supervises all special education staff. This individual collaborates with the school principals to ensure that the
child is receiving full access to general education as deemed appropriate. Often, while school principals are only in charge of staff at one building, special education administrators may supervise special education staff at several partner district schools (Special School District of St. Louis County, 2018).

*Student Achievement:* a point-in-time measure that evaluates how well students perform against a standard (Douglas, 2013).

*Student Growth:* progress students make over time, typically from one year to the next (Douglas, 2013).

*Basic:* students performing at the Basic level on the MAP demonstrate a partial or uneven command of the skills and processes identified in the Missouri Learning Standards (MODESE, 2018).

*Below Basic:* students performing at the Below Basic level on the MAP demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards (MODESE, 2018).

*Collaboratively-Taught Special Education Services:* services that are provided within the general education classroom, where a special education teacher and a general education teacher work together to provide instruction to students that required specialized support (Morin, n.d.).

*Missouri Assessment Program (MAP):* Online assessment designed to measure acquired student knowledge, skills and achievement at the “student, class, school, district and state levels” (MODESE, 2018, p. 1). Results are used to measure the strengths and weaknesses of students and the overall quality of the educational system in Missouri.
Schools that Collaborate with a Specialized District to Supply Special Education Services: For the purpose of this study, schools in which some teachers are hired, paid, and evaluated by a separate district, but provide services within a school that is part of a different district.

Inclusive Education: The integration of special education and general education practices and curriculums as a means of responding to the needs of learners with and without disabilities (Michaliakis, 2009).

Individualized Education Plan (IEP): a term used to describe the official documentation of special education services that will be provided for your child as well as the meeting where these services are determined (Special School District, n.d.b.).

Professional Development: An activity to provide opportunities for staff members to grow professionally or personally (Schwartz & Bryan, 1998).

Proficient: Students performing at the Proficient level on the MAP who demonstrate an adept command of the skills and processes identified in the Missouri Learning Standards (MODESE, 2018).

Resources: For the purpose of this study, resources will be identified as the products and resources (monetary, personnel, time, materials, or facilities) required and expended to educate students in a school system.

Special Education: The process or set of processes used to educate students with disabilities that are categorized by mental, physical, learning and emotional incapacities. This type of education is also defined and guided by federal law (Wedell, 1995).

Special Education Administrator: An individual responsible for all items related to special education within his or her assigned school. He or she supervises all special
education staff. The individual collaborates with the school principals to ensure the child is receiving full access to general education as deemed appropriate. Often, while school principals are only in charge of staff at one building, special education administrators may supervise special education staff at several partner district schools (Special School District of St. Louis County, 2018).

*Student Achievement*: for the purpose of this study, student achievement will be identified in terms of four performance levels that describe a pathway to proficiency and college and career readiness. Each performance level represents standards of performance for English Language Arts and Mathematics. The four performance levels are: below basic, basic, proficient, and advanced (MODESE, 2018).

*Paraprofessional*: an individual also known as a teacher’s aide, classroom assistant or instructional assistant that provides additional educational support to students with and without disabilities (Ashbaker & Morgan, 2001; Minondo, Meyer, & Xin, 2001).

*Partner District*: the district that houses the school in the school district in which they live (Special School District, n.d.a.).

*Resource*: setting in which students are removed (pulled out) from the general education classroom and provided their academic services in a separate classroom; the location is generally the special education room (Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012).

*Self-contained classroom*: Classroom where students remain and receive specially designed services for the majority of the school day (Obiakor et al., 2012).
Teacher Burnout: the term most commonly used to refer to teachers who appear unhappy in their jobs, say they have considered quitting, or seem resistant to adopt the latest reform initiative (Santoro, 2020).

Summary

The purpose of this study was to investigate the differences in student achievement and teacher perceptions of resources, professional development, and administrator support in schools in districts that collaborated with a specialized district to provide special education services and schools in districts that employed their own special education services. Collaborative partnerships were often formed because the sum of the parts were able to more successfully respond to the concerns of the group rather than one organization alone (Berliner, 1997). The researcher believed that analyzing these collaborative special education partnerships compared to individual organizations was worthy of study. These topics are addressed in the next chapter within a review of the current literature, and include a brief history of special education in the United States, a history of collaboration in special education, a history of special education in St. Louis, administrative support in special education, resources in special education, professional development in special education, standardized testing in special education, and special education teacher burnout.
Chapter Two: The Literature Review

Introduction

With the shifting demographics of schools in the United States, diminishing resources, increasing student needs, and changing school requirements, schools and educators across the country attempted to overcome challenges in various ways (Hernandez, 2013). Especially in the realm of special education, where the performance of students on state assessments had been an important topic of discussion, the push for increased student achievement for students with special needs was at an unprecedented high (Davis, Lazarus, & Thurlow, 2012). In order to achieve the goals some school districts relied heavily on collaboration. As research showed, when teachers collaborated to address instructional issues, teaching and learning increased (Goddard, Goddard, & Tschannen-Moran, 2007). Some school districts took collaboration to an even further extent and collaborated with partner districts to increase success for special education students; including resources, professional development, and administrator assignments.

Organization of the Literature Review

The literature review included a brief history of special education in the United States and how legal mandates played a historically important role in the development of the special education process. The review also noted how collaboration played a role in special education to increase student achievement, along with a detailed description of how school districts as a whole have worked together. Following the section on collaboration, the researcher included a brief history of special education in one Midwestern county and how the county developed a single district that worked collaboratively with various other partner districts to provide special education services.
to students. Once the development of Special School District was described, the organization of the district itself was explained. This included how the district organized resources, administrators, and professional development opportunities. Finally, the research detailed various components of special education, such as standardized testing, special education teacher burnout, and preservice teachers of special education.

**A Brief History of Special Education**

Despite education laws in place for students with disabilities since 1918, the passage of the first U.S. federal legislative mandate in 1975, The Education for All Handicapped Children Act, provided students with disabilities a free and appropriate public education (Hernandez, 2013). Now titled the Individuals with Disabilities Education Act (IDEA), the original legal mandate established in 1975 laid the foundation for special education services as we know them today. In 1997, IDEA was reauthorized to assist in improving the performance and achievement of students with disabilities. Consequently, Congress enacted two significant changes to the Individualized Education Plan (IEP): the inclusion of students with disabilities in state and district assessments and an addition of measurable annual goals that enabled parents and educators to accurately determine a student's progress (Yell, Rogers, & Rogers, 1998).

Another major component of The Education for All Handicapped Children Act and the most recent manifestation as IDEA was Least Restrictive Environment (LRE). LRE mandated students with special needs were to be educated in the general education classroom setting to the greatest extent possible. While not all students with special needs were able to be educated in the general education setting, general education teachers and special education teachers were expected to provide instruction to students
with a much broader range of academic, behavioral, and social characteristics (Hernandez, 2013). Often, the requirements called for students to have paraprofessionals or teachers aids to assist in their education. In 2001, Present George W. Bush passed the next wave of changes entitled No Child Left Behind (NCLB) to ensure schools increased student achievement by requiring all students performed proficient or advanced in the areas of reading and math by the 2013-2014 school year. NCLB included students with disabilities, and Congress, for the first time, specifically identified students with disabilities as a subgroup. Students with disabilities were required to have access to general education curriculum and have academic achievement measured by the same assessments as students without disabilities. As a result of NCLB, schools were held accountable to much higher standards for the performance of students with disabilities (Yell, Katsiyannas, & Shiner, 2006).

In 2015, President Obama signed the Every Student Succeeds Act (ESSA) into place, replacing NCLB. While the ESSA maintained many of the key provisions of NCLB, such as the inclusion of students with disabilities and accountability systems to ensure student achievement, ESSA changed how the accountability systems established increased autonomy within the states. Nevertheless, students with disabilities were still required to be included in all forms of accountability systems such as state and district assessments (National Council on Disability, 2018). As a result of the legal mandates, states were under considerably more pressure to provide more rigorous instruction and better learning outcomes for all students, especially those with disabilities (David & Talbert, 2014). While the performance of students with disabilities had always been a concern, with the passage of these new laws student outcomes became a stronger focus.
Research showed students with disabilities had historically performed below grade level peers. A clear gap existed between students without disabilities and students with disabilities when state and district assessment scores were examined (National Center on Educational Outcomes, 2012). Yet, as a result of the legal mandates such as IDEA and ESSA, the subgroup of students was still held accountable for high student achievement. With the increasing accountability, schools and teachers were required to do more, which became increasingly more difficult due to new testing systems, increased learning demands, limited money and resources (David & Talbert, 2014).

**History of Collaboration in Special Education**

The use of collaboration increased particularly since the early 2000s, on the cusp of No Child Left Behind. Government organizations, communities, and schools restructured their way of thinking and moved away from the notion of self-management; while organizations shifted toward working interdependently. While previously, the relationships worked in conjunction with each other, as a result of working collaboratively the relationships increased from merely a social interaction to one that incorporated common goals, interdependence, and reliance (Slater, 2014).

Collaboration was often used as a means for school improvement (Hernandez, 2013; Slater, 2014). With the reauthorization of IDEA in 2004, students were required to be educated in the least restrictive environment (LRE) or the environment as close to the regular educational classroom as possible in which a child can make satisfactory educational progress. However, while the placement of a child in the general education setting was not always appropriate, teachers were expected to provide instruction to students with a much broader range of learning, behavioral, and developmental
characteristics (Hernandez, 2013). To provide high-quality services and increase student success, schools worked closely with one another, making collaboration a “crucial dimension to the planning, delivery, and evaluation of special education and related services… and a means to achieving inclusion” (Hernandez, 2013, p. 480).

While there was not one definition of collaboration, Slater (2014) defined collaboration as having common characteristics of common goals, joint work, equality, and voluntary participation. These collaborative partnerships identified shared goals and contributed equally to the action plan in order to achieve positive outcomes. During this process, while each entity remains independent, it relies heavily on the other to reach the ultimate end goal (Berliner, 1997). Friend and Cook (1992) defined collaboration as a style of “direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal” (p. 422). While there was not one definition of collaboration, Slater (2014) defined collaboration as having common characteristics of common goals, joint work, equality, and voluntary participation. These collaborative partnerships identified shared goals and contributed equally to the action plan to achieve positive outcomes. During the process, while each entity remained independent, the individuals relied heavily on the other to reach the ultimate end goal (Berliner, 1997). Friend and Cook (1992) defined collaboration as a style of “direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal” (p. 422). The same characteristics were used to describe the term, such as shared participation, shared responsibility, and shared goals. Wright (2001, as cited in Hernandez, 2013), viewed collaboration as “intensive joint working practice (p. 480),” while Snell and Janney
(2000, as cited in Hernandez, 2013) saw collaboration as various individuals with diverse expertise and background knowledge working together to achieve mutually agreed upon goals.

Regardless of the definition, collaboration provided a variety of positives to help improve instruction and facilitate success. As educators were required to take on many more responsibilities in schools, collaboration served as a beneficial tool for teachers and other specialists to serve students with disabilities (Hernandez, 2013). Hernandez (2013) outlined three approaches to collaboration: multidisciplinary, interdisciplinary, and transdisciplinary approaches, in which all maintained a set of underlying assumptions that guided the actions of the team. While all three approaches incorporated the involvement of service providers and teachers, no other similarities existed.

The first approach, the multidisciplinary approach, required specialized individuals to work together to provide services to the same individual in isolation. Much of the planning process and intervention application was applied independently. Nevertheless, the team came together during the assessment and intervention outcomes phase of the process (Hernandez, 2013, p. 484). The second approach, the interdisciplinary approach, individuals conferred with one another during the goal-setting phase, intervention phase, assessment phase, and outcome phase. The ultimate goal of the approach was to create a dynamic progress that increased communication and resulted in a less-fragmented approach to service providing (Hernandez, 2013, p. 485). The final approach, the transdisciplinary approach, was identified as the most effective and successful approach to collaboration, as it increased student success through deliberate service delivery that focused on students. The technique was student-centered and
founded on the notion that knowledge and expertise was shared across disciplines, regardless of the roles of each team member (Hernandez, 2013, p. 485). Together, individuals blurred the lines of responsibilities to jointly develop goals, interventions and action plans (Hernandez, 2013).

In an early study connecting collaboration to student achievement on standardized assessments, Goddard, Goddard, and Tschannen-Moran (2007) determined teacher collaboration may have assisted in the improvement of student achievement. Researchers in the study collected quantitative and qualitative data from 47 elementary schools, with 452 teachers and 2,536 fourth-grade students in a large, urban Midwestern school district. State achievement scores in the areas of reading and mathematics were used to analyze student growth and achievement, while teacher questionnaires assessed teacher collaboration and used to collect qualitative responses. Goddard et al. (2007) ultimately found that the schools with higher levels of collaboration also had higher levels of student achievement, even after controlling for a set of extraneous variables, such as race, socioeconomic status, and prior achievement, and school size.

While research showed collaboration and student achievement had a positive correlation, collaboration also possessed numerous other benefits. With the increased demands placed on teachers and the extensive academic, social, and behavioral needs of students, no single organization met student needs alone (Slater, 2014). By working together, Mattessich and Monsey (1992) believed collaboration between educators could increase the effectiveness of services and make them more accessible to students. Additionally, the services were more coherent, as teachers worked together to create action plans, provide interventions, and assess outcomes.
Collaboration of Districts

As districts became overburdened in regards to resources, staff, and supports for students, members in the districts began looking for ways to increase effectiveness and learn from others. Consequently, districts across the United States began to work with each other to prepare students for higher education or a successful career (Duffy et al., 2011). One example of cross-district learning was the Fresno-Long Beach Learning Partnership, established in 2008 consisting of the third and fourth largest school districts in California, the Long Beach Unified School District and the Fresno Unified School District. According to Duffy et al. (2011), the purpose of the district was to “accelerate achievement for all students and to close achievement gaps by capitalizing on shared, systemic capacity--building across the two districts” (p. 1). Prior to collaboration, the two districts identified four focus areas including, mathematics, the English Learner subgroup, leadership development, and college and career readiness. According to Berliner (1997) identifying a common concern or shared goal was the first crucial step in establishing a strong educational partnership.

The Fresno-Long Beach Learning Partnership based much of their work on Etienne Wegner’s communities of practice framework. This framework stated that a strong, collaborative community of practice where student learning is important is based on three crucial elements – the domain, the community, and the practice. The domain was the area that focused on the shared interest or common goal. The community was the area that focused on individuals engaging in joint activities or discussions. The practice was the area that focused on working toward the domain, or the common goal, together. By incorporating these three core elements, the collaborative districts were able
to achieve their goals of increasing academic achievement, preparing students to college and careers, and increasing leadership within their schools. After closer analyzation of achievement data, the Fresno-Long Beach Learning Partnership demonstrated that collaboration between districts was one way to increase student achievement and offered promise to other districts seeking to improve their work (Duffy et al., 2011).

Another collaboration began in California in 2010 when seven (ultimately 10) school districts worked together to improve the quality of teaching occurring in classrooms and implement new, rigorous academic standards for over 1 million students. The districts of Clovis, Fresno, Garden Grove, Long Beach, Los Angeles, Oakland, Sacramento City, San Francisco, Sanger, and Santa Ana Unified School Districts came together creating CORE. The main purpose of CORE focused on two topics, Standards, Assessment, and Instruction (SAI) within their schools and Talent Management. One superintendent from each district was assigned to the board, with one executive director overseeing the progress (Knudson & Garibaldi, 2015).

Through the work of CORE, the districts created an overarching school improvement and accountability plan to improve student achievement. Teams were created, professional development opportunities provided, interventions and new programs utilized, and success monitored. Through these innovative processes, CORE laid a strong foundation for new ideas for cross-district collaboration. The work accomplished by CORE “provided educators a clear view of progress by including data on student-level academic growth, high school readiness, students’ social-emotional skills and schools’ culture-climate, along with traditional measures of test scores, graduation rates and absenteeism” (Knudson & Garibaldi, 2015).
The state of Missouri, included two unique collaborative school districts, one being Pemiscot County School District. Pemiscot County school district, a voter-established school district, provided special education services to seven of the partner districts within the county. The seven districts included North Pemiscot County R-1, Hayti R-2, Pemiscot County R-3, Cooter R-4, South Pemiscot County R-5, Delta C-7, and Caruthersville 18. Within the comprehensive special school district 65 certified staff members and 28 non-certified staff members served students ages three through 21 in 16 of the partner schools. The partner schools comprised of five elementary schools, two middle schools, six high schools, one learning center, one career and technology center, and one K-12 school. The services provided by staff in the district included academic supports, assistive technology, homebound instruction, occupational and physical therapy, speech and language therapy, vocational training, diagnostic services, early childhood special education, transition services, transportation, psychiatric services, and counseling (Pemiscot County Special School District, n.d.).

A seven-member board governed Pemiscot County Special School District (Pemiscot County Special School District, n.d.). Each member of the board was a representative of the seven districts within the special school district, as outlined in the Missouri Revised Statues 162.855. Since the district was smaller than 100,000 students, the district was able to be governed by the seven-member board. In the case of more than 100,000 students, a governing council would have needed to be formed (Pemiscot County Special School District, n.d.). According to the Missouri special school districts' Annual Secretary of the Board Report (ASBR), Pemiscot County Special School District received local, county, state, and federal revenue in order to maintain its operating budget.
SEPARATE SPECIALIZED DISTRICTS

(Pemiscot County Special School District, n.d.). Additionally, the district needed to ensure a tax levy for an operating tax of at least $1.25 on each $100 assessed valuation of the district (Sullivan, 2014, para. 15).

The Pemiscot County Special School District hired the employees, but provided services within the partner districts in the various other counties. Pemiscot County School District was in charge of providing teachers with salaries, insurance, professional development, resources, and administrative assignments (Pemiscot County Special School District, n.d.). Students received special education services within the district’s home schools and the employees worked within the schools (Pemiscot County Special School District, n.d.). However, students unable to attend home schools were eligible to attend Oak View Learning Center, the school for students ages five to 21 with moderate or severe developmental disabilities (Pemiscot County Special School District, n.d.).

**History of Special Education in St. Louis**

Within the Midwestern county of St. Louis, Missouri, special education was much of the same as across the rest of the country up until the late 1950s. During the early years, students needing specially designed-instruction were frequently removed from the main stream environment and educated in a separate environment, if the students were educated at all. In 1954, however, the Brown v. Board of Education case not only set the basis for racial equality in the United States, but served as the starting point for equal educational opportunities for all students, even those with disabilities (LaNear & Frattura, 2007). As LaNear and Fattura (2007) stated in the article, “disability advocates often celebrate the language and rationale of the Brown decision, suggesting that both are
Not long after Brown v. Board of Education in 1954, the state of Missouri noted larger school systems, within the state, would be able to provide special opportunities for exceptional students and those with special needs. To combat the opportunity St. Louis County pushed for a special organization or district to better meet the needs of handicapped children. In December 1957, constituents in St. Louis County recognized the need and voted to create a new school district, called "The Special District for the Education and Training of Handicapped Children of St. Louis County, Missouri" under Missouri School Laws Section 178.650 and allowed for the formation of special districts to educate students with special needs (Eurich et al., 1966). Through the creation of this school district, many more children with special needs were able to be educated.

In 1965, not only did children with special needs require academic support, but also required vocational training to allow the students to become successful members of a competitive society. Thus, The Special District for the Education and Training of Handicapped Children of St. Louis County, Missouri, became The Special School District of St. Louis County, Missouri (SSD). Under Missouri School Laws Section 178.765, the district re-organized and operated a vocational program while continuing to maintain an academic program. Additionally, following the re-establishment of SSD in 1965, The Cooperating School Districts (CSD) of the St. Louis Suburban District was created. CSD provided visual materials and services, which were expensive and essential to educating many children, to all St. Louis County public schools (Eurich et al., 1966).
For districts outside of St. Louis County and those adjacent, students who needed specially designed instruction received services by within the student’s home district. Nevertheless, in 1957 (the same year SSD was originally established), Missouri created the state-funded Missouri Schools for the Severely Disabled (MSSD) (MODESE, n.d.). Missouri Schools for the Severely Disabled served students between the ages of five and 21 in a separate school placement, when the students’ school district was unable to meet the student’s needs within the home school. While students who lived in St. Louis County typically attended SSD if they needed a more restrictive setting beyond the local school district students unable to attend the district due to the location of the residence, attended MSSD. Students that attended MSSD often had a profound disability as defined by the Missouri State Plan for Individuals with Disabilities Education Act (IDEA) classification system or other disabilities and received support beyond what the local school could provide. The IEP team decided the least restrictive environment (MODESE, n.d.).

As students with disabilities required additional resources, materials, and supports, the cost associated with instruction per student was higher than that for general education. While MSSD was state funded, to fund The Special School District of St. Louis County, Missouri voters agreed to a “county-wide tax levy that provides substantial funding for special education providing the resources needed to cover a broad range of services compared to typical districts” (Special School District, 2017, p. 9). When the district was originally established, taxpayers supported by a direct property tax of 25 cents per $100 of assessed valuation across the county. Further, “the items on the budget of the cooperating school districts were financed by the participating districts, half on the
basis of assessed valuation and half on the basis of enrollment, thus again helping the less wealthy districts” (Eurich et al., 1966, p. 49).

**Special School District**

Special School District (SSD) was one of two unique school districts in the state of Missouri that based its vision and mission on collaborating for student success. Special School District focused on six core values - student success, collaboration, integrity, stewardship, continuous improvement, equity, and accountability. By following the core values and the mission, “In collaboration with partner districts, we provide technical education and a wide variety of individualized educational and support services designed for each student’s successful contribution to our community” (Special School District, n.d.b., para. 7), SSD was able to provide equitable special education services to all students, regardless of where the students lived or their socio-economic status.

The district was formed in 1957 after voters approved the referendum to create a school district that focused solely on supporting their students with special needs. In 1958 the district began educating students, with the first special education school, Ackermann, opening in 1961. SSD was unique in the fact that it was a public-school district that had its own tax base and partnered with 22 additional school districts in the St. Louis area to provide special education services and technical educations to all students in the area that required them. SSD employed 2,712 teachers and served 24,000 students in the St. Louis area. In other words, one in six students in St. Louis County received services from SSD. This large number of students were spread throughout 265 various elementary, middle, and high schools in 22 partner districts.
While approximately 97% of students received services in home schools, SSD had five additional separate schools where students with significant disabilities attended. About 750 students attended a separate school setting (Special School District, n.d., para. 3). SSD also provided a wide-range of additional services, such as occupational therapy, social work services, speech and language therapy, and assistive technology within the partner districts. As SSD was so large, the district impacted the lives of more students over a wider area than any other school district in the county (Special School District, n.d.).

The organization of the district was quite unique, due to the circumstance of collaboration. While the district maintained a superintendent, and cabinet as an executive leadership team, SSD also held a Governing Council to maintain fairness and equality. The Governing Council comprised of 22 members, one from each of the partner school districts served by SSD, which provided district oversight focused on the following responsibilities: approving the district’s budget, reviewing the five-year plan, and electing the seven members of the Board of Education (Special School District, n.d.).

As each school had its own administrative team, including a principal or an assistant principal, teachers that worked for Special School District had a supervisor, or a special education administrator. The individual served as the special educator’s evaluator and administrator, rather than the principal of the school in which the special educator worked. The special education administrator often had a staff of 25-30 teachers spread throughout four or five buildings in the partner district. Each partner district also had a Director of Education that serves as the supervisor of all the special education administrators in the district (Special School District, n.d.a.). While the organization of
Special School District, appeared complex the district ensured all students’ needs were being met (Special School District, n.d.a.).

In terms of resources and professional development, SSD provided a full range of services for all students. The services ranged from adaptive physical education services, language services, social work counseling, to half day behavioral programs students could attend at no cost (Special School District, n.d.). All employees of the district were able to attend professional development opportunities provided by the SSD at the SSD Learning Center (Special School District, n.d.). Teachers received paid time off to attend the trainings if approved by a special education administrator (Special School District, n.d.)

**Administrative Support**

In the 21st century, as the role of the school became increasingly more important, the school system shifted from being primarily managed by the government or central office to being more decentralized. Consequently, the expectations of the school leader grew (Assessment of School-Based Management, 1996; Mulford, 2003). Within the institution of a school, the principal was defined as “the leader, administrator, and manager who implements various functions and therefore, needs to be efficient and intelligent in executing leadership tasks” (Goolamally & Ahmad, 2014, p. 123). As stated in the Assessment of School-Based Management (1996), principals found themselves having to make first time decisions such as how money should be spent, what should be taught, and who should be hired. In other words, the principal was required to transform from being considered the lead teacher with some additional duties to a full-
time instructional leader and manager of financial, material, instructional, and human resources (Mulford, 2003).

The administrator also became responsible for developing, implementing, and maintaining achievement focused instructional programs. While one of the most important aspects of increased student achievement was the teacher, administrators were in the best position to support the teachers along the way. Administrators needed to communicate frequently with teachers about student progress and student needs to help students improve (Mendez-Morse, 1991; Strange, Richard, & Catano, 2008). Mendez-Morse (1991) stated the higher-achieving school had more interactions between the teacher and principal dealing with instructional matters than information of a non-academic nature. The conversations included not only educational issues, but positive feedback and reinforcement for the teachers. Strange, Richard, and Catano (2008) stated leaders needed to visit classrooms frequently and have open and honest conversations with teachers about teaching practices as an initial step in evaluating the quality of teaching and retaining strong teachers. Students could not have achieved success without academically focused teachers.

Additionally, administrators needed to gather and analyze data to determine the areas of need and monitor corrective action to ensure changes occurred. To ensure students achieved at high levels, administrators monitored student assessment data and worked with teachers to implement new supports or change instruction (Mendez-Morse, 1991; Strange et al., 2008). Strange et al. (2008) stated those administrators who constantly reflected upon and analyzed data improved teaching and learning throughout schools. Administrators had to be able to assess the quality of instruction within the
classroom through observations and, then, be confident enough to take corrective action if necessary. However, there needed to be a strict balance between trusting teachers to do what was right for students, allowing them to take risks with confidence, and monitoring teaching quality (Strange et al., 2008). The process ensured only the most highly-effective teachers were instructing students, leading to higher levels of student success (Strange et al., 2008).

Conducting observations of teachers provided administrators insight into specific areas of teacher growth (Dunne, 2003; Strange et al., 2008). Education administrators realized the necessity of continuous growth and learning for teachers and how ongoing professional development supported student achievement. According to Dunne (2003), there was too much emphasis placed on a universal approach, rather than allowing teachers to choose what specific areas to focus on or on make the learning relevant to the teacher’s practice. By encouraging each staff member to create a professional growth plan based on observational data, educational trends, and content standards, leaders could help focus the professional opportunities offered to staff in a more positive approach (Dunne, 2003; Whitlock, 2013). According to Whitlock (2013), leaders worked collaboratively with teachers to set goals and develop a plan for improvement, rather than simply tell teachers of a need for improvement. The professional development plan was based on data gathered through observations, student goals, and a variety of assessment scores, thus minimizing bias from the process. Together, teachers and leaders worked together to improve the quality of teaching for the students (Whitlock, 2013).

As the increased expectation of academic performance for students with disabilities changed, as well as the changes of legal mandates and the increased prospects
for students with special education services to perform well on state assessments, the requirements of administrators changed even further (DiPaola & Walther-Thomas, 2003; Goolamally & Ahmad, 2014). While administrators needed to ensure high academic standards for all students through observations, professional goal setting, data analysis, and instructional conversations, many principal’s assumed the role lacking the vast knowledge of special education and how to best support students with special needs and the teachers. Nevertheless, as stated in DiPaloa and Walther-Thomas (2003), the Council for Exceptional Children argued the administrator’s role was essential in the improvement of educational opportunities of students with disabilities and other learners at risk of school failure and drop-out, which posed a dilemma.

According to DiPaola and Walther-Thomas (2003), research showed administrators who focused on instructional issues, displayed administrative support for special education through actions, and provided high-quality professional development for teachers and created successful outcomes for students with disabilities and other students at risk. To begin the process, however, administrators required the necessary background knowledge regarding special education by understanding the requirements of IDEA, the needs of students with disabilities, and the instructional obstacles teachers faced. While the information could not be learned in one day, by frequent exposure to the content, administrators became prepared to support teachers and other special education staff (DiPaola & Walther-Thomas, 2003).

**Resources**

With the increased demands placed on teachers and school administrators to increase success for students with special education services, additional resources were
needed in order to meet student goals. Resources, included three categories – material resources, financial resources, and human resources (Usman, 2016).

Material resources were considered to be the tangible items within the school such as textbooks, technological devices, pencils, paper, whiteboards, and manipulatives. As stated in Usman (2016), “school physical resource management has a direct impact on the learning environment and is a key determinant of educational outcomes” (p. 31). Consequently, physical school resource management aligned with the school goals, service delivery models, and strategies.

Administrators made use of the resources provided by local and state funding. When an administrator determined what resources or materials were needed, he or she thought about two key areas – efficiency in terms of the use resources and the relationship of resources in promoting student achievement and engagement (The Wallace Foundation, 2013). From there, the leader needed to determine how the resources and supports assisted the team in reaching the mission and vision; specifically, for larger, more expensive resources, activities, and materials (Gendron & Faherty, n.d.).

The use of data analysis, reflection, and collaborative discussion among teachers (The Wallace Foundation, 2013) contributed to the decision-making process. By using data to determine what resources would be the most user-friendly and increase student achievement, leaders were able to support teaching and learning.

Material resources such as pencils, notebooks, workbooks, and textbooks were provided by the specialized district, even though the student who benefited from the resource attended the partner school. Purchases of instructional materials and student supplies came from the district through a requisition form submitted to the specialized
district. If additional materials were needed, the partner school occasionally provided supplies, but only as a last result (Special School District, n.d.).

Financial resources were the funds required to assist the school in all aspects needed in order to run, including the day to day operations of the school (Bottoms & Schmidt-Davis, 2010). The funds provided to the district by the government were typically used to purchase the material resources and pay the salaries of the staff members within the school. Highly successful districts were shown to involve administrators in decisions regarding how individual schools would spend their allocated funds (Bottoms & Schmidt-Davis, 2010). Typically, district administration were the ones who decided how the district money would be broken up by school. In other words, not all schools received the same amount of money (Bottoms & Schmidt-Davis, 2010). Nevertheless, many districts moved towards a new process, where administrators were allowed to have a say in the larger budget process (Bottoms & Schmidt-Davis, 2010). In some cases, successful school districts allowed principals to join the budget process in January and February, where principals attended the budget meeting and shared the schools’ monetary needs (Bottoms & Schmidt-Davis, 2010).

In the case of the specialized district, finances were funneled in more ways than a typical district. Funds began at the district, which were then disseminated to directors of the partner districts, in addition to the special education schools, who split the money among the special education administrators (Special School District, n.d.). Special education administrators provided each teacher with an allotment of money at the beginning of the year and the teacher determined how the funds would support teachers and students (Special School District, n.d.).
Much of the money school districts received were spent on staff salaries, which was the third category of resources after material resources and financial resources—human resources. Within the school setting, human resources consisted of teachers, support staff, administrative assistances, custodians and other employees required to make the school run smoothly (Usman, 2016). The primary function of the human resources department was to recruit and train employees, conduct performance evaluations, motivate employees, engage in workplace communication, and ensure the workplace was safe. Despite the fact the human resources department had many responsibilities, the primary purpose was to create plans for hiring highly qualified teachers best suited for a specific job opening (Usman, 2016).

Within the specialized school district, the human resource department determined the personnel and management needs of the district, assuming the enrollment remained stable over the course of many years (Special School District, n.d.). Considering the district provided the only special education services to students in the county, it was safe to assume that enrollment would remain stable. The human resources department, then, outlined what tasks must be completed within the department and how many hours will need to be covered (Special School District, n.d.). This outline completed by the human resources department determined how many staff members were needed. Human resources also played an important role in ensuring qualified candidates provided services within the partner schools throughout all of the school districts (Special School District, n.d.).
Inclusion Resources in Special Education

Special education programs took on many forms, as the availability of special education services were as widespread as the students who received specially designed instruction. In the researcher’s experience, the utilization of best practice was the goal for students within the general education environment, but meeting the expectation was not always possible. Therefore, special education mandates required a continuum of services, so all student needs were met including academic services, and social, emotional, and vocational development, as well (Rea, McLaughlin, & Walther-Thomas, 2002). The continuum of services included three types: self-contained services, resource services, and collaboratively-taught services (Rea, McLaughlin, & Walther-Thomas, 2002). As special education was considered a service, rather than a setting, the school needed to be prepared with a variety of resources to support the selection of services offered to support students in accessing the general education environment to the greatest extent possible (Rea, McLaughlin, & Walther-Thomas, 2002).

Self-Contained Special Education Services

Within the self-contained special educational environment, students were placed with other students with an educational disability for the majority of the day. According to the continuum of services, students spent less than 40% of the day with general education peers (Chen, 2018). The classrooms could be categorized as a disability specific, such as an autism support classroom or emotional support classroom, or a mixed disability classroom, comprised of students with varying disabilities ranging from students with an intellectual educational disability to students with a traumatic brain
injury. A self-contained special educational environment consisted of a special education teacher and often had one or more teacher assistants for additional support (Chen, 2018).

For students who received services in a self-contained setting, resources required to support students were often extensive, due to the severity and range of the disability. Students who received services in the self-contained classroom could have required resources, such as augmentative communication devices to assist with communicating with others, social and emotional supports, such as social work therapy or counseling sessions, supports for personal hygiene needs, or individualized curriculum models to assist with academic learning (Chen, 2018).

Due to the severity of disabilities, self-contained classrooms included 10 students or less, and received more individualized support. Students within the classroom often engaged in different curriculum at varying levels at different times, thus the supports provided for students to support inclusion often dealt with academics and behavior. Students within self-contained classrooms helped to close the achievement gap while building essential skills needed to learn successfully within a general education classroom with peers (Chen, 2018).

**Resource Special Education Services**

Students who received specially designed instruction and spent 40% or more of the school day in the general education classroom frequently received the instruction in what was commonly referred to as a “resource” room comprised of one special education teacher and approximately five to eight students. Occasionally, a teacher’s aide was available for support. The services provided to students in the resource room setting
were outlined in the student’s Individualized Education Plan and allowed the student to learn in a manner best suited for their learning style (Watson, 2019).

As Watson (2019) stated, resource services were offered to students for a variety of reasons. At times, general education classrooms could have been too distracting for students and the smaller, quieter setting was more conducive to learning for these individuals. Students who required services for this reason, completed grade-level work that was being done in the classroom with minor assistance from the special education teacher. Another reason why students were provided resource services was because the material that was being taught in the general education setting was above the student’s current performance level. In this case, the special education teacher taught the student at a slower pace or taught the material at the student’s instructional level (Watson, 2019).

Frequently students who received specially designed instruction, and spent 40% or more of the school day in the general education setting, received strategy instruction related to either academic, behavioral or social/emotional IEP goals. Students often received minimal additional support from the special education teacher. Most of the time students completed grade-level work, the same work peers completed in the general education classroom (Watson, 2019).

**Collaboratively-taught Special Education Services**

Collaboratively-taught special education services, also known as co-teaching were the least-restrictive special education services. Collaboratively-taught students received specially designed instruction within the general education classroom, where a special education teacher and a general education teacher worked together to meet the student’s
IEP goals. Students who received specially designed instruction in a co-taught classroom were educated with peers 100% of the time (Rea et al., 2002).

According to Rea et al., (2002), a benefit of co-taught services was that students with special education needs were learning the same material and held to the same standards as general education students. Co-teaching included numerous benefits specifically two teachers providing instruction in one classroom. Although models varied from station teaching, where each teacher monitored a specialized station, one-teach, one-assist, where one teacher was the lead teacher, while the other circulated the classroom helping students, and parallel teaching, where each teacher took a group of students and focused on a concept, the material taught to students was the same content taught in a typical, non-collaborative taught class (Rea et al., 2002).

Paraprofessionals in Special Education

Paraprofessionals, also known as teacher’s aides, classroom assistants or instructional assistants, entered the world of education more than 50 years ago during the post-World-War II baby boom. The role originated to combat the overwhelming increase of students in schools, with an educational diagnosis (Ashbaker & Morgan, 2001). Although not certified teachers, paraprofessionals worked alongside teachers. According to the U.S. Department of Education (2005), paraprofessionals, although not required to hold a teaching certificate, needed a high school diploma or equivalent and at least 60 hours of college credit.

The primary responsibility of paraprofessionals was to provide services to students with and without disabilities (Ashbaker & Morgan, 2001; Minondo, Meyer, & Xin, 2001). The role was appeared helpful in rural and small schools with limited
resources and staffing of highly qualified teachers. Ashbaker & Morgan (2001) stated within the school setting, the roles of paraprofessionals was extremely complex. The roles and responsibilities ranged from clerical work filing or grading papers to providing instruction to students. Minodo et al. (2001) noted within a special education setting, the roles and responsibilities of professionals also included toileting, feeding, and handling or positioning of students. The U.S. Department of Education (2005) position description additional responsibilities such as conducting parental involvement activities, assisting with classroom management, or acting as a translator. According to a systematic-analysis conducted by Sharma and Salend (2016, p. 122), between 50% and 75% of the day was spent performing small group and individualized instruction and behavioral supports.

Nevertheless, Sharma and Salend (2016) found the support roles of paraprofessionals varied depending on three factors – setting, motivation of the paraprofessional, and the willingness of teachers to accept the paraprofessional. While paraprofessionals rarely worked with individuals without disabilities, the responsibilities varied depending on the age of the student. In the experience of the researcher, paraprofessionals who worked with younger students spent more time on instructional activities than those who worked with older students. Teachers and paraprofessionals sometimes had different viewpoints of role responsibilities; paraprofessionals viewed the role as providing instructional assistance to students, while teachers viewed the role of the paraprofessional as assisting the teacher (Sharma & Salend, 2016).

Regardless of the responsibilities the paraprofessional assumed, the impact of the paraprofessional on students, achievement, and inclusive education needed to be taken into consideration. Sharma and Salend (2016) found the performance of
paraprofessionals had a positive relationship to student achievement, work satisfaction, stress levels, and workloads. Respondents within the study communicated students who worked with paraprofessionals, in the classroom, increased participation and engagement levels during instructional activities, decreased student off-task behavior and disruptions, and had greater socialization with peers. Ultimately, inclusion within the general education environment was increased through the varying roles that paraprofessionals offered, whether this was by grading and filing papers to ensure completion of assignments or instructing students in small group settings (Sharma & Salend, 2016).

**Professional Development**

To improve schools and achieve a school district’s mission and vision, professional development opportunities had to be put in place. As the world of education transformed, goals for student achievement increased, and teachers needed to adapt (Borko, 2004). To help teachers adapt, professional development opportunities provided teachers an increase in knowledge and an enhancement of instructional skills (Borko, 2004).

The administrator was a major influence over professional development and had a positive relationship to teacher learning. First, the administrator was tasked with creating a culture and climate of encouragement to help people think outside the box regarding teaching and learning. As Bredeson (2006) stated, the administrator needed all stakeholders to relate back to the mission and vision, realizing professional development was critical to reaching professional goals. Creating a community stimulated the success of all students by promoting, cultivating, and maintaining a school environment and instructional program for maximum student learning and staff development.
The administrator had to serve as an instructional leader and learner (Bredeson, 2006; Strange et al., 2008). A school leader not only facilitated the organization of the professional development but also participated in the learning process and worked collaboratively with staff, so knowledge could be implemented within the school (Strange et al., 2008). The professional development process began with an in-depth data analysis to determine the areas of need including student assessment scores, needs assessment results, and discipline data (Bredeson, 2006). Due to data analysis, learning goals included in the professional development plan aligned to the school’s mission and vision (Bredeson, 2006). Additionally, the unique needs of the teachers and students became part of the plan (Bredeson, 2006; Generation Ready, 2013). By beginning the professional development process using data, the school was also able to efficiently measure and the learning (Bredeson, 2006).

The degree to which the professional development experience was successful depended on the planning and implementation (Mizell, 2010). Borko (2004) noted districts spent millions of dollars on disjointed, sit-and-get type learning activities lacking purpose for teachers or students. However, when implemented correctly, evidence showed improvements in instructional practices and student learning. Professional development had to be a collaborative, evidence-based process rooted in the school environment (Borko, 2004). Teachers who participated in the learning were given the opportunity to utilize newly acquired knowledge in a non-evaluative setting providing leaders and coaches to provide feedback (Generation Ready, 2013; Mizell, 2010).

Darling-Hammond, Hyler, Gardner, and Espinoza (2017) studied 35 different professional development programs. Thirty-one of the 35 learning opportunities were
content-focused, while only one of the studies promoted inquiry-based learning through
students in a classroom specific context for teachers. The remaining studies only
required 44 hours of professional learning and during the inquiry-based learning study,
teachers were required to meet in small groups, model lessons, analyze teaching practices
using a specific protocol, review student work, study data, and discuss changes that could
be made (Darling-Hammond et al., 2017). Final results showed students who were a part
of the more in-depth study, where teachers truly fine-tuned educational practice, achieved
greater academic gains than those students whose teachers only received vague content
training; results were determined by pre- and post-test science content exams.

Professional development provided to teachers was continuous and rigorous and
offered support once the initial learning was over (Bredeson, 2006; Generation Ready,
2013). The continuous and rigorous professional development supported teachers’
planning instruction which resulted in a greater chance of the professional development
actually being utilized and increasing student achievement (Generation Ready, 2013).
Joyce and Showers (2003) agreed with the results found by Darling-Hammond et al.
(2017). Joyce and Showers (2003) stated teachers needed to be able to practice the newly
acquired skill over a long period of time, such as eight to 10 weeks. Successful
administrators made sure the professional development learning continued by
implementing continuous coaching and peer support (Joyce & Showers, 2003; Strange et
al., 2008). Teachers who had coaching support practiced the strategies more, retained
and increased specific knowledge of the skill, and were able to adapt the skill to fit the
context of individual classrooms when compared to teachers who were not coached
(Joyce & Showers, 2003). Professional development opportunities increased positive
outcomes when teams of teachers worked collaboratively to meet the needs of students. Together, teachers learned new skills and problem solved to raise the achievement level of all groups of students (Mizell, 2010). However, learning together meant more than just sitting collaborating during the learning activities and completing the same tasks. Administrators provided teachers collaborative work time to analyze student results, locate instructional gaps, and make necessary changes; therefore, motivating teachers to develop their own leadership skills (Mizell, 2010). Successful administrators were the ones who served as instructional models for teachers and provided teachers with resources needed to develop professionally (Mizell, 2010).

Within the specialized school district, professional development opportunities were primarily provided by the district. In the researcher’s experience, staff registered for professional development opportunities through an online program that tracked learning hours, as the specialized district also provided professional development opportunities for staff within the district. If a staff member wanted to attend an outside conference, the teacher needed to apply for the conference through the specialized district, who incurred the cost (Special School District, n.d.a.). Nevertheless, teachers typically attended trainings by the partner school districts as well. During professional development days during the school year, teachers attended learning opportunities with their partner schools (Special School District, n.d.a.).

Standardized Testing in Special Education

According to Kamenetz (2014), throughout the course of the school year, all students participated in numerous standardized tests including curriculum-based measure assessments and grade level assessments. The tests required all students to answer the
same questions in the same way, unless stated differently in each student’s Individual Education Plan through accommodations and modifications. All tests were scored in a universal manner. The use of standardized tests in American education, increased in recent years due to the passing of No Child Left Behind in 2002. No Child Left Behind explicitly stated each state needed to have challenging academic standards in reading and math, set annual statewide progress objectives to ensure that all groups of students reach proficiency within 12 years, and test children annually in grades three through eight, in reading and math, to measure student progress (Kamenetz, 2014).

Edwards (2015) discusses two opposing views regarding the standardized testing requirements outlined in No Child Left Behind. Some believed summative assessments were a fair and objective measure of student achievement and all students should participate, regardless of achievement level. Others believed standardized assessments were not fair and did not illustrate an accurate representation of student learning. Even further, some believed standardized tests should be tailored to the student’s individual ability. For instance, if a seventh-grade student read on a second-grade reading level, the assessment given to the student should have been on a second-grade reading level. All parties could agree on one thing, however; there needed to be a standard way to compare scores among students in different areas and of different races (Edwards, 2015).

Every state required every child to participate in a standardized assessment each year in third through eighth grade in the areas of math and reading, plus once in high school. Students whose IEP team decided an alternative assessment would be best, participated in the MAP-A, or alternative assessment, as outlined in their Individualized Education Plan. The alternative assessment was administered only to students with the
most significant cognitive disabilities who were deemed, by the IEP team, unable to participate in the MAP assessment; approximately 1% of students took the MAP-A assessment. According to the Council of the Great City Schools, students participated in 113 standardized tests in grades K through 12 (Kamenetz, 2014). Scores from the assessments were used to track the performance of students and schools as a whole. Schools and districts needed to show progress toward proficiency, and failing to meet proficiency could result in consequences. Failure to consistently achieve Annual Yearly Progress (AYP) standards resulted in consequences for a school district ranging from the replacement of the entire staff to the closure of the school (Maranto, 2015).

On one hand of the argument, some education professionals believed standardized testing held teachers and schools accountable for what was taught in a clear and unbiased manner where standardized tests became inclusive and non-discriminatory since all common state assessments required students to answer the same questions (Kamenetz, 2014). Further, with the new grade-level assessment, teachers could ensure all students acquired the same background knowledge prior to taking the performance task part of the assessment (Kamenetz, 2014). Test scores were also able to be compared among states, cities, districts, and schools and allowed parents to be able to compare their child’s performance to his or her same-age peers (Kamenetz, 2014). The Council of Chief State School Officers found approximately 23 different purposes for tests, including state and federal accountability, grade promotions, English proficiency, program evaluation, teacher evaluation, diagnostics, and end-of-year predictions (Kamenetz, 2014).

On the other hand, some believed that standardized testing was a stressful and unnecessary use of time, did not increase student achievement and discriminatory among
many different groups, including students of varying races and abilities. While teachers spent countless hours teaching to the test through repeated review and drill, it was still an inaccurate representation of student learning (Procon.org, 2015). Standardized testing was only a small portion of what made learning meaningful for students, as there were a variety of factors that cannot be measured by a test, including creativity, compassion, motivation, courage, and leadership (Procon.org, 2015). Even the data regarding standardized testing was in disagreement (Procon.org, 2015). “Ninety-three percent of studies on student testing, including the use of large-scale and high-stakes standardized tests, found a positive effect on student achievement, according to a peer-reviewed, 100-year analysis of testing research completed in 2011 by testing scholar Richard P. Phelps,” (Procon.org, 2015, para. 4). Nevertheless, overall no relationship existed between standardized testing and increased student achievement as a whole, as the United States scores dropped in math and science and had no change in reading since the passing of No Child Left Behind in 2002 (Procon.org, 2015).

For students in special education, teachers spent much of the school year preparing students to complete common assessments. Students with special needs participated in assessments, through accommodations and modifications as determined by the IEP team (Niebling & Elliot, 2005). Accommodations and modifications, although used interchangeably by many individuals in the world of education, were different. Accommodations included changes in how a student responded to an assessment or the way in which the assessment was administered (Niebling & Elliot, 2005). Examples of accommodations included variances in setting, timing, scheduling, presentation, and method of response (Niebling & Elliot, 2005). The purpose of providing students with
accommodations was not to change the assessment itself, but to allow students to overcome obstacles and reveal a target skill level (Niebling & Elliot, 2005). While providing students with accommodations did not ensure students would perform better on the assessment, Niebling and Elliot (2005) stated “we cannot truly know what a student has learned until we provide him with the appropriate accommodations that remove the irrelevant interference of a disability” (p. 3).

Modifications altered the assessment content or the process of measurement. Examples of modifications included not assessing the same grade-level standards or asking students to answer the same questions on the assessment (Katsiyannis, Zhang, Ryan, & Jones, 2007; Niebling & Elliot, 2005). If the students received modifications to the state assessment an alternative assessment was given. The alternative assessment score was not considered fully valid or a true display of the student’s skill level (Katsiyannis, Zhang, Ryan, & Jones, 2007; Niebling & Elliot, 2005). Examples of alternative assessments included portfolios, skills checklists, performance tasks, and IEP goal analyses, with portfolios being the most common form of alternate assessment.

Due to the passing of No Child Left Behind in 2002 and the Every Student Succeeds Act by President Obama in 2015 (Donnelly, 2015), all students were required to take standardized assessments in order to measure their progress and academic achievement. For students that had disabilities, however, these assessments seemed futile. In order to overcome the obstacles that these students faced, accommodations and modifications for testing was provided to students, but often did not paint a clear picture of the student’s true understanding.
Donnelly (2015) stated President Obama instructed the Department of Education to ensure students take high-quality tests, limit test taking time to 2% of classroom time and remove the “drill-and-kill” approach in the classroom (para. 4). For students with disabilities, the argument became not about the amount of time that the school spent on testing, but the purpose of testing. Assessments without opportunities for growth seemed ineffective (Kamenetz, 2015). Students should have been given fewer summative assessments and more formative assessments related to an instructional level (Kamenetz, 2015). Accountability measures and interventions were not just based on one score, but used a big-data approach (Kamenetz, 2015). The big-data approach used information from a number of different sources — graduation rates, discipline, demographic information, teacher-made assessments and attendance in order to measure student growth and achievement (Kamenetz, 2015).

**Special Education Teacher Burnout**

Freudenberg, a clinical psychologist, introduced burnout and studied organizational stress in 1974. Freudenberg (as cited in Akin, 2019) defined teacher burnout as “people’s failure to meet high demands caused by their excessive workloads” (p. 49). Malash and Jackson (as cited in Akin, 2019) defined burnout as “the state resulting in a decrease in the sense of personal accomplishment along with an increase in individuals’ emotional exhaustion and depersonalization” (p. 49). The term teacher burnout evolved and was commonly referred to as teachers who appeared dissatisfied, and considered quitting teaching, or seemed resistant to try the newest instructional intervention or program (Santoro, 2020).
With the increased demands placed on students with disabilities to show growth on state assessments to close the achievement gap requirements placed on special education teachers amplified. As years progressed, special education teacher shortages increased, with 48 of the 50 states reporting special education teacher shortages in 2015 (Carver-Thomas & Darling-Hammond, 2017, para.20). According to a national survey conducted by the Council for Exceptional Children, over 1,000 special education teachers stated, “poor teacher working conditions contributed to the high rate of special educators leaving the field, teacher burnout, and substandard quality of education for students with special needs (Gersten, Keating, Yovanoff, & Harniss, 2001, p. 549). The high rate of shortages became a concern for two reasons. First, research showed high levels of teacher turn-over was harmful to student achievement. By retaining teachers, rather than filling the classroom with new and unexperienced teachers, it was able to be ensured that high-quality instruction was taking place and that the teachers in the classrooms embodied the experience and the expertise to instruct all students. Secondly, special education teacher turnover rates were higher than in any other category of teacher, an area of education that benefitted from consistency and structure (Carver-Thomas & Darling-Hammond, 2017).

To understand why teachers experienced burnout and left the profession of special education, a profession where the number of students requiring specialized support was increasing, the working conditions of teachers who left needed to be analyzed. Gersten, Keating, Yovanoff, and Harniss (2001), conducted a study on the working conditions and the relationship on teacher retention and student achievement within three large urban school districts in the United States. The research team completed the study by
organizing a conceptual framework, beginning with the problems or factors related to job design, the outcomes these obstacles had on teachers, and how these obstacles affected their intent to stay or leave the field (Gersten et al., 2001). Rather than analyzing typical conditions such as classroom size, use of paraprofessionals, and availability of curricular resources, the researchers analyzed how certain job design factors related to teacher retention (Gersten et al., 2001). The job factors noted in the results included administrator support, professional development opportunities, and stress (Gersten et al., 2001). Teacher dissatisfaction also dealt with the variables of standardized testing, lack of administrative support, and poor working conditions (Carver-Thomas & Darling-Hammond, 2017).

Administrator support was found to be a critical factor in determining special education teacher retention, since teachers reported the lack of administrator support as a primary reason for teacher burnout. For instance, teachers who believed the administration was unsupportive were twice as likely to leave the profession as teachers who believed the administration was supportive of their teaching (Carver-Thomas & Darling-Hammond, 2017). Within the Gersten et al. (2001) study, researchers noted that administrator support contributed to how teachers felt about professional development and the working conditions. Gersten et al. (2001) noted special education teachers felt supported by administrators when the administrator understood and appreciated the role particular educators served. Rather than providing material resources for the teachers, teachers felt stress was reduced when administrators engaged in meaningful conversations about the roles and provided teachers with professional development opportunities to enhance instruction (Gersten et al., 2001).
With the increased responsibilities placed on administrators and the lack of time available, administrators struggled to meet the needs of all teachers. However, by implementing some relatively low-cost strategies, administrators were able to better support the special education teachers and maintain high-quality teachers within the schools (Gersten et al., 2001). For example, Gersten et al. (2001) identified one strategy as assisting special education teachers in thinking through the conflicts and unique demands of the job. To reduce stress, administrators needed to provide special education teachers with approaches to assist in the prioritization of problems and assistance in working through interpersonal conflicts that arise between teachers, parents, and other members of the special education team. Langher, Caputo, and Ricci (2017) discussed the importance of administrative support and how the support reduced emotional exhaustion and increased personal accomplishment, or a feeling of success and acceptance. Especially in the realm of special education, many administrators lacked the relevant knowledge of how to support special education teachers. Carver-Thomas and Darling-Hammond (2017) believed spending the necessary funds to train administrators in how to support special education teachers was beneficial.

Special education teacher retention was also increased when administrators provided special education teachers with professional development opportunities (Langher, Caputo, & Ricci, 2017). According to Gersten et al. (2001) administrators had the largest positive relationship to professional development opportunities when compared to job satisfaction and role dissonance. Providing special education teachers with opportunities to learn on the job, regardless of the number of years in teaching experience, increased retention within the field (Gersten et al., 2001). Professional
development opportunities also prevented job stress and increased the perception special education teachers were able to make independent decisions (Langher et al., 2017).

The concept of professional learning communities fell within the category of professional development opportunities. DuFour (2007) defined professional learning communities as collaborative teams that focused the collective efforts of individuals on critical questions. In the research performed by Gersten et al. (2001), it was identified teachers who participated in professional learning communities exhibited higher levels of commitment to work, demonstrated higher degrees of care for students and commitment to rigorous expectations. Professional learning communities served as a manner for teachers to work collaboratively to improve teaching skills and enhance the academic achievement of students. Nevertheless, Gersten et al. (2001) noted professional development opportunities went beyond simply attending teacher trainings or following legal requirements. Rather, special education teachers believed professional development learning relied heavily on having more opportunities to observe other teachers’ teaching practices and learn from each other. Teachers stated a need for professional development opportunities regarding inclusive practices and opening the line of communication with general education staff to increase student success (Gersten et al., 2001).

Out of all the factors, within the school setting, teachers had the highest relationship to student learning and high levels of achievement (Carver-Thomas & Darling-Hammond, 2017). Therefore, school districts needed to attract high-quality teachers and retain the teachers within the current schools (Santoro, 2020). With strong administrative support and available professional development opportunities where
special education teachers felt valued at work, stress was decreased and staff was retained (Carver-Thomas & Darling-Hammond, 2017; Gersten et al, 2001).

**Summary**

The requirement for students with disabilities to show academic growth and achievement, as measured by state assessments, increased over the years. Within the state of Missouri, students with disabilities completed the MAP assessment each year and growth was measured according to the score. According to Carver-Thomas and Darling-Hammond (2017), the teacher had a positive relationship to student learning when considering all other factors within the school setting. To increase student achievement for students with disabilities, one specialized district worked collaboratively with other districts in the county to provide special education services (Special School District, n.d.). The overarching district organized resources, administrative support, and professional development opportunities differently than two other districts adjacent to the county who supported students with special education services (Special School District, n.d.). The researcher aimed to investigate and relate the academic influence of schools with a separate specialized district measuring student achievement and growth and explored how this relates to the teacher perceptions of administrator support, resources to support inclusive education, and professional development opportunities. The next chapter outlined the methodology used for this study. Chapter four shared the results attained from the mixed-methods study. Chapter five provided suggestions for both groups to utilize the findings for improvements in current programs and recommendations for additional investigations.
Chapter Three: Methodology

Utilizing a mixed-method approach allowed the researcher to use both quantitative and qualitative data within one study, therefore producing various types of results that could further the understanding of the researcher (Creswell & Plano Clark, 2011). The study aimed to identify if there were differences between assessment scores of students who attended schools in districts that collaborated with a specialized district and schools that employed their own special education teachers in the subtests of Mathematics and English Language Arts on the Missouri Assessment Program (MAP). Through the comparison, the researcher intended to identify current strengths and weaknesses of the organizations related to special education service providers. Additionally, the researcher attempted to determine if there was a difference among teacher perceptions of administrator support, resources to support inclusive education, and professional development opportunities and how the perceptions related to student achievement among the schools that collaborate with a specialized district to provide special education services to those school districts who employ their own special education services.

The Research Sites and Participants

The researcher began by engaging in a school demographic “match-up” based on ethnicity, specifically African American and Caucasian students enrolled at the time of the study, percentage of students enrolled in special education, enrollment and percentage of students receiving free and reduced lunch. The researcher’s intent was to stay within a 10% variance in each category. Researched school A was matched with a researched school B based on the criteria. Initially, the researcher began the matching process using
all schools that collaborated with a specialized district and schools in five adjacent school
districts that supplied their own special education services. Nevertheless, three of the
five adjacent school districts did not want to participate in the study, thus narrowing
down the match pool. The researcher began matching schools from the two adjacent
school districts that supplied their own special education services with schools that
collaborated with a specialized district. From there, the final list of 10 elementary
schools and 10 secondary schools was selected.

Permission to conduct research at each of the study sites needed to be obtained.
To conduct research at the schools that collaborated with a specialized district to provide
special education services, only one permission was needed, as each of the schools
worked under the umbrella of the larger collaborative district. A form to obtain
permission to conduct research was completed and submitted to the evaluation and
research administrator of the collaborative district. The evaluation and research
administrator provided approval (See Appendix B). To obtain permission from the two
adjacent school districts the researcher emailed the director of human resources of each
of the districts. The researcher received permission electronically from each of the
administrators to utilize participants at the selected schools in their districts (See
Appendix B).

Students and adults chosen for the study were a non-random, purposive sample.
The researcher selected study participants based on the selected school matching process.
All students with disabilities that completed the MAP assessment in grades three through
eight and students with disabilities and completed the English 2 and Algebra 1 end of
course exam were chosen to participate in the study, through the quantitative analysis
process of assessment data. All special education teachers within the selected schools were chosen to complete the survey.

**Survey**

Once the researcher received approval from the Institutional Review Board of the study university and permission from each of the study sites, the dissertation-team created survey was disseminated electronically. Email addresses of the special education teachers that worked in the researched school districts that provided their own special education services were obtained by the researcher. The researcher disseminated the survey to the study participants. The email addresses for the special education teachers for the collaborative district were obtained by the research and evaluation administrator for the collaborative district. The research and evaluation administrator disseminated the survey to the collaborative district participants.

The dissertation team-created survey focused on the three areas focused on student achievement in the area of special education – administrator support, resources, and professional development. As Carver-Thomas & Darling-Hammond (2017) stated three critical factors: administrator support, resources, and professional development ultimately led to teacher burnout, therefore removing high-quality teachers from the workforce which ultimately led to lower student achievement and success in the classroom. A recruitment script asking for participation was included in the email with the survey attached. The researcher also included a survey information sheet detailing the purpose of the study (see Appendix C). When completing the survey, participants were required to answer a mixture of Likert scale questions and open-ended questions.
(see Appendix D). Participants were able to opt-out of any questions on the survey at any time.

To maintain participant privacy and confidentiality, the researcher stored on a password-protected electronic device the participant survey quantitative responses. The anonymous setting on Google forms was initiated and no identifiable information was obtained. Teachers completing the survey were not asked to identify individual schools, but the level of students (elementary or secondary) taught. The researcher expected to receive approximately 50 surveys, however the participant response rate totaled n=31 responses specifically n=18 from the collaborative district and n=13 from the researched school districts that supplied their own special education services.

**Assessment Scores**

Due to the nature of the quantitative data, permission was not required to analyze the MAP scores for students with disabilities in the selected schools. The researcher obtained MAP data from the Missouri Department of Elementary and Secondary Education (MODESE) and analyzed assessment scores for students with an IEP for 2018 and 2019 by school and grade level to determine student achievement and student growth for the two-year period. The researcher then organized data by the number of students scoring in the below basic category for each of the selected schools.

**Methodology**

Both quantitative and qualitative data was utilized for the study. The researcher began by compiling the assessment scores of the MAP results from each selected school sorted by grade and school year. Assessment scores for students with an IEP who completed the MAP assessment in grades three through eight in English Language Arts
and Mathematics, as well as students in high school who completed the Algebra 1 and English 2 assessment were the scores considered in data analysis. Elementary data were considered for assessment scores in grades three through five and secondary data were considered for assessment scores in grades six through eight and English 2 and Algebra 1. MODESE provided the researcher with secondary data. The researcher compiled the number of students at the below basic level for English Language Arts and math at each grade level for all researched schools for 2018 and 2019. The researcher analyzed the data for each hypothesis using t-tests for difference in means, as well as ANOVA. In order to determine which statistical t-test to complete, an F-test for difference in variance was conducted first.

The researcher disseminated the survey to the selected participants after quantitative data collection. Once the survey data was collected, the researcher removed all identifiable information to protect the identity of the participants. The researcher analyzed the data using a t-test for difference in two independent means for each of the Likert scale questions reading administrator support, resources, and professional development, following an F-test of variances. Finally, the researcher used anecdotal data from the open-ended survey questions regarding administrator support, resources, and professional development opportunities in order to determine trends and draw conclusions regarding the teacher perceptions of administrator support, resources to support inclusive education, and professional development opportunities.

Null Hypotheses

Null Hypothesis 1: There will be no difference in English Language Arts and math scores on state aptitude tests for special education students in schools with a
separate specialized district to supply special education services compared to those schools who supply their own special education services.

*Null Hypothesis 2*: There will be no difference in student growth on English Language Arts and math state aptitude tests for special education students in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services.

**Research Questions**

*Research Question 1*: What are teacher perceptions of administrative support (instructional improvement, feedback, and reflection) in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

*Research Question 2*: What are teacher perceptions of professional development opportunities in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

*Research Question 3*: What are teacher perceptions of resources to support inclusive education (specialized personnel, physical classroom materials, information resource centers or systems) in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

**Limitations**

While the researcher ensured the selected schools related closely in terms of race percentage, special education percentage, enrollment, and free and reduced lunch percentage, no two schools were identically matched. Originally, the researcher
examined the demographics of a wider-range of adjacent schools in the area that hire their own special education teachers and matched them to schools that collaborate with a specialized district. However, the researcher was unable to obtain permission from some of the districts. When making the comparison, the researcher attempted to match schools that provided permission based on race percentage, enrollment, special education percentage, and free and reduced lunch percentage within 10%.

The survey was created by the researcher and the committee and prior to dissemination the survey had not been proven reliable or validated in previous research. Additionally, some participants did not complete the survey, due to the electronic format or the length of the survey. While the researcher disseminated the survey to 145 respondents, only 26 surveys individuals participated. The returned surveys included detailed responses within the open-ended response sections with an equal amount of surveys from special education teachers in schools that collaborated with a specialized school district and surveys from special education teachers in schools that provided their own special education services.

Furthermore, some questions could have been misleading or difficult for individuals to answer. One respondent emailed the researcher inquiring about further clarification regarding what was considered an administrator. The respondent did not know whether he or she should answer the question keeping in mind his or her special education administrator or school principal. Due to the confusion of some of the questions, depending on where the respondents were employed, some answers to the survey could have been skewed.
Conclusion

The researcher utilized a mixed-methods approach gathering assessment score data and special education teacher perception data to seek a difference among Researched School District A and Researched School District B on student achievement and growth by determining if students who attended schools in districts with a specialized district had different achievement data than students who attended schools in districts that supplied their own special education services and explored the teacher perceptions of administrator support, resources to support inclusive education, and professional development opportunities among Researched School District A and Researched School District B. The following chapter shared the results attained from the mixed-methods study. Chapter five provides suggestions for both groups to utilize the findings for improvements in current programs and recommendations for additional investigations.
Chapter Four: Results

Overview

This chapter represents findings of multiple statistical $t$-tests for difference in means and discusses the results. The purpose of this mixed methods study was to relate the academic impact of schools with a separate specialized district that supplied special education services on student achievement and growth. This was completed by determining if students who attended schools in districts with a specialized district had congruent or different content knowledge than students who attended schools in districts that supplied their own special education services and explored how this impacted the teacher perceptions of administrator support, resources to support inclusive education, and professional development opportunities among the schools that collaborated with a specialized district and those that supplied their own special education services. The secondary Missouri Assessment Program (MAP) data from the MODESE was used as part of this study, as well as qualitative data from a dissertation-team created survey. Data were collected from five districts whose schools collaborate with a specialized district and two districts that provide their own special education services. The researcher chose to use a statistical $t$-test for difference in two independent means, as well as an F-test for difference in variances; the results of the analysis finalize this chapter.

The MAP scores from the English Language Arts and math grade-level assessments were analyzed to investigate if there was a difference between the number of students that scored in the below basic category for special education students in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. Students performing at the
Below Basic level on the MAP demonstrated a minimal command of the skills and processes identified in the Missouri Learning Standards. Various descriptors were utilized in each subject area to better detail student performance (MODESE, 2018).

In order to further analyze the null hypotheses, the number of special education students in each grade level at each school that scored in the below basic category was obtained from the MODESE. From there, the number of special education students that scored in the below basic category for the 2018 and 2019 assessments in each subject area was entered into the statistics calculator.

Table 1

<table>
<thead>
<tr>
<th>Groups</th>
<th>Count</th>
<th>Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary ELA Specialized</td>
<td>36</td>
<td>3.72</td>
<td>8.09</td>
</tr>
<tr>
<td>Elementary ELA Non-Specialized</td>
<td>44</td>
<td>4.70</td>
<td>10.12</td>
</tr>
<tr>
<td>Elementary Math Specialized</td>
<td>32</td>
<td>4.94</td>
<td>6.06</td>
</tr>
<tr>
<td>Elementary Math Non-Specialized</td>
<td>45</td>
<td>4.71</td>
<td>9.89</td>
</tr>
<tr>
<td>Secondary ELA Specialized</td>
<td>40</td>
<td>11.33</td>
<td>31.97</td>
</tr>
<tr>
<td>Secondary ELA Non-Specialized</td>
<td>26</td>
<td>26.92</td>
<td>128.23</td>
</tr>
<tr>
<td>Secondary Math Specialized</td>
<td>38</td>
<td>16.37</td>
<td>40.13</td>
</tr>
<tr>
<td>Secondary Math Non-Specialized</td>
<td>26</td>
<td>27.54</td>
<td>77.22</td>
</tr>
</tbody>
</table>

The results of Table 1 show the number of special education students who took the Missouri Assessment Program (MAP) and scored in the below basic category (count), the average number of students for each group (mean), and the amount of difference between the number of students (variance).

**Null Hypothesis 1**

*Null Hypothesis 1*: There will be no difference in English Language Arts and math scores on state aptitude tests for special education students in schools with a
SEPARATE SPECIALIZED DISTRICTS

separate specialized district to supply special education services compared to those schools who supply their own special education services.

The researcher conducted a t-test for difference in two independent means to see if there was a difference in ELA and math scores on the MAP assessment for special education students in schools that collaborate with a separate specialized district to provide special education services and students in schools that provide their own special education services by analyzing the number of special education students that scored in the below basic category. A preliminary test of variances revealed that the variances were equal for elementary ELA ($F(80)=1.11; p=0.745$), elementary math ($F(74)=1.67; p=0.731$), and secondary math ($F=2.05; p=0.06$). A preliminary test of variances revealed that the variances were not equal for secondary ELA ($F(39)=3.86; p<.001$). The analysis revealed the following results in Table 2.

Table 2 shows the results of the t-test of two independent means. The table indicates the mean, standard deviation, degrees of freedom, $t$-value, and $p$-value for each of the areas of ELA and math, including elementary and secondary, as well as specialized and non-specialized schools.

Table 2

<table>
<thead>
<tr>
<th>Groups</th>
<th>Specialized M</th>
<th>Specialized SD</th>
<th>Non-Specialized M</th>
<th>Non-Specialized SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary ELA</td>
<td>3.72</td>
<td>2.84</td>
<td>3.48</td>
<td>2.71</td>
<td>80</td>
<td>0.40</td>
<td>0.693</td>
</tr>
<tr>
<td>Elementary Math</td>
<td>4.94</td>
<td>2.46</td>
<td>4.70</td>
<td>3.18</td>
<td>74</td>
<td>0.35</td>
<td>0.731</td>
</tr>
<tr>
<td>Secondary ELA</td>
<td>11.36</td>
<td>5.72</td>
<td>19.31</td>
<td>9.71</td>
<td>39</td>
<td>-3.76</td>
<td>0.000</td>
</tr>
<tr>
<td>Secondary Math</td>
<td>16.44</td>
<td>6.14</td>
<td>27.54</td>
<td>8.79</td>
<td>56</td>
<td>-5.65</td>
<td>0.000</td>
</tr>
</tbody>
</table>
The elementary ELA scores for students in schools that collaborate with a specialized district to provide special education services (\(M=3.72; SD=2.84\)) were not higher than the elementary ELA scores for students in schools that provide their own special education services (\(M=3.48; SD=2.71; t(80)=0.40; p=.693\)). It can be concluded that the null hypothesis is not rejected and there was insufficient evidence to suggest that there was a difference in the number of students with IEPs that scored in the below basic category on the elementary ELA assessment between schools that use a separate specialized district and schools that employ their own special educators from within their own districts.

The elementary math scores for students in schools that collaborate with a specialized district (\(M=4.94; SD=2.46\)) were not higher than the math scores for students in schools that provide their own special education services (\(M=4.70; SD=3.18; t(74)=0.35; p=.731\)). It can be concluded that the null hypothesis is not rejected and there was insufficient evidence to suggest that there was a difference in the number of students with IEPs that scored in the below basic category on the elementary math assessment between schools that use a separate specialized district and schools that employ their own special educators from within their own districts.

The secondary ELA scores for students in schools that collaborate with a specialized district (\(M=11.36; SD=5.72\)) were higher than the ELA scores for students in schools that provide their own special education services (\(M=19.31; SD=9.71; t(39)=-3.76; p<.001\)). It can be concluded that the null hypothesis is rejected and there was sufficient evidence to suggest that there was a difference in the number of students with IEPs that scored in the below basic category on the secondary ELA assessment between
schools that use a separate specialized district and schools that employ their own special educators from within their own districts.

The secondary math scores for students in schools that collaborate with a specialized district (M=16.44; SD=6.14) were higher than the math scores for students in schools that provide their own special education services (M=27.54; SD=8.79; t(56)=−5.65; p<.001). It can be concluded that there was sufficient evidence to suggest that the null hypothesis is rejected and there was a difference in the number of students with IEPs that scored in the below basic category on the secondary math assessment between schools that use a separate specialized district and schools that employ their own special educators from within their own districts.

Null Hypothesis 2

Null Hypothesis 2: There will be no difference in student growth on English Language Arts and math state aptitude tests for special education students in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services.

The researcher conducted a t-test of two independent means to see if there was a difference in student growth on English Language Arts and math state aptitude tests for special education students in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services by analyzing the number of special education students that scored in the below basic category. A preliminary test of variances revealed that the variances were equal for elementary ELA specialized ($F(33)=2.45; p=0.081$), elementary ELA non-specialized ($F(24)=1.51; p=0.354$), elementary math specialized ($F(15)=1.52; p=0.428$), elementary
SEPARATE SPECIALIZED DISTRICTS

math non-specialized \((F(22)=1.09; \ p=0.844)\), secondary ELA specialized \((F(18)=1.11; \ p=0.812)\), secondary ELA non-specialized \((F(12)=1.14; \ p=0.819)\), secondary math specialized \((F(12)=1.04; \ p=0.933)\), and secondary math non-specialized \((F(12)=1.19; \ p=0.770)\). The analysis revealed the following results.

Table 3

**Student Growth in ELA and Math**

<table>
<thead>
<tr>
<th>Groups</th>
<th>2018 M</th>
<th>2019 M</th>
<th>2018 SD</th>
<th>2019 SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary ELA Specialized</td>
<td>3.00</td>
<td>4.22</td>
<td>2.12</td>
<td>3.32</td>
<td>33</td>
<td>-1.29</td>
<td>0.206</td>
</tr>
<tr>
<td>Elementary ELA Non-Specialized</td>
<td>3.52</td>
<td>3.44</td>
<td>2.42</td>
<td>2.97</td>
<td>44</td>
<td>0.10</td>
<td>0.918</td>
</tr>
<tr>
<td>Elementary Math Specialized</td>
<td>4.50</td>
<td>5.20</td>
<td>2.19</td>
<td>2.70</td>
<td>14</td>
<td>-0.80</td>
<td>0.443</td>
</tr>
<tr>
<td>Elementary Math Non-Specialized</td>
<td>4.57</td>
<td>4.77</td>
<td>3.14</td>
<td>3.35</td>
<td>41</td>
<td>-0.20</td>
<td>0.840</td>
</tr>
<tr>
<td>Secondary ELA Specialized</td>
<td>11.20</td>
<td>11.45</td>
<td>5.64</td>
<td>5.81</td>
<td>38</td>
<td>-0.14</td>
<td>0.891</td>
</tr>
<tr>
<td>Secondary ELA Non-Specialized</td>
<td>19.92</td>
<td>18.69</td>
<td>9.55</td>
<td>10.22</td>
<td>12</td>
<td>0.32</td>
<td>0.757</td>
</tr>
<tr>
<td>Secondary Math Specialized</td>
<td>17.40</td>
<td>18.08</td>
<td>6.11</td>
<td>7.09</td>
<td>20</td>
<td>-0.24</td>
<td>0.813</td>
</tr>
<tr>
<td>Secondary Math Non-Specialized</td>
<td>31.30</td>
<td>26.60</td>
<td>8.82</td>
<td>9.47</td>
<td>18</td>
<td>1.15</td>
<td>0.266</td>
</tr>
</tbody>
</table>

Table 3 shows the results of the t-test of two independent means. The table indicates the mean, standard deviation, degrees of freedom, \(t\)-value, and \(p\)-value for each of the areas of ELA and math, including elementary and secondary, as well as specialized and non-specialized schools.

The 2019 ELA achievement growth scores for special education students in elementary schools that collaborate with a specialized district to provide special education services \((M=4.22; \ SD=3.32)\) were not higher than the 2018 ELA achievement growth scores for special education students in elementary schools that collaborate with a specialized district to provide special education services \((M=3.00; \ SD=2.12; \ t(33)=-1.29)\);
$p=.206$). The researcher failed to reject the null hypothesis and concluded that achievement scores for 2019 in ELA for students in schools that collaborate with a specialized district were not higher than achievement scores for 2018 in ELA for students in schools that collaborate with a specialized district.

The 2019 ELA achievement growth scores for special education students in elementary schools that provide their own special education services ($M=3.44$; $SD=2.97$) were not higher than the 2018 ELA achievement growth scores for special education students in elementary schools that provide their own special education services ($M=3.52$; $SD=2.42$; $t(44)=0.10$; $p=.918$). The researcher failed to reject the null hypothesis and concluded that achievement scores for 2019 in ELA for students in schools that provide their own special education services were not higher than achievement scores for 2018 in ELA for students in schools that provide their own special education services.

The 2019 math achievement growth scores for special education students in elementary schools that collaborate with a specialized district to provide special education services ($M=5.20$; $SD=2.70$) were not higher than the 2018 math achievement growth scores for special education students in elementary schools that collaborate with a specialized district to provide special education services ($M=4.50$; $SD=2.19$; $t(14)=-0.80$; $p=.443$). The researcher failed to reject the null hypothesis and concluded that achievement scores for 2019 in math for students in schools that collaborate with a specialized district were not higher than achievement scores for 2018 in math for students in schools that collaborate with a specialized district.
The 2019 math achievement growth scores for special education students in elementary schools that provide their own special education services ($M=4.77; SD=3.35$) were not higher than the 2018 math achievement growth scores for special education students in elementary schools that provide their own special education services ($M=4.57; SD=3.14; t(41)=-0.20; p=.840$). The researcher failed to reject the null hypothesis and concluded that achievement scores for 2019 in math for students in schools that provide their own special education services were not higher than achievement scores for 2018 in math for students in schools that provide their own special education services.

The 2019 ELA achievement growth scores for special education students in secondary schools that collaborate with a specialized district to provide special education services ($M=11.45; SD=5.81$) were not higher than the 2018 ELA achievement growth scores for special education students in secondary schools that collaborate with a specialized district to provide special education services ($M=11.20; SD=5.64; t(38)=-0.14; p=.891$). The researcher failed to reject the null hypothesis and concluded that achievement scores for 2019 in ELA for students in secondary schools that collaborate with a specialized district were not higher than achievement scores for 2018 in ELA for students in schools that collaborate with a specialized district.

The 2019 ELA achievement growth scores for special education students in secondary schools that provide their own special education services ($M=18.69; SD=10.22$) were not higher than the 2018 ELA achievement growth scores for special education students in secondary schools that provide their own special education services ($M=19.92; SD=9.55; t(12)=0.32; p=.757$). The researcher failed to reject the null
hypothesis and concluded that achievement scores for 2019 in ELA for students in secondary schools that provide their own special education services were not higher than achievement scores for 2018 in ELA for students in schools that provide their own special education services.

The 2019 math achievement growth scores for special education students in secondary schools that collaborate with a specialized district to provide special education services (M=18.08; SD=7.09) were not higher that the 2018 math achievement growth scores for special education students in secondary schools that collaborate with a specialized district to provide special education services (M=17.40; SD=6.11; t(20)=-0.24; p=.813). The researcher failed to reject the null hypothesis and concluded that achievement scores for 2019 in math for students in secondary schools that collaborate with a specialized district were not higher than achievement scores for 2018 in math for students in schools that collaborate with a specialized district.

The 2019 math achievement growth scores for special education students in secondary schools that provide their own special education services (M=26.60; SD=9.47) were not higher that the 2018 math achievement growth scores for special education students in secondary schools that provide their own special education services (M=31.30; SD=8.82; t(18)=1.15; p=.266). The researcher failed to reject the null hypothesis and concluded that achievement scores for 2019 in math for students in secondary schools that provide their own special education services were not higher than achievement scores for 2018 in math for students in schools that provide their own special education services.

**Research Question 1**
Research Question 1: What are teacher perceptions of administrative support (instructional improvement, feedback, and reflection) in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

Open-ended questions within this portion of the survey allowed participants to answer questions regarding how the administrator showed support for instructional improvement, how the administrator provided positive and constructive feedback, and how the administrator provided opportunities for reflection. In terms of instructional improvement, some teachers within schools that supply their own special education services believed administrators showed support for instructional improvement by providing collaboration experiences that focused on how to improve instruction and engagement in the classroom. This was accomplished through a data analysis process that took place during data teams or professional learning community times. One participant stated that the administrator supported instructional improvement by being, ‘very clear, providing constructive criticism on lessons, instruction and engagement, and keeping in touch on caseloads and classroom demands.’

For teachers within schools that collaborate with a specialized district, many teachers stated that feedback regarding instructional improvement was often accomplished through formal teacher evaluations that occurred only a few times during the school year. One participant stated, ‘none. My special education administrator tells us that teacher evaluations are not important.’ On the other hand, some participants believed that their administrator provided meaningful and timely feedback and ‘helps establish goals and direction on how I am going to meet them.’
As part of the survey, participants were asked to rate the quality of support provided by their administrator in terms of instructional improvement. The rating scale ranged from 1 to 5, with 1 being very poor and five being excellent. The Null Hypothesis was: There is no difference in perception ratings, regarding administrative support of instructional improvement, between schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. According to results of application of a t-test for difference in means to the Likert scale data for this particular part of the survey, the analysis revealed that the null hypothesis was not rejected and there was insufficient evidence to suggest that there was a difference in the means of scores regarding the quality of administrator in terms of instructional improvement between schools that use a separate specialized district (M=3.06; SD=1.51) and schools that employ their own special educators from within their own districts (M=3.85; SD=1.07; t(29)=1.61; p=.118).

The results of Table 4 show the data from the Likert-scale questions from the survey that was disseminated to special education teachers. The table indicates the mean, standard deviation, degrees of freedom, t-value, and p-value for each of the areas of administrator support, professional development, and resources.
In terms of positive and constructive feedback, teachers in schools that supply their own special education services believed their administrators were open and honest when it came to communication. They stated that these administrators provided their teachers with the autonomy to make professional decisions and provided positive comments during observations and other times that administrators were in their classrooms. One respondent stated,

‘My principal is present, positive and open/honest. She gives feedback through evaluations but also in conversation, making a point to compliment the positive things she sees and also isn't afraid to ask about things that may concern her. Because she is so positive and supportive, but also so direct, I am comfortable asking her directly for feedback when I need it, and value her response knowing that she is being open and honest.’

Two of the 13 respondents stated that positive and constructive feedback either did not occur, or when it did it was very generic and did not seem meaningful.
For teachers in schools that collaborate with a specialized district, some participants stated that administrators provided timely feedback after observations through shout-outs or other forms of public acknowledgement. One participant stated that the administrator, ‘Immediately meets with us after observations and provides positive feedback as well as guiding questions to improve our techniques.’ Alternatively, five out of the 18 respondents indicated that positive and constructive feedback rarely occurs.

As part of the survey, participants were asked to rate the quality of support provided by their administrator in terms of positive and constructive feedback. The rating scale ranged from 1 to 5, with 1 being very poor and 5 being excellent. The Null Hypothesis was: There is no difference in perception ratings, regarding administrative support of positive and constructive feedback, between schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. According to results of application of a t-test for difference in means to the Likert scale data for this particular part of the survey the analysis revealed that the null hypothesis was not rejected and there was insufficient evidence to suggest that there was a difference in the means of scores regarding the quality of administrator in terms of positive and constructive feedback between schools that use a separate specialized district (M=3.22; SD=1.52) and schools that employ their own special educators from within their own districts (M=4.00; SD=1.00; t(29)=1.61; p=.120).

In regards to opportunities for personal reflection provided by the administrator, teachers in schools that provide their own special education services stated that this was
accomplished during formal post_observation meetings and through the professional growth plan process. During this time, administrators allowed teachers time to openly reflect on their own practice without fear of being judged. One respondent stated that the administrator accomplished this by, ‘Sharing their own experiences of difficulties and celebrations. Talking openly and honestly, but not passing judgement. Keeping it positive and reflective, not critical or negative.’ Two of the 13 participants believed that administrators did not provide time for personal reflection.

For teachers within schools that collaborated with a specialized district, administrators provided support for personal reflection during pre- and post_conference times and through professional growth plans. Administrators allowed teachers to engage in authentic and safe conversations without fear and by asking thoughtProvoking questions. However, four out of the 18 participants stated that the administrator does not provide opportunities to reflect on personal growth and simply requires teachers to fill out the necessary paperwork.

As part of the survey, participants were asked to rate the quality of support provided by their administrator in terms of personal reflection. The rating scale ranged from 1 to 5, with 1 being very poor and 5 being excellent. The Null Hypothesis was: There is no difference in perception ratings, regarding administrative support of personal reflections, between schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. According to results of application of a t_test for difference in means to the Likert scale data for this particular part of the survey the analysis revealed that the null hypothesis was not rejected and there was insufficient evidence to suggest that there was
a difference in the means of scores regarding the quality of administrator in terms of personal reflection between schools that use a separate specialized district (M=2.94; SD=1.70) and schools that employ their own special educators from within their own districts (M=3.92; SD=0.95; t(29)=1.87; p=.071).

**Research Question 2**

*Research Question 2:* What are teacher perceptions of professional development opportunities in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

In terms of the professional development portion of the survey, teachers were asked to answer questions regarding the impact of professional development on their instruction and how this supports inclusive education. Teachers in schools that provide their own special education services indicated that while the professional development opportunities in their districts are strong, they do not focus on special education or how to provide supports to students in inclusive classrooms. One participant stated, ‘professional development is strong in our district, but is not ever focused on special education, inclusion, etc. It is academic in nature or trauma-informed practices or effective instructional practices, etc.’

Teachers in schools that collaborate with a specialized district to provide special education services had varying responses. Half of the respondents indicated that the professional development opportunities that were provided offered great ideas based on strong, research-based principles to support inclusive education. The other half of the respondents indicated that the professional development was not helpful. One of the
statements made was, ‘some of the professional development is great and I use it daily in my classroom. Sometimes it is too little, too late.’

As part of the survey, participants were asked to rate the quality of professional development that supports inclusive education provided by their district. The rating scale ranged from 1 to 5, with 1 being very poor and 5 being excellent. The Null Hypothesis was: There is no difference in perception ratings, regarding administrative support of professional development, between schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. According to results of application of a t-test for difference in means to the Likert scale data for this particular part of the survey the analysis revealed that the null hypothesis was not rejected and there was insufficient evidence to suggest that there was a difference in the means of scores regarding the quality of professional development to support inclusive education between schools that use a separate specialized district (M=2.89; SD=1.45) and schools that employ their own special educators from within their own districts (M=3.23; SD=1.01; t(29)=0.73; p=.472).

**Research Question 3**

*Research Question 3:* What are teacher perceptions of resources to support inclusive education (specialized personnel, physical classroom materials, information resource centers or systems) in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

Open-ended questions within this portion of the survey allowed participants to answer questions regarding the availability of specialized personnel, additional material
resources to support inclusive education, and the availability of resource centers or systems to support students in the general education environment. In terms of the availability of specialized personnel, teachers in schools who supply their own special education services stated that the variety of support personnel included paraprofessionals, speech and language therapists, reading specialists, and specialist teachers for English learners, students that were deaf, and students that were blind. One respondent stated, ‘We do have designated specialized personnel in district, such as a vision itinerant person or behavior specialist, etc. But there are usually only one for each specialty for the district, so they are not always readily available, so you may have limited access to them.’

For teachers in schools that collaborate with a specialized district to supply special education services, teachers stated that the variety of specialized support personnel included paraprofessionals, speech and language therapists, instructional facilitators, effective practice specialists, transportation specialists, assistive technology coordinators, school psychologists, and behavior specialists. However, one respondent stated, ‘I have not used additional specialized personnel in a few years. When I did, her advice/suggestions was mediocre.’

As part of the survey, participants were asked to rate the quality of additional specialized personnel available. The rating scale ranged from 1 to 5, with 1 being very poor and 5 being excellent. The Null Hypothesis was: There is no difference in perception ratings, regarding quality of additional specialized personnel availability, between schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. According
to results of application of a t-test for difference in means to the Likert scale data for this particular part of the survey the analysis revealed that the null hypothesis was not rejected and there was insufficient evidence to suggest that there was a difference in the means of scores regarding the quality of specialized personnel available to support inclusive education between schools that use a separate specialized district (M=3.39; SD=1.42) and schools that employ their own special educators from within their own districts (M=3.23; SD=1.24; t(29)=−0.32; *p*=.749).

The second part of the resources portion of the survey asked participants to describe any physical resources that are available to them to support inclusive education. Teachers in schools that supply their own special education services indicated that they have access to whiteboards, manipulatives, modified curriculum, and smart boards. One participant stated, ‘I have a fabulous classroom. It is large and easily able to accommodate all the specialty things my students need to be successful. I have been given any materials that I have requested.’ Two of the 13 participants stated that they had never been offered a budget for supplies and most of the supplies were purchased by the teachers.

Teachers in schools that collaborate with a specialized district to provide special education services stated that they had access to modified curriculum, assistive technology and alternate books and activities. Four of the 18 respondents reported that they did not know what materials were available to them or they were unsure how to obtain the necessary materials to support their students. Five of the 18 respondents stated that they used their partner district’s resources. For instance ‘I am lucky that the department I teach in always includes me and I can get any materials that they are given.’
As part of the survey, participants were asked to rate the quality of physical resources available. The rating scale ranged from 1 to 5, with 1 being very poor and 5 being excellent. The Null Hypothesis was: There is no difference in quality of physical resources perception ratings between schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. According to results of application of a t-test for difference in means to the Likert scale data for this particular part of the survey the analysis revealed that the null hypothesis was not rejected and there was insufficient evidence to suggest that there was a difference in the means of scores regarding the resources available to support inclusive education between schools that use a separate specialized district ($M=3.11$; $SD=1.39$) and schools that employ their own special educators from within their own districts ($M=3.46$; $SD=1.39$; $t(29)=0.68$; $p=.505$).

The final portion of the professional development section of the survey asked participations to detail types of information centers or systems available that support inclusive education. Teachers in schools that provide their own special education services stated that their additional systems included specialized transportation, outside consultants for behavior, autism specialist centers, and a resource center. One participant stated that they had, “centers for autism and behavior throughout the district, specialized transportation, ABA, outside consultants for behavior, etc.” Three of the 13 respondents indicated that they were not aware of any of the specialized systems or information centers available or that there were not any available.

For teachers that were in schools that collaborated with a specialized district, teachers indicated that there was an instructional resource center available and
specialized transportation. However, one respondent stated that while the information and resources were available, “one must know exactly where to go to find the resources.” Another respondent reported that, “these are available, but it is difficult to receive answers from the contact people who are in charge of them.”

As part of the survey, participants were asked to rate the quality of information centers or specialized systems available. The rating scale ranged from 1 to 5, with 1 being very poor and 5 being excellent. The Null Hypothesis was: There is no difference in perception ratings, regarding quality of information systems or specialized system availability, between schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services. According to results of application of a t-test for difference in means to the Likert scale data for this particular part of the survey the analysis revealed that the null hypothesis was not rejected and there was insufficient evidence to suggest that there was a difference in the means of scores regarding availability of information centers or specialized systems between schools that use a separate specialized district (M=2.94; SD=1.30) and schools that employ their own special educators from within their own districts (M=3.54; SD=1.27; t(29)=1.27; p=.216).

Summary

The researcher presented findings and analysis for Null H1, Null H2, RQ1, RQ2, and RQ3 in Chapter Four. The quantitative analysis from this mixed-methods study generated evidence to suggest that the scores of elementary students in schools that collaborated with a specialized district were not higher than the scores of elementary students in schools that provided their own special education services in the areas of ELA
and math. Nevertheless, the evidence suggested that the scores of secondary students in schools that collaborated with a specialized district were higher than the scores of secondary students in schools that provided their own special education services in the areas of ELA and math. The second part of the quantitative analysis indicated that there was no difference in student growth on elementary and secondary assessments scores in the area of ELA and math from 2018 to 2019 between students in schools that collaborated with a specialized district and students in schools that provided their own special education services. The qualitative data, as well as the Likert-scale results indicated similar scores in the areas of administrator support, professional development, and resources between both groups. The following chapter provides suggestions for both groups to utilize the findings for improvements in current programs and recommendations for additional investigations.
Chapter Five: Discussion and Reflection

Overview

The researcher investigated two hypotheses and three research questions to compare student achievement and teacher perceptions of schools that collaborated with a separate specialized district and schools who provided their own special education services. To provide suggestions for improvements in current special education programs and organizations, the researcher related the academic influence of schools with a separate specialized district that supplied special education services on student achievement and growth. The researcher determined if students who attended schools in districts with a specialized district had different MAP scores than students who attended schools in districts that supplied their own special education services and explored the perceptions of administrator support, resources to support inclusive education, and professional development opportunities among the schools that collaborated with a specialized district and those that supplied their own special education services.

To determine student achievement and growth, the researcher analyzed the number of special education students scoring in the below basic category on the Missouri Assessment Program (MAP) state assessment in the areas of English Language Arts (ELA) and math for 2018 and 2019. Students that performed at the below basic level on the Missouri Assessment Program (MAP) were considered to demonstrate a minimal command of the skills and processes identified in the Missouri Learning Standards (MODESE, 2018). The researcher chose the category for data collection, as students with special needs often performed below their grade-level peers. According to Katsiyannis et al. (2007), students with special needs failed to meet state assessment
requirements and often demonstrated a lack of knowledge due to the combination of cognitive deficits and not being exposed to the curriculum. Nevertheless, the realm of education was working together to close the achievement gap and increase student achievement for students with special needs.

By completing qualitative analyses of survey results, the researcher was also able to determine the difference of teacher perceptions of administrator support, resources to support inclusive education and professional development opportunities between schools that collaborated with a specialized district and schools that provided their own special education services. Through the investigation, the researcher hoped to determine if there was a difference in student achievement and growth depending on the organization of special education programs, such as whether or not school collaborated with a specialized district to provide special educations. The study results could be used to assist districts in developing their special education organizations in order to best support students and help them be successful.

Findings

Through examining the number of special education students that scored in the below basic category on the ELA and math MAP assessment, the researcher concluded there was insufficient evidence to suggest a difference in the number of students with IEPs that scored in the below basic category on the elementary ELA and math assessments between schools that used a separate specialized district and schools that employed their own special educators from within their own districts. Nevertheless, it could be concluded that there was sufficient evidence to suggest there was a difference in the number of students with IEPs that scored in the below basic category on the
secondary ELA and math assessments between schools that used a separate specialized district and schools that employed their own special educators from within their own districts.

**Null Hypothesis 1.** The researcher looked at the student population as a whole for schools that collaborated with a specialized district and schools that employed their own special education services for the 2018 and 2019 school years. For student data analyzed at the elementary level, the numbers included students in grades three through five. For the secondary scores, the data included students in grades six through eight, as well as students completing the Algebra 1 and English 2 end of course exams at the high school level.

The data suggested, as indicated by the number of students scoring in the below basic category, student achievement on the ELA and math MAP assessment were the same for elementary students in schools that collaborated with a specialized district and schools that provided their own special education services. Nevertheless, the mean was slightly higher for the specialized group, but not high enough to be significant, indicating slightly more students scored in the below basic category than the non-specialized group. Alternatively, the data suggested there were more students scoring in the below basic category on the ELA and math MAP assessments for the non-specialized schools at the secondary level, thus indicating student achievement on the ELA and math MAP assessment was higher for secondary students in schools that collaborated with a specialized district than secondary students in schools that provided their own special education services, with a $p$-value of less than .001. The researcher noted this was most
likely the case due to the additional special education services that should be provided at
the secondary level.

Null Hypothesis 2. The researcher studied the student population as a whole for
schools that collaborated with a specialized district and schools that employed their own
special education services for the 2018 and 2019 school years. For student data analyzed
at the elementary level, the numbers took into account students in grades three through
five. For the secondary scores, the data took into account students in grades six through
eight, as well as students completing the Algebra 1 and English 2 end of course exams.

Through examining the number of special education students that scored in the
below basic category on the ELA and math MAP assessments between the years 2018
and 2019 for specialized districts and non-specialized districts, it could be concluded
there was no difference in student growth on English Language Arts and math state MAP
tests for special education students in schools with a separate specialized district
compared to those schools who supplied their own special education services. Neither
district had larger growth data from 2018 to 2019. The researcher determined this was
most likely the case due to the variances among state assessment results and the inability
to accurately compare the results. With more comparable tests from 2018 to 2019, scores
would most likely have been more accurate for analysis.

Research Question 1. What are teacher perceptions of administrative support
(instructional improvement, feedback, and reflection) in schools with a separate
specialized district to supply special education services compared to those schools who
supply their own special education services?
A dissertation-team created survey was sent to special education teachers at the elementary level and second level in both schools that collaborated with a specialized district and schools that provided their own special education services. The survey was sent to 145 respondents and the researcher received 31 responses. Results indicated there was no statistically significant difference in terms of administrative support in the areas of instructional improvement, feedback, and reflection. Overall, 77% of respondents from schools that provided their own special education services stated their administrator provided support for instructional improvement, feedback, and reflection by collaborating to solve problems, providing resources to use in the classroom, and providing feedback on how to improve lessons in the classroom. Fifty percent of respondents from schools that collaborated with a specialized district stated their administrator provided support for instructional improvement, feedback, and reflection by establishing goals and directions for improving instruction in the classroom, providing feedback, and offering resources to support instruction.

A Likert-scale was provided to respondents as part of the survey to quantify the results. According to a t-test for difference the analysis revealed the null hypothesis was not rejected and there was insufficient evidence to suggest there was a difference in the means of scores regarding the quality of administrator in terms of instructional improvement, feedback, or reflection between schools that use a separate specialized district and schools that employ their own special educators from within their own districts.

The researcher noted the small number of responses could have played a part in the outcome of the results. Out of the 145 surveys sent, participants completed 31, with
18 of the surveys coming from respondents that worked in schools that collaborated with a specialized district and 13 of the surveys came from respondents that worked in schools that provided their own special education services. Additionally, respondents were not required to answer every question on the survey. Therefore, out of the 31 respondents, four individuals (three from specialized schools and one from a non-specialized school) left the open-ended questions regarding administrator support for instructional improvement, opportunities for reflection, and blank.

**Research Question 2.** What are teacher perceptions of professional development opportunities in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

A dissertation-team created survey was sent to special education teachers at the elementary level and second level in both schools that collaborated with a specialized district and schools that provided their own special education services. The survey was sent to 145 respondents and the researcher received 31 responses. Results indicated that there was no statistically significant difference in terms of professional development opportunities. Overall, 38% of respondents from schools that provide their own special education services stated the professional development opportunities provided by their districts were beneficial and helpful in providing inclusive education in the classrooms. Alternatively, the other 62% stated the professional development opportunities were not geared toward special education and were not applicable to their own classrooms. Thirty-three percent of respondents from schools that collaborated with a specialized district stated the professional development opportunities provided to them were meaningful and provided opportunities for reflection and engagement.
A Likert-scale was provided to respondents as part of the survey to quantify the results. According to the $t$-test for difference in means to the Likert scale data the analysis revealed the null hypothesis was not rejected and there was insufficient evidence to suggest there was a difference in the means of scores regarding the quality of professional development opportunities between schools that used a separate specialized district and schools that employed their own special educators from within their own districts.

Similarly, to research question one, the small amount of responses could have played a part in the outcome of the results. Additionally, respondents were not required to answer every question on the survey. Therefore, out of the 31 respondents, nine individuals (six from specialized schools and three from non-specialized schools) left the open-ended questions regarding the use of the professional development opportunities blank.

**Research Question 3.** What are teacher perceptions of resources to support inclusive education (specialized personnel, physical classroom materials, information resource centers or systems) in schools with a separate specialized district to supply special education services compared to those schools who supply their own special education services?

The researcher sent a dissertation-team created survey to special education teachers at the elementary level and second level in both schools that collaborated with a specialized district and schools that provided their own special education services. The survey was sent to 145 respondents and the researcher received 31 responses. Results indicated no statistically significant difference in terms of resources to support inclusive education.
education. Overall, 77% of respondents from schools that provided their own special education services stated they were provided with specialized personnel, classroom materials, and additional resources centers or systems to support inclusive education. Sixty-six percent of respondents from schools that collaborated with a specialized district stated they were provided with specialized personnel, classroom materials, and additional resources centers or systems to support inclusive education.

Similarly, to research questions one and two, a small amount of responses could have played a part in the outcome of the results. Additionally, respondents were not required to answer every question on the survey. Therefore, out of the 31 respondents, six individuals (four from specialized schools and two from non-specialized schools) left the open-ended questions regarding the impact of professional development blank.

**Discussion**

One would have assumed students receiving instruction from a school that collaborated with a specialized district would achieve higher on state assessments than students receiving instruction from a school that provided their own special education services at all grade levels, but this was not the case in all areas. The researcher noted the research data could assist special education organizations. While student achievement for special education students was not different at the elementary level by collaborating with a specialized district or providing own special education services, a difference was noted at the secondary level. The difference in assessment scores could have been due to numerous reasons.

During elementary years, students receiving special education services were often provided instruction within an inclusive setting. Within the environment, students were
educated with grade-level peers to the greatest extent possible, therefore receiving the
general education curriculum in the least restrictive setting. The experience was
beneficial for students, as those who participated in the grade-level assessments were able
to receive the same instruction all students received. As students got older, however, and
curriculum became more challenging in grades six through 12, challenges increased to
provide appropriate instruction.

As stated in the literature review, students with disabilities required additional
resources, materials, and supports, the cost associated with instruction per student was
higher than for general education students (Special School District, 2017, p. 9).
Additional costs increased as a student entered secondary school, which required more
resources and supports to assist the student in completing course requirements, such as
passing a state assessment, obtaining credits and graduating high school, while ensuring
the student was adequately prepared to either attend post-secondary school or training or
enter the work force.

A critical part of secondary school special education was the transition plan. A
transition plan for students was a part of the Individualized Education Plan (IEP) that
outlined goals and services for the student to assist him/her in reaching his/her post-
secondary goals including: classes the student would take, additional steps the student
would complete, such as getting a driver’s license or holding a part time job, and the
services the student would receive to meet the goals. Federal law stated all students with
an Individualized Education Plan were required to have a transition plan prior to the age
of 16. However, the plans were not always followed due to a lack of resources at the
school and the parents had to ensure the steps were completed (Butrymowicz & Mader, 2017).

For schools that collaborated with a specialized school district to provide special education services, transition services was a resource commonly stated as a source of enjoyment on the survey. Respondents stated the specialized district included a transition director, six transition facilitators to assist teachers in the process, and three transitions effective practice specialists. Alternatively, none of the respondents in the non-specialized group stated transition resources were available. Having the resources ensured secondary students met the goals, completed the coursework, and prepared for future outside of school, possibly indicating a higher level of student achievement. To ensure students met high levels of achievement at all grade levels, schools that provided their own special education services could potentially investigate utilizing transition planning resources and supervisors at the secondary level.

In terms of student growth, once again one would have assumed students receiving instruction from a school that collaborated with a specialized district would show a greater amount of growth from year to year on state assessments than students receiving instruction from a school that provided their own special education services at all grade levels, but this was not the case in all areas. The researcher believed numerous reasons supported the conclusion. Initially, a difficulty existed when comparing state MAP assessment scores with complete validity from 2018 to 2019 as the assessments changed over time. With the changing of standards assessed and types of questions posed on the assessment, could have contributed to the findings determined in the study and results should be viewed cautiously.
The qualitative portion of the study revealed no difference between schools that collaborated with a specialized district and schools that provided their own special education services in the areas of administrator support, resources, and professional development opportunities. With the administrator’s role being essential to student achievement for students with disabilities (DiPaloa & Walther-Thomas, 2003), resources influence student learning (Usman, 2016) and professional development being a building block of school efforts to achieve missions and visions (Borko, 2004), the student achievement for both special education organizations would be the same. Considering there was no difference in student achievement scores in the areas of ELA and math at the elementary level the conclusion seemed to align. Alternatively, the researcher found the opposite for student achievement at the secondary level.

**Recommendations for Future Research**

The researcher designed the study to fill an apparent gap in the literature and determine if there was a difference in student achievement and teacher perceptions of administrative support, resources, and professional development between schools that collaborated with a specialized district to provide special education services and schools that provided their own special education services. To obtain the information, the researcher analyzed the number of students at each school that scored in the below basic category on the ELA and math state assessments at each grade level for 2018 and 2019. The researcher explored teacher perspectives by disseminating a dissertation-team created survey.

When analyzing the quantitative data to determine student achievement and student growth the researcher utilized the number of students in the below basic category,
as this category indicated low student achievement and was often where students with special education services scored low on state assessments (citation needed here). Future researchers could conduct the study differently by including actual student scores, rather than using the number of students in the below basic category and compare the individual scores among schools. The additional data could provide deeper insight into the varying levels of student achievement between the organizations. In subsequent years as the standardized test form changes, future researchers could use additional years’ worth of data to determine student growth.

To obtain qualitative data, the researcher utilized a dissertation-team created survey. Out of the 145 surveys that were disseminated, only 31 were returned. Out of the 31 surveys, 18 were from teachers that worked in schools that collaborated with a specialized school district and 13 were from teachers that worked in schools that provided their own special education services. The surveys were sent to respondents in two different manners, with some receiving the surveys directly and others receiving the survey via a memo sent out to staff. The timing of the survey, as the survey was sent out in late March, as well as the fact that the survey responses were only requested once could have resulted in the low response rate. Future research could include sending out the survey at a different time during the year and requesting survey responses more than once from respondents.

To maintain anonymity on the survey, the only identifying question asked was whether the teacher taught in a school that collaborated with a specialized school district or taught in a school that provided their own special education services. Future researchers could include a question where teachers could indicate an elementary or
secondary level. In the study, the researcher was unable to determine if administrator support, resources, or professional development played a role in the student achievement scores at each grade level specifically because the question was left off of the survey. Future studies would be able to determine if items mentioned above related to student achievement specifically.

**Conclusion**

According to Hernandez (2013), as the needs of schools in the United States changed over time, which included reduced resources, increased student needs, and additional school requirements, schools and educators across the country attempted to overcome obstacles. Especially in the area of special education, where the performance of the group of students on state assessments has been a significant topic of discussion, the drive for increased student achievement for the students was at an unparalleled high (Davis, Lazarus, & Thurlow, 2012). In order to achieve school district goals some relied on collaboration, while others found varying methods to provide special education services, which included the organization of administrative support, resources, and professional development.

The quantitative results of the study revealed the organization of special education service providers did not play a role in ELA or math student achievement at the elementary level. Additionally, the organization of special education service providers did not play a role in ELA or math student growth at the elementary level. Nevertheless, the organization of special education service providers did indicate a difference on ELA and math student achievement at the secondary level. Further, after an analysis of the qualitative data, results indicated there was no difference among administrative support,
resources, among the two varying organizations either. Yet, future research could break down the results to determine if any of the factors influence student achievement at a particular level, such as the secondary level, for example. Ultimately, the researcher noted adding additional resources and supports, such as transition services, at the secondary level for schools that do not collaborate with a specialized district could increase student achievement.
References


Butrymowicz, S., & Mader, J. (2017). *The ‘forgotten’ part of special education that could lead to better outcomes for students*. Retrieved from
https://hechingerreport.org/forgotten-part-special-education-lead-better-outcomes-students/


https://centralvalleyfoundation.org/wp-content/uploads/2016/05/report_on_the_district_partnership_project__dpp_.pdf


approaches/educational-strategies/collaborative-team-teaching-what-you-need-to-know


## Appendix A: List of Schools

<table>
<thead>
<tr>
<th>SSD</th>
<th>Non-SSD</th>
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<tbody>
<tr>
<td>Westridge Elementary (Rockwood)</td>
<td>Harris Elementary (St. Charles)</td>
</tr>
<tr>
<td>Beasley Elementary (Mehlville)</td>
<td>Blackhurst Elementary (St. Charles)</td>
</tr>
<tr>
<td>Blevins Elementary (Rockwood)</td>
<td>Boone Trail Elementary (Wentzville)</td>
</tr>
<tr>
<td>Bowles Elementary (Rockwood)</td>
<td>Green Tree Elementary (Wentzville)</td>
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<td></td>
<td>Discovery Ridge Elementary (Wentzville)</td>
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<td>Kennerly Elementary (Lindbergh)</td>
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<tr>
<td>Sorrento Springs (Parkway)</td>
<td>Coverdell Elementary (St. Charles)</td>
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<tr>
<td>Hanna Woods (Parkway)</td>
<td>Lincoln Elementary (St. Charles)</td>
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<tr>
<td>Sappington Elementary (Lindbergh)</td>
<td>Monroe Elementary (St. Charles)</td>
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<tr>
<td>Geggie Elementary (Rockwood)</td>
<td>Crossroads Elementary (Wentzville)</td>
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<tr>
<td>Clark Elementary (Webster)</td>
<td>Duello Elementary (Wentzville)</td>
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<tr>
<td>South Middle (Rockwood)</td>
<td>Frontier Middle (Wentzville)</td>
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<tr>
<td>LaSalle Springs (Rockwood)</td>
<td>Heritage Intermediate (Wentzville)</td>
</tr>
<tr>
<td>Eureka Sr. High (Rockwood)</td>
<td>Liberty High (Wentzville)</td>
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<tr>
<td>Oakville Sr. High (Mehlville)</td>
<td>Timberland High (Wentzville)</td>
</tr>
<tr>
<td>Bernard Middle (Mehlville)</td>
<td>South Middle (Wentzville)</td>
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<tr>
<td>Mehlville High (Mehlville)</td>
<td>St. Charles High (St. Charles)</td>
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<tr>
<td>Rockwood Summit Sr. High (Rockwood)</td>
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</tr>
<tr>
<td>South Middle (Parkway)</td>
<td>Hardin Middle (St. Charles)</td>
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<tr>
<td>Sperreng Middle (Lindbergh)</td>
<td>Jefferson Intermediate (St. Charles)</td>
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<tr>
<td>Webster Groves High (Webster Groves)</td>
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<tr>
<td></td>
<td>West High (St. Charles)</td>
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</tbody>
</table>
Appendix B: Permission for Research Sites

Dear Ms. Brede,

I am pleased to notify you that your application for conducting research with SSD titled: *A Comparative Study of Student Achievement and Teacher Perceptions of Schools With A Separate Specialized District That Supplies Special Education Services To Schools Who Supply Their Own Special Education Services* has been accepted. This acceptance indicates that we have examined your application and granted permission to conduct survey research with SSD teachers.

This approval is valid for one year. If you anticipate that data collection will extend beyond that timeline, please contact us. We would appreciate notification of any significant changes to your research design. We also ask that you forward us the findings of your study when complete.

If I can further clarify or answer questions related to the permissions granted, please do not hesitate to contact me. Please work with our office to finalize procedures for recruitment and data collection. Thank you and good luck with your research.

Sincerely,

Matthew Traughber, Ph.D.
Evaluation and Research Administrator
(314) 989-8520
mtraughber@ssdmo.org
Appendix C: Informed Consent

You are being asked to participate in a survey conducted by Leigha Brede at Lindenwood University. We are doing this study to determine if students who attend schools in districts that contract special education services have congruent or different academic achievement than students who attend schools in districts that employ their own special education teachers, as measured by the Missouri Assessment Program. The researcher would also like to determine if there is a significant difference among teacher perceptions of administrator support, resources to support inclusive education, and professional development opportunities and how these relate to student achievement among the schools that collaborate with a specialized district to supply special education services to those school districts who employ their own special education services. It will take about 10-15 minutes to complete this survey.

Your participation is voluntary. You may choose not to participate or withdraw at any time by simply not completing the survey or closing the browser window.

There are no risks from participating in this project. We will not collect any information that may identify you. There are no direct benefits for you participating in this study.

WHO CAN I CONTACT WITH QUESTIONS?

If you have concerns or complaints about this project, please use the following contact information:

Leigha Brede – lmb419@lindenwood.edu; Dr. Graham Weir – gweir@lindenwood.edu

If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu.

By clicking the link below, I confirm that I have read this form and decided that I will participate in the project described above. I understand the purpose of the study, what I will be required to do, and the risks involved. I understand that I can discontinue participation at any time by closing the survey browser. My consent also indicates that I am at least 18 years of age.

https://docs.google.com/forms/d/e/1FAIpQLSdwHKD4CJXHmUnlaOBl638rCm_0nWS6uO3cJMFg0DunIKCNQ/viewform

You can withdraw from this study at any time by simply closing the browser window. Please feel free to print a copy of this information sheet.
Appendix D: Survey Questions

In which district are you currently employed? *
- Special School District
- Other

Which level do you currently teach?
- Elementary
- Secondary

Rate the quality of support your administrator provides in terms of instructional improvement. (If you are a SSD employee, please consider your special education administrator, rather than your building administrator)

1 2 3 4 5
Very Poor

How does your administrator show support for instructional improvement?
Your answer

Rate the quality of support your administrator provides in terms of positive and constructive feedback.

1 2 3 4 5
Very Poor

How does your administrator provide you with positive and constructive feedback. Please provide examples.
Your answer
What are some types of physical classroom materials that support inclusive education that are available to you?

Your answer:

Rate the quality of resources to support inclusive education in terms of information resource centers or systems (i.e. instructional resource center, special transportation, ABA, etc.)

1 2 3 4 5
Very Poor 0 0 0 0 0 Excellent

What are some types of information resource centers or systems that support inclusive education that are available to you (i.e. instructional resource center, special transportation, ABA, etc.)

Rate the quality of support your administrator provides in terms of your own personal reflection on your instructional practice.

1 2 3 4 5
Very Poor 0 0 0 0 0 Excellent

How does your administrator provide you with opportunities for reflection?

Your answer:

Rate the quality of professional development provided by your district on your support of inclusive education.

1 2 3 4 5
Very Poor 0 0 0 0 0 Excellent
What is the impact of professional development opportunities provided by your district on your instruction?

Your answer

Rate the quality of additional specialized personnel that are available to you.

1 2 3 4 5

Very Poor □ □ □ □ □ Excellent

What are some types of additional specialized personnel who support inclusive education that are available to you?

Your answer

Rate the quality of resources to support inclusive education in terms of physical classroom materials that are available to you.