

**PERCEPTIONS OF SPECIAL EDUCATION PARAPROFESSIONALS’
EFFECTIVENESS IN SUPPORTING THE ACADEMIC, SOCIAL, AND
EMOTIONAL NEEDS OF SPECIAL EDUCATION STUDENTS AND
RECOMMENDATIONS FOR PARAPROFESSIONAL PROFESSIONAL
DEVELOPMENT TOPICS**

A Doctoral Capstone Project in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

Scott Lawrence O’Donnell
California University of Pennsylvania

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California University of Pennsylvania
School of Graduate Studies and Research
Department of Secondary Education and Administrative Leadership

We hereby approve the capstone of

Scott Lawrence O'Donnell

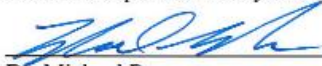
Candidate for the Degree of Doctor of Education

7-27-2020



Dr. Mary Wolf
Assistant Professor, California University of Pennsylvania
Doctoral Capstone Faculty Committee Chair

7/27/2020



Dr. Michael Ross
Superintendent, Union Area School District
Doctoral Capstone External Committee Chair

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Abstract

Paraprofessionals play an integral role in the academic, social, and emotional growth of students in a K-12 setting. However, they may not have the necessary skills, background, or education to effectively implement academic, social, and emotional supports for students that diminish their overall effectiveness. Moreover, special education paraprofessionals may not receive adequate professional development to address these deficient skills, if they exist. This research study will explore the attitudes of special education paraprofessionals toward their professional development, their perception of their effectiveness in the classroom, and their perceptions of needed topics for professional development. This study will also explore administrators', regular education teachers', and special education teachers' perceptions toward paraprofessionals' effectiveness and development to determine whether or not there exists any differences in the attitudes of administrators and teachers toward paraprofessionals' effectiveness and the attitudes of paraprofessionals toward themselves. Therefore, this action research study will seek to examine what constitutes effective paraprofessional support, what strategies administrators, teachers, and paraprofessionals find to be the most effective, and what professional development best helps build the confidence and effectiveness of paraprofessionals in the classroom setting.

CHAPTER I

Introduction

Schools are entrusted to provide the best quality education possible for all students. State and federal mandates dictate that districts provide rigorous, appropriate, and equitable education to all students, including those with a learning disabilities or emotional disturbances (ED). In order to achieve this mandate, schools employ a variety of strategies, supports, and programs to help learning-support and emotional-support students receive a Free and Appropriate Public Education (FAPE). One method that may be employed in this endeavor is the use of paraprofessionals to help support the special education teachers and students in those designated classes. This research study will explore the use of paraprofessionals as they help to support the academic, social, and emotional achievement of special education students.

The researcher is currently employed in the district and serves as the Director of Curriculum and Instruction. The district for this research study is located in a semi-rural area of Western Pennsylvania and educates approximately 740 students in two buildings – one elementary school that educates students from K-4 through 5th grades and one middle/high school that educates students from 6th - 12th grades. Since beginning work in the district, in July 2015, the district employed seven special education teachers, including one life-skills' teacher, five learning-support teachers, and one speech therapist. As of January 2020, the district employs two life-skills' teachers, five learning-support teachers, one itinerant emotional-support teacher, and one speech therapist. The more dramatic increase, in terms of special education services, comes when comparing the number of paraprofessionals employed by the district from July 2015 to January 2020.

In July 2015, the district employed six special education paraprofessionals, two Title I paraprofessionals, and one library paraprofessional. As of January 2020, the district employed 11 special education paraprofessionals, two one-on-one special education paraprofessionals, and three Title I paraprofessionals. The library paraprofessional now also divides her time between the elementary library and the elementary special education classroom.

The increase in paraprofessionals has a few different impetuses. The addition of the two one-on-one paraprofessionals was driven by the needs of the students with whom they work and the IEP team's decision that more intensive support was needed. The district also recognizes substantial cost savings by hiring a paraprofessional compared to a full-time teacher. As a result, when additional support is needed, part of the decision-making discussion centers around whether or not a paraprofessional can be utilized to support the need.

The question remains, however, as to whether or not the addition of paraprofessionals solves the underlying issues associated with supporting the academic, social, and emotional needs of learning-support and emotional-support students. Little emphasis has been placed on exploring whether or not the addition of these individuals dramatically improves the quality of education received or the ability of learning-support and emotional-support students to succeed in the school setting.

Part of the current responsibility of the Director of Curriculum and Instruction is to focus on the academic achievement of students at all levels in the district. The special education population is identified by the state as a focus subgroup, meaning one that the state will specifically pullout to report assessment data on the Pennsylvania System of

School Assessment (PSSA) and Keystone Exams. Likewise, the academic growth of students with disabilities is reported for each school building, drawing attention to whether or not this population of students is improving academically. The district utilizes paraprofessionals in an attempt to help students with disabilities achieve proficiency on state assessments but, until this point, the district has spent little time examining whether or not paraprofessionals have a direct impact on improving the academic achievement of students with disabilities.

Another component of this administrative position is to arrange professional development offerings across the district. When the district's special education director retired, the district attempted to fill this void by first contracting out the service to another district, and then later hiring a part-time special education director to oversee services. The Director of Curriculum and Instruction ended up playing a larger role in special education services due to the part-time nature of both scenarios. It was during this time that the Director began overseeing the professional development of paraprofessionals as well. While special education paraprofessionals are required to receive professional development, little emphasis has been placed on tailoring this professional development to the unique role of these paraprofessionals in the district. Much of the professional development offered to paraprofessionals was done through free online courses through the Pennsylvania Department of Education (PDE) website or through the Pennsylvania Training and Technical Assistance Network (PaTTAN). While both offered valuable training, neither option allowed for meaningful professional development connected to our district. Paraprofessionals had the option of which course they wished to complete

and follow-up was not conducted to determine whether the course impacted their daily job performance or was relevant to their specific role.

Throughout the course of this research project, the exploration of what types of professional development are necessary to help paraprofessionals be successful in supporting the academic, social, and emotional needs of learning support and emotional-support students is paramount. Part of the intervention planning involves the Director taking a more active role in the professional development of paraprofessionals, and, based on interview and survey data collected as part of this project, engaging the paraprofessionals in targeted professional development that is relevant and meaningful to their daily tasks.

Any time the district adds staff to its roster, there is a financial implication. While paraprofessionals are relatively cost-effective compared to full-time teachers, given the increase that the district has seen over the last five years, it is important to examine whether or not the added incurred costs are justified or whether those funds would be better spent elsewhere in the district. While this study will not attempt to examine the relationship between paraprofessional costs and assessment results, it is likely through the collection of various data, that conclusions can be drawn as to whether or not the expenses associated with these individuals is worth the support they provide special education students.

Research Questions

This research study will be guided by the following four questions:

1. What professional development topics for paraprofessionals are perceived as beneficial to effectively address the academic, emotional, and social needs of learning-support students?
2. What professional development topics for paraprofessionals are perceived as beneficial to effectively address the academic, emotional, and social needs of emotional-support students?
3. Is there a difference in the perception of paraprofessionals' professional development needs between paraprofessionals, teachers, and administrators?
4. Do the perceptions of the effectiveness of paraprofessionals by paraprofessionals, teachers, and administrators change after paraprofessionals receive targeted professional development?

In order to guide this study, it is necessary to examine the body of work which already exists related to paraprofessionals, their effectiveness, and their professional development. This body of research will help guide the development of this research study and the intervention plan that will be implemented in the target district.

CHAPTER II

Literature Review

In order to effectively develop this research study, it is imperative to understand the historical and contemporary use of paraprofessionals in educational settings and understand the body of extant research on the effectiveness and prevalence of paraprofessionals in school settings. In order to begin understanding the use of paraprofessionals to support the academic, social, and emotional success of students, it is important to understand the growing trend of using paraprofessionals in school settings.

The Bureau of Labor Statistics (BLS) reported that there were more than one million teacher assistants across the United States in 2018. The BLS stated that this number will increase by 4%, or roughly 50,000 new positions, by 2028. While the name given to individuals who support children and students in classroom settings may range from teacher assistant, paraprofessional, para-educator, classroom aide, to classroom assistants, many of the essential functions of these individuals remain the same (Fisher & Pleasants, 2012).

Definitions of Paraprofessionals in Public Schools

Paraprofessionals working with special education students in K-12 schools can generally be organized into two broad categories: instructional paraprofessionals and personal care assistants. Chapter 14 of the Pennsylvania School Code has defined the term instructional paraprofessional as, “a school employee who works under the direction of a certified staff member to support and assist in providing instructional programs and services to children with disabilities or eligible young children” (Chapter 14, §14.105(a)(1)). A personal care assistant is defined by Chapter 14 of the Pennsylvania

School Code as someone who “provides one-on-one support and assistance to a student, including support and assistance in the use of medical equipment (for example, augmentative communication devices; activities of daily living; and monitoring health and behavior)” (Chapter 14, §14.105(a)(4)).

Other types of paraprofessionals may exist in K-12 settings, although they may not be directly related to providing special education support as outlined in Chapter 14. Title I, Part A also provided a definition of a paraprofessional that clarifies the distinction between an individual serving as a paraprofessional in a special education setting and an individual serving as a paraprofessional for Title I purposes. Title I regulations state:

Paraprofessionals [are those] who provide instructional support, include those who (1) provide one-on-one tutoring if such tutoring is scheduled at a time when a student would not otherwise receive instruction from a teacher, (2) assist with classroom management, such as by organizing instructional materials, (3) provide instructional assistance in a computer laboratory, (4) conduct parental involvement activities, (5) provide instructional support in a library or media center, (6) act as a translator, or (7) provide instructional support services under the direct supervision of a highly qualified teacher. (U. S. Department of Education, 2004, p. 1)

While Chapter 14 provides for paraprofessionals who work directly with special education students, Title I, Part A does provide for one-on-one and small group support for regular education students through the use of paraprofessionals.

The American Federation of Teachers had summarized the definition of a paraprofessional in 1998 when it wrote:

An instructional paraprofessional is a school employee whose position is either 1) instructional in nature or 2) who provides other direct or indirect services to students and/or their parents. The paraprofessional works as a member of a team in the classroom where the teacher has the ultimate responsibility for the design and implementation of the classroom education program, the education programs of individual students, and for evaluation of those programs and student progress. (p. 7)

The American Federation of Teachers' (1998) definition provided for a broader understanding of the paraprofessional outside the context of both the special education program and Title I program. The American Federation of Teachers' *Standards for a Profession* (1998) also articulated that the role of the paraprofessional must “complement and support the instructional plan and educational goals” (p. 7) of the students with whom they work.

Ashbaker and Morgan (2004) noted the importance of using the term paraprofessional to describe these individuals when they wrote:

The change in title [from teacher assistant] is a true reflection of the dramatic shift in paraprofessionals' responsibilities... Today, paraprofessionals are an integral part of classroom instruction, actively providing direct services for student education programs and performing specialized and sophisticated tasks for students with even the most-specialized needs. (p. 2)

While the modern use for paraprofessionals may be what was described by Ashbaker and Morgan (2004) that has not always been the case. Understanding the

historical background for the use of paraprofessionals can help shape an understanding of how the role of the paraprofessional has changed from their inception to modern times.

Trends in the Use of Paraprofessionals in Public Schools

The first use of paraprofessionals in a school setting likely occurred in the 1950s when shortages of certified teachers prompted school districts to look for other ways to provide service to students. While this shortage of teachers contributed to the rise of paraprofessionals in school settings, so did parental demands to include students with disabilities in the general education curriculum (Pickett, 1997). The same author also explained that the first project to integrate paraprofessionals into schools occurred when non-teacher trained women were employed to assist in clerical functions to allow the certified teachers more time to devote to instruction. The researchers continued to explain that paraprofessionals evolved over the next several decades to shift into the roles that they are currently known for in the school setting.

The U.S. Department of Education reported that in 2007, schools and agencies employed more than 312,000 paraprofessionals across the United States. By 2018, the U.S. Department of Education reported that number had risen to 433,000 (U.S. Department of Education, 2007). Research suggests that there are numerous reasons for the increase in paraprofessionals in the United States including a lack of appropriately trained teachers in many school districts, increasing class sizes and increasing special education caseloads, and lack of training for teachers on the various disabilities and unique needs of students (Giangreco, 2003).

Another cause of the increase was due to the emphasis that all students be educated, as much as possible, in the regular education classroom. The Individuals with

Disabilities Education Act ([IDEA], 2004) required that all special education students, regardless of disability, be provided the opportunity to be educated in the least restrictive environment (LRE), which is defined as:

To the maximum extent appropriate, children with disabilities...are educated with children who are not disabled, and special classes...or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (20 U.S. C §1412 (a) (5) (a))

Etschedit and Barlett (1999) encapsulated the mandate placed on schools concerning LRE when they wrote, "school districts have a duty to make good faith efforts to include students with disabilities in regular classroom settings and to provide necessary supplementary aids and services to make these settings effective" (p. 163). With emphasis placed on school districts ensuring that special education students receive education in the LRE, the role of the paraprofessional has become ever more focused on supporting special education students in the classroom (Marks, Schrader, & Levine, 1999).

Schools must be cautious of ensuring that students are educated in the LRE as several court cases have ruled in favor of parents who argued that their student was not included "to the maximum extent possible" (p. 2) in the general education environment (Ashbaker & Morgan, 2004). In order to meet the requirements of an LRE for students, school districts have utilized an inclusion model of special education. According to King (2003), an inclusive classroom is one in which all students, regardless of their disability,

are included in the same learning environment as other students. Giangreco, Edelman, Luiselli, and MacFarland (1997) also noted that it is not only the school which attempts to include special education students as much as possible in the regular education environment but that parental demands on schools have also caused schools to utilize more paraprofessionals to help support special education students across the U.S. In 2018, the U.S. Department of Education's *40th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act* reported that 63.1% of special education students received supplemental special education service, meaning that they received instruction in the special education classroom for less than 20% of their school day. This fact points to the reality that the majority of special education students were included in the general education classroom for most of their school day.

Federal and State Requirements for Paraprofessionals

The Education of Handicapped Children Act passed in 1975, which would later become IDEA, 2004, provided for federal clarification on the role of the paraprofessional in working with special education students. IDEA (2004) provided that paraprofessionals “who are appropriately trained and supervised” can be utilized by school district to provide special education and related services to students with disabilities (20 U.S.C § 1412 (a) (14) (B) (iii)), making them an acceptable and integral component of a student's special education program. The United States Code (USC) also required that paraprofessional qualifications are “consistent with State-approved or State-recognized certification, licensing, or other comparable requirements” (20 U.S.C §1412 (a) (14) (B) (i)).

Subsequent educational laws also reinforced the scope of the paraprofessional's role. The No Child Left Behind Act (NCLB) of 2001 mandated that school districts ensure that paraprofessionals engage in activities that were consistent with the provisions of the Act, including:

- (a) To provide one-on-one tutoring for eligible students, if the tutoring is scheduled at a time when a student would not otherwise receive instruction from a teacher;
- (b) To assist with classroom management, such as organizing instructional and other materials;
- (c) To provide assistance in a computer laboratory;
- (d) To conduct parental involvement activities;
- (e) To provide support in a library or media center;
- (f) To act as a translator; and
- (g) To provide instructional services to students in accordance with paragraph (3) (NCLB §1119)

In accordance with IDEA (2004) and Title I, the scope of the paraprofessional was limited by NCLB (2001) to specific functions and roles within the educational program of students with whom the paraprofessional worked. NCLB (2001) further provided that the paraprofessional must perform their duties with the oversight and direction of a certified teacher and that certified teacher must plan lessons and design instruction (NCLB §1119).

NCLB (2001) also set minimum expectations for the qualifications of all paraprofessionals hired after its enactment. All new paraprofessional hires for any local

educational agency that received federal money under the NCLB Act (2001) must have met one of three standards:

- (a) completed at least 2 years of study at an institution of higher education;
- (b) obtained an associate's (or higher) degree; and
- (c) met a rigorous standard of quality and can demonstrate, through a formal state or local academic assessment —
 - (i) knowledge of, and the ability to assist in instructing, reading, writing, and mathematics; and
 - (ii) knowledge of, and the ability to assist in instructing, reading readiness, writing readiness, and mathematics readiness, as appropriate. (NCLB §1119)

These requirements also appear in the Pennsylvania School Code, as noted below.

The NCLB Act (2001) also established additional limitations on the role of the paraprofessional in the school setting, including limiting the work that the paraprofessional performed by requiring that the paraprofessional work under the direct supervision of a teacher and within close proximity to the teacher (NCLB §1119).

The Every Student Succeeds Act ([ESSA], 2015), which replaced NCLB as federal law in 2015, upheld the requirements of paraprofessionals established in the NCLB legislation. The ESSA (2015) also required that parents who request it must be provided with information related to the qualifications of the paraprofessionals who work with their children.

The Pennsylvania School Code outlined that paraprofessionals working in a special education setting must meet one of three qualifications as of July 1, 2010, “(i)

have completed at least two years of post-secondary study, (ii) possess an associate degree or higher, (iii) meet a rigorous standard of quality as demonstrated through a state or local assessment” (Chapter 14, §14.105 (a)(1). While all states receiving federal monies must require one of three qualifications for individuals to serve as a paraprofessional, Pickett, Likins, and Wallace (2003) found that:

No two credentialing, certification, licensure, permit systems are alike. The only shared characteristic of the systems is that all are non-binding on LEAs.

Currently, with the exception of requiring a minimum of a high school diploma or GED for employment as a teacher aide, there is little consensus among states with a credentialing systems about what the components of a credential should be, let alone what the standards for paraeducator roles, skills and preparation should be. Moreover, the states that have established standards for paraeducator preparation that are not embedded in their rules or regulatory procedures have no way of requiring LEAs to provide training for paraeducators that meet the standards.

(para. 2)

As such, it is up to each state to determine the qualifications and credentials of individuals serving in a paraprofessional role. While the NCLB Act (2001) and the ESSA (2015) do maintain the three main qualifying criteria for paraprofessionals, the third qualification is up to interpretation by states, and therefore, is inconsistent between states. However, the U.S. Department of Education data do support that the majority of paraprofessionals working in special education settings across the United States do meet the standard of highly qualified. That is, they have met their state's requirements for paraprofessionals (U.S. Department of Education, 2018). In 2015, the U.S. Department

of Education found that 94.5% of paraprofessionals employed to work with special education students ages three through five were considered highly qualified, and 94% of paraprofessionals working with special education students ages 6-21 were considered highly qualified (U.S. Department of Education, 2018).

Roles and Responsibilities of Paraprofessionals

While the roles and responsibilities of paraprofessionals have certainly changed in recent years, many of the roles and responsibilities in today's literature mimic that which is in the literature of decades ago. Included in those overlapping expectations are such things as encouraging good behavior, working with individual and small groups of students to reinforce skills already taught, serving as scribes for students with visual disabilities, and assisting students with self-care activities such as using the restroom and eating (Greer, 1978). While that is a non-exhaustive list of similarities, it is important to note that many of the fundamental expectations for paraprofessionals have remained unchanged for decades.

One of the primary roles of the paraprofessional within the special education program is to provide academic support for students in classroom settings (Pickett et al., 2003). Within this domain falls the idea of inclusion, which is helping all students, regardless of disability, to access the general education classroom and providing the necessary supports to ensure that they are able to find success in the general education curriculum (Roach, 1995). Coots, Bishop, and Grenot-Scheyer (1998) found that paraprofessionals were vital supports for special education students who were included in the general education classroom.

This support may focus on the academic achievement of students, or it may focus on the behavioral or social support of students within the school setting. In a study conducted by Fisher and Pleasants (2012), the researchers found that 53% of their study group engaged in providing behavioral and social support to students (p. 291). Forty-eight percent of their respondents engaged in carrying out lessons designed by the teacher and 36% of their respondents reported that they engaged in student supervision (p. 291). The majority of paraprofessional interactions with students were found to be direct instruction in small groups or one-on-one support (Malian, 2011).

In a survey of 202 paraprofessionals from 38 states, researchers found that paraprofessionals reported that they engaged in eight tasks most commonly throughout the course of their day (Liston, Nevin, & Malian, 2009). These tasks included providing tutorials, engaging in small group instruction, supervising students, managing student behaviors, keeping up-to-date on teacher lesson plans, teaching students social skills, collecting data, and adapting material for students. Researchers also found that paraprofessionals engaged in carrying out the tasks listed above, through a variety of means, including working one-on-one, directing computer-assisted learning, providing Response to Intervention (RtI) interventions, and assisting students with community-based instruction (Liston et al.)

Liston et al. (2009) also found that 68% of paraprofessionals spent some or all of their day directing student behavior, 59% spent some of their day delivering individual instruction to students, 50% taught appropriate social skills throughout the course of their day, 36% of paraprofessionals supervised peer tutoring sessions, 26% helped students with homework, and 14% reported that they supported cooperative learning groups (p. 8).

Another study of 419 teachers, paraprofessionals, and special education teachers conducted in a dozen schools in Vermont found that paraprofessionals spent an average of 47% of their time carrying out instruction that was planned by a teacher, almost 19% providing support for student behavior, about 17% of their time was spent conducting self-directed tasks (those chosen by the paraprofessional), and the remaining time was spent on tasks such as clerical tasks, personal care tasks, and other supervision of students (Giangreco & Broer, 2005, p.14).

While supporting the academics of students is a role squarely within the realm of the paraprofessional, the literature notes a concern with regard to the paraprofessional taking on too much ownership of the student's education. The literature notes that some teachers believe that he or she is not responsible for the special education student in his or her classroom as long as that student is supported by the paraprofessional. For example, teacher interactions with autistic students supported by a paraprofessional were far more infrequent than teacher interactions with students who were not supported by a paraprofessional (Young, Simpson, Myles, & Kamps, 1997).

Giangreco et al. (1997) found that paraprofessionals assigned to work in close proximity with special education students decreased the regular education teacher's sense of ownership over the education of those students. They found that teachers interacted with students who had a one-on-one paraprofessional much less compared to other students in the classroom. Giangreco et al. (1999) found that "excessive proximity of paraprofessionals actually interfered with peer interactions and contributed to limited involvement of the general education teacher with the student with disabilities" (p. 282). Giangreco and Doyle (2007) did note that teachers were more engaged with students with

disabilities when the paraprofessional was assigned to work with the entire class rather than a small group of special education students or an individual special education student. However, nearly 60% of paraprofessionals surveyed across 12 Vermont public schools noted that the paraprofessional provided “most of the instruction that the students with disabilities receive rather than the majority being provided by teacher or special educators” (Giangreco & Broer, 2005, p. 16).

Assisting with academics is not, however, the only role that paraprofessionals focus on during the course of their duties. Downing, Ryndak, and Clark (2000) found that paraprofessionals cited one of their main responsibilities as preventing inappropriate or aggressive behavior from interfering in the education of other students in classrooms. Paraprofessionals report that they believe they are primarily responsible for overseeing the behavior management of special education students in inclusive settings (Marks et al., 1999). Marks et al. also found that the belief that the paraprofessional was responsible for the behavior of special education students would allow the teacher to abdicate his or her responsibility in the behavior management of those students.

When they are focused on supporting academics, paraprofessionals reported that they used a range of strategies to support the education of students in inclusive classrooms “including providing choices, interspersing preferred with nonpreferred activities, providing additional prompts or redirection, reducing demands, using positive behavioral support strategies for motivation, and getting classmates to assist the student(s)” (Downing et al., 2000, p. 174). However, the literature also documents concerns with the belief by some educators as to the role of the paraprofessional. Marks et al. (1999) found that:

For the most part, paraeducators found themselves in situations in which waiting for teachers and other professionals to make curricular and teaching decisions was not feasible. Consequently, faced with the need to provide daily academic activities and to make ‘on-the-spot’ modifications to the classroom activities, paraeducators found themselves assuming primary responsibility for day-to-day educational decisions. (p. 321)

This study pointed to the fact that, at times, the day-to-day function of the paraprofessional is in direct conflict with state and federal mandates that the paraprofessional should not design instruction for students. Additional literature exists, and will be discussed later, which supports the premise that often paraprofessionals are engaged in duties that are beyond the scope of what their work should be according to state and federal law. While the primary role of paraprofessionals should be to support the educational achievement of students through the teaching of skills, many paraprofessionals report that their role is to ensure that students remain on task rather than the teaching of skills (Downing et al., 2000). When paraprofessionals are focused on providing instruction, Fisher and Pleasants (2012) found that one-fourth of their survey participants engaged in lesson planning, which is a duty reserved for certified teachers and stands in direct conflict with state and federal laws. Giangreco and Broer (2005) found that 30.67% of paraprofessionals in their study engaged in designing instructional materials without the support of a certified teacher.

Even though their role is not to design instruction, paraprofessionals support the curriculum of a school through other means. Paraprofessionals report that they support the curriculum through making modifications and adaptations for students with whom

they work (Downing et al., 2000). These researchers noted that these adaptations included “reducing the amount of work, color coding or highlighting important information, enlarging materials, using manipulatives, audiotaping material, and using pictures for reading and writing” (p. 175).

While paraprofessionals do often support the academics of special education students, the research also shows that paraprofessionals work to teach students a variety of interpersonal and self-determination skills. In a 2011 study of 347 paraprofessionals, Carter, Sisco, and Lane found that 66.96% of respondents often taught students choice-making skills, 41.94% of respondents taught students decision-making skills, 58.48% of respondents taught students goal problem-solving skills, 35.59% of respondents taught students goal-setting and attainment skills, 43.73% of respondents taught students self-advocacy and leadership skills, 52.19% of respondents taught students self-management and self-regulation skills, and only 6.94% of respondents taught students self-awareness and self-knowledge skills.

A 2012 study by Lane, Carter, and Sisco conducted with 223 paraprofessionals from 115 randomly selected public schools revealed that at least 74% of the respondents rated several components of self-determination as highly important to them. Those seven components consisted of: choice making, decision-making, problem-solving, goal-setting and attainment, self-advocacy and leadership, self-management and self-regulation, and self-awareness and self-knowledge. This study also found that the instruction of these skills by paraprofessionals occurred more frequently at the elementary level for the components of choice-making, problem-solving, and self-management and self-regulation. The other four components were taught more often at the secondary level.

Several studies have been conducted to determine the paraprofessionals' view of his/her role in the school setting. Marks, Schrader, and Levine (1999) found that some paraprofessionals "feel that it was entirely up to them to ensure that the inclusion student received some educational benefits, and many felt that they were the only ones who truly understood the needs of the inclusion student" (p. 323). However, despite this perception, paraprofessionals also noted that they were "excluded from having a voice in decision making [*sic*] despite their in-depth knowledge of a student" (Fisher & Pleasants, 2012, p. 292).

Another study that focused on how paraprofessionals see their role was done by Chopra et al. in 2004. This study focused on the paraprofessional as a connector. The study identified that paraprofessionals viewed themselves as a connector between parents and teachers, between special education students and teachers, between special education students and their peers, between special education students and their parents, and between special education students and the curriculum.

Little research exists on the perspective of current and former students toward the paraprofessionals who worked with them in the school setting. However, Broer, Doyle, and Giangreco did conduct a study in 2005 with 16 disability students. That study suggested that there were four common student views of those studied toward paraprofessionals: (a) mother, (b) friend, (c) protector from bullying, and (d) primary teacher.

Despite the various roles and responsibilities that paraprofessionals assume across schools, 78% paraprofessionals report that lack of appreciation for their position was a major or minor concern (Fisher & Pleasants, 2012).

Training and Professional Development of Paraprofessionals

Pennsylvania law provides that paraprofessionals must engage in at least 20 hours of activities each year designed to develop their ability to perform their duties (Chapter 14, §14.105 (a) (3) and (4)). Given that each state may establish differing requirements for the certification, training, and professional development of paraprofessionals, it is impossible to look to federal law for recommendations on training requirements (Pickett et al., 2003). Pennsylvania School Code is also silent on what specific topics should be included in the development of paraprofessionals across the Commonwealth. Instead, each school district must make those determinations, only needing to meet the minimum number of hours of professional development as outlined in the Pennsylvania School Code.

Fisher and Pleasants (2012) cited that researchers found that the majority of training received by paraprofessionals occurs on the job rather than prior to employment. They go on to explain that the scope and duties performed by paraprofessionals often exceed the limitations put onto the paraprofessional role by federal requirements, suggesting the need for professional development for teachers and administrators as well. Carter, O'Rourke, Sisco, and Pelsue (2009) studied 313 paraprofessionals, who reported that their primary training occurred after employment rather than prior to employment. This trend was supported by the research of Riggs and Mueller (2001), who found that 40% of their respondents ($N=758$) reported that training occurred on the job, and only 12% reported they received training by attending in-service workshops, taking classes, or participating in paraprofessional conferences. The researchers found that a majority of the initial training paraprofessionals received was through "assistance from teachers and

other paraeducators” (p. 57). While those paraprofessionals found this training to be helpful, they also indicated the need for more planned, systematic, professional development.

Giangreco, Edelman, and Broer (2003) found that teachers, administrators, and paraprofessionals all indicated that “orientation and entry-level training and on-the-job training to match responsibilities” (p. 69) was a priority need for paraprofessionals.

Riggs (2001) conducted a study of 200 paraprofessionals and identified four high-priority training needs: knowledge of specific disabilities, information on facilitating inclusion, working with related service providers and other adults, and classroom behavior management and instructional strategies. However, this type of training occurs inconsistently across schools (Riggs & Mueller, 2001).

Research has supported the idea that if paraprofessionals receive professional development in instructional and social/emotional strategies, they can increase in their effectiveness working with students in inclusive classrooms (Bingham, Spooner, & Browder, 2007). However, other researchers have noted that training alone will not ensure that paraprofessionals are able to effectively assist students in inclusive classrooms (Giangreco & Doyle, 2007). Other supports such as guidance from special education teachers and administrators is also important to help improve the instructional practice. However, the literature suggests this does not occur regularly. In one study, one-quarter of paraprofessional respondents indicated that they received no daily supervision from any teacher or administrator as part of their daily routine (Riggs & Mueller, 2001).

While literature supports the idea that professional development for paraprofessionals is essential to their ability to effectively work with students, the literature also points to the importance of providing professional development to regular and special education teachers to work with paraprofessionals assigned to their classroom. Teachers themselves have little to no formalized training during their teacher preparation program or as part of their professional development programming to effectively work with paraprofessionals assigned to their classroom (French & Pickett, 1997).

Research suggests that the teacher with whom the paraprofessional is assigned to work can provide valuable professional development and training to new paraprofessionals. It is noted that the teacher should begin by focusing on the orientation of new paraprofessionals to the school setting in which they are assigned to work. Additionally, classroom teachers are able to provide orientation to the paraprofessional about the students with whom the paraprofessional will work during the course of the school day (Giangreco & Doyle, 2004). Carroll (2001) found that a three-part orientation process was recommended. The first part of the orientation should be at the district level and include policies and procedures. The second part of the orientation should be at the school level to discuss specific building procedures, a tour of the facility, and an introduction to staff members. The final orientation was classroom-specific which clarified the paraprofessional's role and specific expectations for his or her performance. This final orientation should also include input from the classroom teacher as well.

Role clarification is also an important professional development topic noted in the literature. Giangreco and Doyle (2004) noted that role clarification includes identifying

what specific duties are assigned to the paraprofessional and what duties are assigned to the teacher. As discussed earlier, the literature points to the idea that the distinction between the role of the paraprofessional and teacher can become unclear (Marks et al., 1999). Only 47% of paraprofessionals in one study were provided with a written job description outlining their specific job responsibilities (Riggs & Mueller, 2001).

Lasater, Johnson, and Fitzgerald (2000) described six areas that should form the primary focus for professional development for paraprofessionals. Those areas include clarifying roles and responsibilities, understanding characteristics of different learners, cultural diversity training, data collection methods, behavioral and instructional strategies, and health-related issues and procedures.

Keller, Bucholz, and Brady (2007) articulated the importance of including instructional and behavioral strategies into the recommended professional development of paraprofessionals when they wrote:

Paraprofessionals who assist low-achieving students and students with disabilities work closely (frequently one-on-one or in small groups) with these students to reinforce classroom learning. They are an ideal resource for teaching and reinforcing the use of learning strategies. Because paraprofessionals often supervise students in the hallways, lunchroom, and various other social situations, they can profit from developing, teaching, and reinforcing social learning strategies for the students whom they supervise. However, paraprofessionals often do not have the necessary knowledge and skills to use learning strategies with these students. (p. 19)

Some research exists on the effectiveness of various types of professional development and training for paraprofessionals and whether training impacts the paraprofessional's effectiveness in performing their tasks. Bingham, Spooner, and Browder (2007) found that with proper training, paraprofessionals could effectively use and instruct students with severe language disabilities on the use of assistive technology for communication. Likewise, researchers have found that with directed training, paraprofessionals were able to help students learn appropriate socialization skills (Koegel, Kim, & Koegel, 2014).

Barrio and Hollinghead (2017) found that incorporating shorter workshops (typically 45 – 60 minutes in length) focused on specific topics was effective in helping paraprofessionals learn and retain the information provided. The researchers also found that paraprofessionals in their study responded favorably to being given access to an online community of practice (OCP). This OCP housed copies of the workshop material, links to helpful websites, information pertinent to the paraprofessionals' responsibilities, and a place for the paraprofessionals to engage in discussions or leave comments.

Other studies have focused on the use of live, interactive, technology training to provide professional development for paraprofessionals. In one study, researchers found favorable opinions of the model from paraprofessionals, and it was noted that this type of delivery method worked particularly well for agencies which lacked personnel with time or expertise to conduct the professional development in an in-person setting (Morgan, Forbush, & Nelson, 2004).

A study, in 2002, at the St. Mary's Area School District, found that a blended professional development model was effective with paraprofessionals employed by the

district. This model included both workshops/lectures, computer-based training, and skill-based training such as Cardio-Pulmonary Resuscitation (CPR) and Non-violent Crisis Intervention (NCI) (Bugaj, 2002). This study was limited in scope, however, as it only represented data from one school district in Pennsylvania.

A 2004 study by Forbush and Morgan evaluated a live, two-way video and audio system to provide training to teachers and paraprofessionals in Idaho, Pennsylvania, and Utah. The study found that the system provided training that may not have been otherwise available due to budgets, staffing, or location. In 2016, a masters-level thesis study was conducted by Courtney Downing of The Ohio State University that focused on the use of video modeling and performance feedback to train paraprofessionals in the use of least-to-most prompting, simultaneous prompting, and naturalistic interventions. The paraprofessionals in this study were noted to correctly implement the strategies as a result of the modeling and feedback.

While the research focused on the training of paraprofessionals has tended to focus on outside resources, Walker, Douglas, and Brewer (2019) conducted a small study ($n=3$) that focused on whether or not special education teacher-directed professional development was effective with paraprofessionals. While this study focused on a small sample of paraprofessionals implementing a particular strategy with multi-disabled students, the findings pointed to a need for additional research focused on teacher-directed professional development for the paraprofessionals with whom they work.

Some additional research exists focusing on the implementation of specific professional development and training resources. Serna et al. (2015) explored the use of *Learning ABA* to teach paraprofessionals how to implement applied behavior analysis

(ABA) with students with Autism Spectrum Disorder (ASD). A plethora of online training resources exist that claim to be effective for the training and professional development of a paraprofessional; however, these resources have not been scientifically researched to determine their effectiveness.

Research on the Effectiveness of Paraprofessionals

Fisher and Pleasants (2012), in their statewide survey, found several reasons why the effectiveness of paraprofessionals is in question. Partly due to the limited educational requirements found in federal or state law for paraprofessionals, they found that “the least qualified staff are teaching students with the most complex learning characteristics and in some cases with little oversight or direction, overstepping the boundaries identified in IDEA” (2004, p. 288). This statement echoed the work of Mueller, in 2002, when she found that many special education programs rely too heavily on inexperienced and under trained paraprofessionals to provide instruction and behavior support to the neediest students.

Both the work of Mueller (2002) and Fisher and Pleasants (2012) reinforced the finding of Brown, Farrington, Knight, Ross, and Ziegler (1999) that paraprofessionals often provide the majority of the instruction for the neediest learners. Giangreco et al. (1999) found that “inappropriate use of paraprofessionals to assume the responsibilities of qualified teachers and special educators may perpetuate a double standard whereby students without disabilities are taught by certified educators, and students with significant disabilities are taught by paraprofessionals” (p. 283). In one study, 70% of the paraprofessionals surveyed in 12 Vermont schools noted that they made instructional

and curriculum decisions for students with whom they worked without any input from special or regular education teachers (Giangreco, Smith, & Pinckney, 2006).

Giangreco (2013) noted that this trend “presents serious equity concerns for students with disabilities and calls into question whether such assignment [students assigned to work with paraprofessionals] reflects the devalued status of some students with disabilities disguised in a cloak of helping” (pp. 97-98). Researchers have also argued that the overuse of paraprofessionals “reflect devaluing double standards that likely would be considered unacceptable if they were applied to students without disabilities” (Giangreco & Doyle, 2007, p. 432).

A body of research has emerged that looks at alternatives to the use of paraprofessionals, particularly one-on-one paraprofessionals, for the support of students with disabilities. Carter, Sisco, Melekoglu, and Kurkowsi (2007) examined the use of peer supports to replace a one-on-one paraprofessional. They found that peer interactions increased in a peer-support model for students with disabilities compared to students with disabilities who were supported by a paraprofessional.

Fisher and Pleasants (2012) also found that the use of paraprofessionals may cause some teachers to be less involved with the students who are supported by the paraprofessional in the classroom. Giangreco et al., (1997) noted that the use of one-on-one paraprofessionals may cause general education teachers to interact less with the special education students assigned to that paraprofessional compared to other students. The researchers also found that students who were assigned to work with paraprofessionals often engaged in learning that was different than the rest of their peers and followed a schedule that was often determined by the paraprofessional.

Another concern present in the literature is if the use of a paraprofessional changes the perception of the special education student by his or her peers. In interviews with teachers, Bennett, Deluca, and Bruns (1997) found that teachers worry that “children in the classroom might think the child with disabilities was less competent because he/she had an instructional assistant” (p. 126).

Some research suggests that the use of paraprofessionals in close proximity to students was stigmatizing to students and that students reacted to the proximity of paraprofessionals through negative behaviors. Other studies have suggested that students may believe that the paraprofessional watches their behavior more closely than other students, causing the appearance that the student was more poorly behaved than his peers (Giangreco, et al., 1997). The researchers went on to suggest that behavior data may be skewed because the paraprofessional may pay more attention to the special education student’s behavior than is paid to other students’ not assigned to the paraprofessional. In a survey of paraprofessionals, however, slightly over 85% of respondents disagreed or strongly disagreed that their close proximity to students was unnecessary or interfered with interactions between the special education student and his or her teacher or between the special education student and his or her peers (Giangreco & Broer, 2005).

Giangreco et al. (1997) found that proximity by paraprofessionals came in primarily one of four ways. The first was that the paraprofessional would maintain physical contact with the student, including touching the student's arm, hand, shoulder, or wheelchair. The second was the paraprofessional sitting in the seat directly next to the student. The third was the student sitting in the paraprofessional's lap, such as during carpet time or when completing activities on the floor. The final way was that the

paraprofessional would follow the students everywhere students went in the classroom or the school, even though their presence was not immediately necessary.

Giangreco (2010) suggested that the use of paraprofessionals to provide support to included students may be a reactive response to increased students with complex disabilities. He suggested that the school system may attempt to address these complex disabilities simply by adding more paraprofessional support rather than looking for root cause solutions to the needs presented by the students.

Giangreco et al. (1999) found that school districts may rely too heavily on the use of paraprofessionals to support students with disabilities rather than looking at other factors such as characteristics of school, classroom, personnel, or organization. They also found that paraprofessionals may be more commonly assigned to students with particular disability categories rather than based on the individual need of the student in question. As a result, the effectiveness of that paraprofessional may be called into question. Moreover, “virtually no student outcome data exist suggesting that students with disabilities do well or better in school given paraprofessional supports” (Giangreco & Broer, 2005, p. 10). The literature has remained silent on the correlation between paraprofessional support and the student outcome data of students with disabilities since the Giangreco and Broer research in 2005.

Another noted concern regarding paraprofessionals was the lack of time given to paraprofessionals to plan for upcoming lessons. Reading the material themselves, completing all the work that is expected of the student, talking with the teacher about the material were noted ways that paraprofessionals prepare for their work with students (Liston et al., 2009). Malian (2011) found that 60% ($N=202$) of paraprofessionals

reported that they had between one and five hours per week to plan for the following week's activities.

Giangreco, Yuan, McKenzie, Cameron, and Fialka (2005) noted several other concerns not yet addressed in the literature regarding the assignment of one-on-one paraprofessionals. Included in those concerns was that students who were assigned to paraprofessionals might develop isolated relationships with the paraprofessional, leading to the exclusion of peer interactions between the special education student and his or her peers. The researchers also noted that students who are assigned paraprofessionals might develop learned helplessness whereby they become "hesitant to participate without paraprofessional direction, prompting, or cueing" (p. 30). Additionally, Giangreco et al. noted that students assigned to paraprofessionals might lose a sense of personal control in their decision-making since the paraprofessional may end up making decisions for these students when their peers not assigned to paraprofessionals would make these decisions on their own.

While much of the literature focused on the effectiveness of paraprofessionals themselves, a 2001 study by Wallace, Shin, Bartholomay, and Stahl focused on the knowledge and skills needed by teachers to oversee the duties of the paraprofessionals. The researchers identified seven critical areas: communication with paraprofessionals, planning and scheduling, instructional support, modeling for paraprofessionals, public relations, training, and management of paraprofessionals. The researchers also found that many teachers are not adequately trained to supervise paraprofessionals and also require training in these areas in order to best help paraprofessionals grow in their profession.

Drecktrah (2000) found that only 28% ($N=212$) of teachers had training on how to collaborate with paraprofessionals during their teacher training programs.

Needs of Special Education Students with Whom Paraprofessionals May Work

While paraprofessionals may work with a range of student needs, for the purpose of this study, two types of special education students were examined: learning-support students and emotional-support students (also known as emotionally disturbed students). Hallahan, Kaufman, and Pullen (2015) defined special education as “specially designed instruction that meets the unusual needs of an exceptional student that might require special materials, teaching techniques, or equipment and/or facilities.” Students classified as either a learning-support student with a SLD (explained below) or students classified as having an emotional disturbance (explained below) qualify for special education services.

IDEA (2004) broadly defined children who qualify for special education when it stated:

The term “child with a disability” means a child—

- (i) with intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this chapter as (“emotional disturbance”), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and
- (ii) who, by reason thereof, needs special education and related services (20 U.S.C. §1401 (3) (A)).

IDEA (2004) continued to specify that a SLD is a disorder “in one or more of the basic psychological processes involved in understanding or using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations” (20.U.S.C. §1401 (30) (A)). Students with a SLD may be referred to as learning-support students in order to differentiate from other types of special education students.

For the purpose of this study, another type of special education student will be examined. Emotional disturbance is defined in the United States Education Code (2015) in the following:

- (i) Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance:
 - (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors;
 - (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
 - (c) Inappropriate types of behavior or feelings under normal circumstances;
 - (d) A general pervasive mood of unhappiness or depression; and
 - (e) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section.

Students who receive special education services due to an emotional disturbance (ED) may be referred to as emotional-support students. While students with an emotional disturbance may have academic difficulties, the distinction between a SLD and ED are significant.

The vast majority of students receiving special education services falls into the SLD category. Newman (2006) reported that two-thirds of special education students who received services were students with learning disabilities. The other one-third of special education students had disabilities of other natures. In the 2017-2018 school year, the National Center for Education Statistics ([NCES], 2019) reported that only 34% of students served under special education services fell into the SLD category. However, that does not indicate that there are fewer students receiving special education service. Instead, The NCES (2019) also reported that the number of students receiving special education services has grown from 6.3 million during the 2001-2001 school year to 7.0 million during the 2017-2018 school year. The data suggest that more students are qualifying for special education services but under a different disability category than SLD.

In Pennsylvania, the Pennsylvania Department of Education ([PDE], 2019) reported that across the Commonwealth during the 2017-2018 school year, there were 119,502 school-age students with SLD (or 41% of all students in Pennsylvania who receive special education services) and 24,914 school-age students with ED (or 8.5% of

all students in Pennsylvania who receive special education services). Of those, a substantial portion (10,978 or 44% of those with ED) of students with ED between the ages of six and 17 were educated in the regular classroom at least 80% of the time. An additional 4,716 students with ED (or almost 19% of students with ED) between the ages of six and 17 were educated in the regular classroom between 40% and 79% of the time. A little over 3,000 students with ED (or almost 12% of students with ED) between the ages of six and 17 were educated in the regular education classroom less than 40% of the time. The other students with ED, as reported in this report, were either in the 18- to 21-year old age range or educated at a nonpublic facility. Students with SLD between the ages of six and 17 were found to have the following enrollments: 74,900 (or 63% of those with a SLD) were educated in the general education classroom at least 80% of the day, 33,384 (or 27.9% of those with a SLD) were educated in the general education classroom for between 40% and 79% of the day, and 2,699 students (or 2.3% of those with a SLD) were educated in the general education classroom less than 40% of the day.

Newman (2006) also found that 35% of special education students received the general education curriculum used for other students without disabilities. However, 52% of teachers reported that they had to make some modifications to the general education curriculum in order to help these special education students be successful. Ninety-nine percent of teachers reported, however, that special education students are “expected to keep up with others in class” (p. 5) even though the same teachers reported that only 78% of special education students are able to do so.

Some research exists on the academic differences between learning-support and emotionally disturbed students. The report *Facts from NLTS2: High School Completion*

by *Youth with Disabilities* (Scientific Research Institute, 2005) found, based on a 2003 survey of more 11,000 students, that only 56% of students with an emotional disturbance completed high school compared to 75% of students with a learning disability. Wagner, Newman, Cameto, Levine, and Garza (2006) found the students with ED have the highest dropout rate of students with any disability covered under the umbrella of special education.

Certainly, one of the goals of special education is to help the student learn skills that will enable him or her to become independent in life. Researchers found that 74% percent of students with EDs responded that they knew where to find necessary resources compared to 64% of students with a learning disability (Cameto, Newman, & Wagner, 2006).

Wagner, Newman, Cameto, and Levine (2006) reported that ED students had higher mean average scores compared to SLD students on five of the six Woodcock-Johnson III subtests. However, Reid, Gonzalez, Nordness, Trout, and Epstein (2004) reported that ED students show moderate to large differences in their overall academic performance as compared to students without disabilities. They also found that ED students performed significantly below peers across all subject areas. Likewise, Nelson, Benner, Lane, and Smith (2004), in their study of 42 students with ED, found that ED students demonstrated significant deficits in reading, math, and writing.

Lane, Carter, Pierson, and Glaesar (2006) found that students with SLD and ED had statistically similar performances when given a series of academic, social, and behavioral assessments. However, the same researchers found that teachers viewed SLD

students as more academically competent than students with ED despite similar scores on the series of assessments.

Cameto et al. (2006) also found that 42% of students with emotional disturbance had trouble completing homework weekly, or more often, compared to 31% of students with learning disabilities. They also found that 43% of students with emotional disturbance had difficulty paying attention in school compared to 36% of students with learning disabilities.

The difference in post-secondary plans has also been studied as part of the work of Cameto et al. (2006). Fifty-six percent of ED students reported that they definitely would attend a post-secondary school, and an additional 30% of ED students reported that they probably would attend a post-secondary school. This is in contrast to the actual enrollment data for ED students, which, in 2005, was found to be only 36%. This discrepancy is also shown in SLD students of whom 53% percent stated they definitely would attend a post-secondary institution and an additional 34% who reported that they probably would attend a post-secondary institution. By 2005, only 43% of those respondents had enrolled in a post-secondary school.

Wehby, Lane, and Falk (2003) noted that few studies have focused on the academic needs of students with ED. They postulated four reasons why this may be:

1. Behavior problems prevent teachers from implementing high-quality instruction with Emotional and Behavior Disorders (EBD).
2. Students with EBD influence the behavior of teachers, essentially shaping teachers into providing less instruction.

3. Within teacher-training programs for students with EBD, there is a lack of preparation in the area of academic instruction.
4. The limited research in the area of academic instruction has contributed to the absence of an empirically valid knowledge base with which to guide future research and subsequent preparation of teachers. (p. 194)

They noted that there may be a belief by educators that, until behavior complies with accepted norms, academic instruction is impossible. Levy and Chard (2001) echoed this sentiment that the attention when working with students with ED focuses on behavior and not on how and what students with ED should be taught.

Wehby et al. (2003) also noted that the majority of interactions between teachers and students with ED are focused on negative behaviors rather than on instruction and academics. While this should be a concern for educators, Carr, Taylor, and Robinson (1991) explained that the lack of attention on academics may be partly caused by the student, and ED's attempts to engage them in negative behavior and noncompliant responses in order to distract the teacher from providing instruction. The same researchers have questioned whether the students' misbehaviors results in less instruction from the teacher or if the teacher's lack of instruction causes student misbehavior.

There are distinct social and behavioral needs when comparing students with SLDs to those with EDs. The National Longitudinal Study-2 (2003) included data from more than 11,000 students in Grades 7-12 during the 2000-2001 school year and found that in five behavior categories, students with EDs had a greater percentage who demonstrated the behavior category than any other disability category. The study looked at the following five disciplinary and behavior categories: control behavior to act

appropriately in class not at all well or not very well, arguing with others in class sometimes or very often, fighting with others in class sometimes or very often, having any disciplinary actions in the most recent school year, and having even been suspended or expelled. The study found that 61% of students with ED were reported to be argumentative, but only 42% of students with SLD were found to do the same. The same study found that students with ED had a higher percentage of suspensions and expulsion than did students with any other disability. Seventy-three percent of ED students in the National Longitudinal Study-2 (2003) were suspended or expelled at some point during their educational career compared to 27% of SLD students. Thirteen percent of SLD students did not control their behavior to act appropriately in class compared to 40% of ED students. Thirty-eight percent of students with emotional disturbance fought sometimes or very often with students compared to 16% of students with learning disabilities.

The ability to get along with teachers and peers is another area of research that showcases differences between students with ED and those with learning disabilities. Learning-disabled students self-reported to researchers that 19% of them had difficulty getting along with teachers, and 21% had difficulty getting along with peers. Students with an ED self-reported to researchers that 25% of them had difficulty getting along with teachers, and 35% of them had difficulty getting along with peers (Cameto et al., 2006). The difference in the ability to get along with peers and teachers is not the only social category in which students with learning disabilities and EDs differ. Cameto et al. also reported that 47% of students with ED self-reported that they are never involved in school activities compared to 32% of students with LD.

Cameto et al. (2006) found that students' responses to questions related to personal autonomy showed some differences between students with ED and SLD. The survey was based on M. L. Wehmeyer's 2000 work, *The Arc's Self-Determination Scale: Procedural Guidelines* and included ratings for items such as keeping one's personal items in order, demonstrating good personal hygiene and grooming, making friends with similarly-aged peers, keeping appointments, selecting gifts for family and friends, and choosing how to spend money. Cameto et al. found that 52% of students with learning disabilities rated their personal autonomy responses as high compared to only 40% of students' ratings that their friends cared about them very much compared to 53% of SLD students (Cameto et al.).

Lane et al. (2006) found in their study that teachers rated ED students as significantly lower on social measures than students with SLD indicating that teachers viewed students to have "significantly lower levels of social competence and school adjustment compared to high school students with LD" (p. 113). Teachers likewise rated students with ED as having "significantly higher levels of problem behaviors" (p. 114) than their peers with LD. Lane et al. also found more negative comments, more instances of contact with the school's disciplinary system, and more days absent for students with ED than their LD peers. Graves (2018) found that SLD students had a population mean of 10.36 days absent compared to the population mean of 27.64 for students with ED. She also found that students with SLD had a population mean of 0.69 office referrals compared to the population mean of 5.29 office referrals for students with ED.

There are a variety of emotional similarities and differences between SLD students and ED students. Cameto et al. (2006) found that there was only 1% difference

between how students with ED and learning disabilities responded whether or not the statement “you can handle most things that come your way” was “very much” like them (68% and 67% respectively). Likewise, the researchers found that 77% of students with a learning disability enjoyed life all, most, or a lot of the time compared to 76% of students with ED. The difference between whether or not students with ED and learning disabilities perceive themselves as having a disability was again within 1% for these populations of students (29% and 28%, respectively). The discrepancy was slightly greater when students were asked if they knew how to get the information they needed. Seventy-four percent of students with EDs responded that they did, compared to 64% of students with a learning disability. Wagner et al. (2006) found that after high school, students with ED showed the greatest chance of living in a criminal justice institution, mental health facility, in foster care, or in homelessness compared to students with any other type of disability. They also found that among students with ED, more than 75% had been stopped by law enforcement for something other than a traffic violation, more than half (58%) had been arrested at least one time, and about 43% were on probation or parole.

Given the complexity of academic, social, and emotional needs of students with SLD and ED, it is imperative for school districts to provide the most efficient and effective support. While the use of paraprofessionals is an important component of that support, more research is needed to examine the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of students with SLD and ED. Moreover, districts must establish a clear protocol for paraprofessional professional development that assists in the development of skills to ensure the success of these

populations of students. With an understanding of the historical context of paraprofessionals and the body of extant research on their use in school settings, this study was able to produce designing a research study to explore the effectiveness of paraprofessionals in the target district that would answer the research questions set out in the last chapter.

CHAPTER III

Methodology

As demonstrated by reviewing the body of literature related to paraprofessionals, it is clear that paraprofessionals play an integral role in the academic, social, and emotional growth of students in a K-12 setting. However, they may not have the necessary skills, background, or education to effectively implement academic, social, and emotional supports for students, diminishing their overall effectiveness. Moreover, special education paraprofessionals may not receive adequate professional development in order to address these deficient skills if they exist. This research study explored the attitudes of special education paraprofessionals toward their professional development, their perception of their effectiveness in the classroom, and their perceptions of needed topics for professional development. This study also explored administrators', regular education teachers', and special education teachers' perceptions toward paraprofessional effectiveness and development in order to determine whether or not there exists any differences in the attitudes of administrators and teachers toward paraprofessionals and the attitudes of paraprofessionals toward themselves. Therefore, this action research study sought to examine what constitutes effective paraprofessional support, what strategies do administrators, teachers and paraprofessionals find to be the most effective, and what professional development best helps build the confidence and effectiveness of paraprofessionals in the classroom setting.

This action research study utilized a qualitative approach, including participant questionnaires, semi-structured interviews, and observations as the primary data collection methods. Participants in this action research study included paraprofessionals

assigned to work with learning-support or emotional-support students, regular and special education teachers who had learning-support paraprofessionals assigned to work in their classroom for all or part the school day, and administrators in the district.

Purpose of the Research Study

This action research study sought to explore what professional development was necessary to improve the effectiveness of paraprofessionals who worked with learning-support and emotional-support students at the elementary, middle, and high school levels. It not only sought to determine the types of professional development identified by paraprofessionals, teachers, and administrators as essential, but this action research study sought to offer recommendations for future paraprofessional trainings in order to maximize paraprofessional effectiveness when working with special education students.

This research study sought to explore initial attitudes toward paraprofessionals' effectiveness, develop a professional development plan that addressed areas of concern in these initial attitudes, and then explore whether or not this professional development plan changed those perceptions of effectiveness by the participant groups.

In order to guide that research plan, the following four research questions were developed:

1. What professional development topics for paraprofessionals are perceived as beneficial to effectively address the academic, emotional, and social needs of learning-support students?
2. What professional development topics for paraprofessionals are perceived as beneficial to effectively address the academic, emotional, and social needs of emotional-support students?

3. Is there a difference in the perception of paraprofessionals' professional development needs between paraprofessionals, teachers, and administrators?
4. Do the perceptions of the effectiveness of paraprofessionals by paraprofessionals, teachers, and administrators change after paraprofessionals receive targeted professional development?

As noted in the last chapter, a variety of research exists on the lack of professional development provided to paraprofessionals in order to effectively carry out their duties. This study, then, examined whether or not the concerns noted in the literature review were present in this district and whether or not those concerns can be alleviated by targeted professional development.

Setting and Participants

This action research study was conducted in a semi-rural school district located in western Pennsylvania. The district is comprised of two buildings – one elementary school that educates students in four-year old kindergarten (K4) through 5th grades and one middle/high school which educates students in 6th- through 12th- grades. The total enrollment for the district is approximately 740 students for the 2019-2020 school year. For the 2018-2019 school year, the district reported that 20.3% of students were classified as special education, compared to the state average of 17.3% (PDE, June 2019). The same report indicates that 38.2% of those special education students in the district fall into the SLD category. Another 23.0% of that population receives services due to an Other Health Impairment classification. Slightly over 13% of special education students in the district are diagnosed with speech or language impairment. Slightly over 11% of

special education students in the district are students with autism, and the remaining students are intellectually disabled.

All participants in this study were volunteers and could elect to discontinue participation in the study at any time. Three separate groups of participants were included as part of this study: paraprofessionals who worked in the district with special education students, regular and special education teachers who worked in the district, and administrators in the district. For the purpose of reporting results in this study, each participant was assigned a letter after their job category in order to identify their feedback throughout the questionnaires, interviews, and observations.

There were eight paraprofessionals who participated in this study. Four of these paraprofessionals worked at the middle/high school level and four of these paraprofessionals worked at the elementary level. There were 13 teachers who participated in the study including five special education teachers and eight regular education teachers. Of the teachers, nine taught at the middle or high school level and four of them taught at the elementary level. There were two administrators who were included as part of this study including the Director of Special Education and a building principal. One other school administrator was invited to participate in the research study but a response was not received from this administrator. Table 1 lists the background of the participants in this study.

Table 1

Participants in the Study

Participant Code	Primary Job Duty	Primary Location of Job
Paraprofessional A	Special Education Paraprofessional	Middle/High School
Paraprofessional B	Special Education Paraprofessional	Elementary School
Paraprofessional C	Special Education Paraprofessional	Middle/High School
Paraprofessional D	Special Education Paraprofessional	Middle/High School
Paraprofessional E	Special Education Paraprofessional	Elementary School
Paraprofessional F	Special Education Paraprofessional	Elementary School
Paraprofessional G	Special Education Paraprofessional	Elementary School
Paraprofessional H	Special Education Paraprofessional	Middle/High School
Teacher A	Regular Education Teacher	Middle/High School
Teacher B	Special Education Teacher	Middle/High School
Teacher C	Regular Education Teacher	Middle/High School
Teacher D	Special Education Teacher	Middle/High School
Teacher E	Regular Education Teacher	Middle/High School
Teacher F	Special Education Teacher	Middle/High School
Teacher G	Regular Education Teacher	Middle/High School
Teacher H	Regular Education Teacher	Middle/High School
Teacher I	Special Education Teacher	Elementary School
Teacher J	Regular Education Teacher	Elementary School
Teacher K	Regular Education Teacher	Middle/High School
Teacher L	Regular Education Teacher	Elementary School
Teacher M	Special Education Teacher	Elementary School
Administrator A	<i>See Note Below</i>	
Administrator B	<i>See Note Below</i>	

Note: Demographics for the administrators are not provided in order to provide some level of confidentiality. Given the size of the research district, providing demographic information would immediately identify the administrator. One administrator serves as a building level principal and one serves as the Director of Special Education for the district.

All participants were provided with Informed Participant Consent.

Paraprofessionals, teachers, and administrators were provided with an online consent agreement for the questionnaire (Appendices C, D, and E, respectively) which indicated that by clicking continue in the questionnaire they were agreeing to participate in the questionnaire. Paraprofessionals, teachers, and administrators were provided with a consent agreement for the semi-structured interviews that indicated their agreement to participate in the interview (Appendices F, G, and H, respectively). Finally, paraprofessional participants were provided with a consent agreement to participate in the observation process (Appendix I). As indicated in the Informed Participant Consent forms, any participants could contact the researcher at any time to remove himself or herself from the study if he or she no longer wished to participate.

Intervention and Research Plan

The literature review pointed to several common concerns with the use of paraprofessionals to support the academic, social, and emotional growth of special education students. One concern that was noted in several studies is that paraprofessionals may not be effective in their roles and may provide little-to-no benefit to the students with whom they work. Some researchers (Giangreco et al., 1997; Marks et al., 1999) indicated that the use of paraprofessionals may actually hurt the growth of special education students by allowing teachers to abdicate responsibilities for these students. Another common finding in the research is the relative lack of attention to the quality, frequency, and intentionality of professional development for paraprofessionals. Based on these common research themes, the researcher sought to explore whether or not

those concerns were present in the district and whether those concerns could be lessened or eliminated through the creation of targeted professional development.

This research study was conducted in three phases. The first phase was the gathering of initial data related to the research questions. This initial data collection, which will be discussed in more depth later in this chapter, was completed through three different methods. Initial questionnaires were distributed to the three-participant groups in this study in order to gauge general attitudes and perceptions. Participants were then engaged in semi-structured interviews which sought to expand on the participants' attitudes toward the research topic. Finally, the researcher conducted observations of the paraprofessionals working with learning-support and emotional-support students in order to determine whether or not the perceptions from the participant groups were noted in practice in the classroom.

The second phase of this research study used the results of this initial data to develop a professional development plan that was administered to participants in order to determine whether or not the targeted professional development influenced the perception of paraprofessionals, teachers, and administrators toward the effectiveness of paraprofessionals.

The third phase of this research study was to return to gathering data from the participant groups to determine whether or not the perceptions and attitudes toward the effectiveness of paraprofessionals changed after the implementation of the targeted professional development plan. For this phase, participants were once again asked to participate in an online questionnaire, semi-structured interview, and paraprofessional observations.

There are a variety of fiscal implications for this study. As school districts grapple with the best ways to help the academic, social, and emotional success of students, they must consider whether or not the use of paraprofessionals will provide the intended results. The initial reaction from school districts may be to add more staff, and since paraprofessionals are typically paid less than certified teachers, the addition of paraprofessionals may be an attractive approach for school districts. However, the salary cost for these employees may exceed the benefits of their use. In the research district, the anticipated salary cost for the special education paraprofessionals is \$160,000 (Samantha Laverty, personal communication, March 6, 2020). As a result, this study sought to explore whether or not the effectiveness of paraprofessionals could be improved and create more meaningful academic, social, and emotional learning for students.

Research Design, Methods, and Data Collection

A qualitative approach was chosen in order to examine the research questions from an overall perspective. According to Ary, Jacobs, Sorensen, and Walker (2014), “qualitative researchers seek to understand a phenomenon by focusing on the total picture rather than breaking it down into variables. The goal is a holistic picture and depth of understanding rather than a numeric analysis of data” (p. 32). A qualitative approach enables the researcher to help determine needs related to a particular issue, patterns that can be identified in a series of data, or characteristics of a particular problem (Madrigal & McClain, 2012). Moreover, Denzin and Lincoln (2005) commented that qualitative research provides, “... an interpretive naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them” (p. 3). This

approach, then, allows the researcher to conduct the research in a natural setting without the need to establish experimental conditions. An added benefit of a qualitative approach, particularly in a research study of this type, is that “the goal is not to generalize to a larger population, but simply to develop an in-depth description of a specific phenomenon in a particular setting” (Mertler, 2019, p. 167).

The researcher sought California University of Pennsylvania’s (Cal U) Institutional Review Board (IRB) approval on July 22, 2019. On August 5, 2019, the researcher’s proposal was approved with stipulations (Appendix A and Appendix B). On August 6, 2019, the proposal was submitted again with the stipulations addressed and final approval received to begin collecting data.

Three methods of data collection were selected in order to provide a complete picture of the research topic and to explore whether all three data collection methods provided similar results. The first method of data collection used was an online questionnaire administered through Google Docs. According to Bryman and Bell (2011), the questionnaire used in this study can be described as a self-completion questionnaire since, “respondents answer questions by completing the questionnaire themselves” (p. 231). The use of Google Docs allowed the researcher to quickly capture both closed-ended and open-ended questions for all three participant groups. Google Docs compiles the answers to questionnaire questions in a spreadsheet that allows the researcher to quickly review the data collected. The use of the questionnaire also helps focus the answers to particular aspects of the research topic. Unlike the semi-structured interview, which will be discussed later, the questionnaire limits participants to responding to specific questions either through providing them with predetermined answers (such as a

multiple choice question) or by limiting the free-text response-length of open-ended questions. While questionnaires do limit the scope and amount of data collected, this study sought to minimize the impact of these limitations by the addition of other data collection methods. The use of the questionnaire also limits respondent fatigue since they tend to be shorter than other types of questionnaires and also limits the influence of the interview on responses and eliminates any variance in how the interviewer asks questions to the respondents (Bryman & Bell, 2011, pp. 232-233).

There are several limitations to the use of a self-completion questionnaire, however, that must be addressed. Bryman and Bell (2011) listed several disadvantages to the self-completion questionnaire including an inability to collect additional data beyond what are listed in the questionnaire, incomplete results because respondents do not complete all items, and an inability to ask follow-up questions based on respondent responses (pp. 233-234).

In order to mitigate the concerns posited by Bryman and Bell (2011), the researcher incorporated a second data collection method into the research study. The second method of data collection was the use of semi-structured interviews by all three participant groups. Cohen and Crabtree (2006) defined the characteristics of the semi structured interview in three ways:

- “The interviewer and respondents engage in a formal interview.”
- “The interviewer develops and uses an ‘interview guide.’ This is a list of questions and topics that need to be covered during the conversation, usually in a particular order.”

- “The interviewer follows the guide but is able to follow topical trajectories in the conversation that may stray from the guide when he or she feels this is appropriate” (para. 1).

Bryman and Bell (2011) further explained that the semi-structured interview questions are “somewhat more general in their frame of reference than that [*sic*] typically found in a structured interview schedule” (p. 205). Cohen and Crabtree (July 2006) proceeded to explain the benefits of the use of semi-structured interviews in the research process when they wrote, “Many researchers like to use semi-structured interviews because questions can be prepared ahead of time...Semi-structured interviews also allow informants the freedom to express their views in their own terms...[and] can provide reliable, comparable qualitative data” (p. 2).

The final method with which the researcher collected data in this study was through observations of paraprofessional participants. DeMonbrun, Finelli, and Shekhar (2015) wrote:

Classroom observations can be a useful tool in conducting research on a myriad of interactions and events that occur in an educational setting. Research in much of the social sciences and industrial management involves the use of trained human observers as a primary source of data collection to answer research questions about interactions, faculty/student behaviors, instructor effectiveness (performance evaluations), and teaching methods utilized by instructors.

Observations have been used in engineering education research to investigate faculty use of different types of instructional methods, interactions between

faculty and students in various courses, and the relationship dynamics of student teams in design courses, among other research areas. (p. 2)

Mertler (2019) added that observations must “involve *carefully* watching and *systematically* recording what you see and hear in a particular setting” (p. 169). Given the nature of the research questions explored in this study, classroom observations of paraprofessional interactions with special education students provided the researcher with data about paraprofessional practices that would be used to compare to the data collected through the questionnaire and semi-structured interviews. Kumar (2012) noted, however:

When individuals or groups become aware that they are being observed, they may change their behavior. Depending upon the situation, this change could be positive or negative – it may increase or decrease, for example, their productivity – and may occur for a number of reasons. (p. 172)

The researcher, realizing this potential concern with the use of observations, attempted to mitigate the impact of participants acting differently during the observation process by including both the semi-structured interview and questionnaire. The addition of these two data collection methods allowed the researcher to compare if what was observed during the observations was consistent with the perception shared on the questionnaire and in the interviews.

During the observation process, the researcher collected narrative notes of the interactions between the paraprofessional and students. According to Kumar (2012), a narrative note is one in which, “the researcher records a description of the interaction in his/her own words” (p. 173). These interactions included descriptions of events that occurred during the observation and, when possible, actual quotes from the participants.

Because these observations were neither video nor audio recorded, the researcher was careful to capture direct quotes accurately. In the event that the researcher was unable to capture the quote, a description of events was recorded instead.

Prior to the start of the research study, the researcher established the research timeline that appears in Table 2 in an effort to ensure that multiple forms of data were conducted throughout the year and to ensure that complete data to answer each research question were collected. Since the conclusion of this research study, the actual date that data were collected has been added to the research timeline.

Table 2

Data Collection Timeline

Anticipated Data Collection Date	Data Item to be Collected	Actual Data Collection Date
August-September 2019	Beginning of Year Paraprofessional, Teacher, and Administrator Questionnaire	August - September 2019
August-September 2019	Beginning of Year Paraprofessional Teacher, and Administrator Interviews	August - September 2019
August – November 2019	Beginning of Year Paraprofessional Observations	August – October 2019
January – February 2020	Midyear Paraprofessional, Teacher, and Administrator Questionnaire	February 2020
January – February 2020	Midyear Paraprofessional, Teacher, and Administrator Interviews	January – February 2020
January – February 2020	Midyear Paraprofessional Observations	January 2020

All participants in the research study were willing volunteers and could choose to stop participating in the study at any point, for any reason. All participants who began the research study elected to continue throughout the study until its completion. Prior to the start of the research study in August, 2019, the researcher met with the paraprofessional participants to explain the nature of the research study and the proposed data collection methods that would be used with paraprofessionals, teachers, and administrators. Since the researcher worked in a leadership position in the district in which this research study was conducted, the researcher wanted to ensure paraprofessional participants that their participation was voluntary and should they choose not to participate, their nonparticipation would not impact them in any way. The researcher explained the research questions that would attempt to be answered as part of this research study and explained how the paraprofessionals' participation would help answer those research questions.

It was explained that anonymity would be impossible in the collection of data. Due to the nature of the data collection methods (face-to-face interviews and observations), and that the researcher was familiar with each participant in the study, there was no way to design this study to provide anonymity to the participants. The researcher explored the idea of collecting only questionnaire data through an anonymous questionnaire. However, this approach was dismissed because the researcher did not believe it would lead to the depth and type of data needed to answer the research questions. In order to ensure that all participants understood how the researcher would attempt to protect their privacy, the researcher explained that personally-identifying information would not be included in the results of this research study and would only be

known to the researcher. Wiles, Crow, Heath, and Charles (2006) noted that ensuring confidentiality is in, and of itself, almost impossible in the research study when they wrote:

Confidential research cannot be conducted; researchers have a duty to report on the findings of their research and they cannot do so if the data they collect is [*sic*]confidential (i.e., cannot be revealed). What researchers can do is to ensure they do not disclose identifiable information about participants and to try to protect the identity of research participants through various processes designed to anonymize them. (p. 4)

The researcher explained to the paraprofessional participants that no personally-identifying information would be included in the research study. This was accomplished through the removal of all names from the reporting of findings and the assigning of participant letters to compare questionnaire, interview, and observation results. Paraprofessionals were assigned a letter in a random order to prevent other participants from identifying the name of the participant.

In August 2019, all paraprofessionals who met the criteria for inclusion in this research study were emailed a link to the Beginning of Year/Midyear Questionnaire for Paraprofessionals Disclosure (Appendix C) and the Beginning of Year Questionnaire for Paraprofessionals (Appendix J). Both questionnaires were distributed electronically to all participants through Google Forms, which recorded their responses. Paraprofessionals were asked to complete the questionnaire within one week of receipt and all responses were returned within that timeframe.

In August 2019, the researcher emailed regular education and teacher education teachers the Beginning of Year/Midyear Questionnaire for Teachers' Disclosure (Appendix D) and the Beginning of Year/Midyear Questionnaire for Teachers (Appendix K) who met the following criteria: (a) they taught in the district during the 2018-2019 school year, (b) they had a paraprofessional who worked in their classroom for all or part of the day during the 2018-2019 school year, and (c) they had a paraprofessional who worked in their classroom for all or part of the day during the 2019-2020 school year. All but two of the eligible regular and special education teachers completed the beginning of year questionnaire. The two eligible teacher participants were excluded for the remainder of the study as it was necessary to compare the questionnaire results to the interview results.

When the researcher met with the paraprofessionals in August 2019 to explain the research study and the questionnaire tool, the researcher also explained that small group interviews with the paraprofessionals would be conducted and if they chose not to participate in the interviews, they would be excluded from the study. The researcher explained that the interviews would be recorded in order to transcribe the responses, but that any identifying information such as names would be removed from the transcript in order to protect the identity of the individuals. The researcher also explained that if any paraprofessional felt uncomfortable participating in a small group interview, he/she should let the researcher know and an individual interview could be arranged. All the paraprofessional participants were provided with the Semi-Structured Interview for Paraprofessionals – Beginning of Year/Midyear Disclosure (Appendix F).

The researcher divided the paraprofessional participants into two groups for the purpose of interviewing based on job location. These two groups were interviewed using the same set of semi-structured interview questions (Appendix L). Prior to starting the interview, the researcher again explained that participation in the study was voluntary and that the interviews would be recorded for the purpose of transcription. After the interview was conducted, the researcher transcribed the interview himself since participants in the interview had, at times, spoken about specific examples involving the names of individuals. In order to maintain confidentiality, the researcher transcribed these interviews and removed the identifying information from the transcript.

After completing the two-group paraprofessional interviews, the researcher emailed the teacher participants who had completed the online questionnaire to ask if they were willing to participate in a one-on-one interview. All the teacher participants who participated in the online questionnaire agreed to participate in the one-on-one interviews. Teacher participants were provided a copy of the Semi-Structured Interview for Teachers– Beginning of Year/Midyear Disclosure (Appendix G). The researcher utilized the Semi-Structured Interview for Teachers/Administrators– Beginning of Year questions (Appendix M). Because of the nature of the researcher’s position in the district, it was not uncommon for the researcher and the teacher participants to engage in confidential discussions on topics unrelated to this research study. The researcher determined that one-on-one interviews would be appropriate for teacher participants in order to ensure that teachers felt comfortable sharing concerns about, or experiences with paraprofessionals, without fear that the information would be shared by another participant. All teacher interviews were recorded, and the researcher sent the audio file to

an individual outside the district to be transcribed. During the audio recording the researcher did not use the individual's name in order to protect the individual's identity and the researcher asked the teacher participant not to use names in his or her responses. The researcher provided the individual who was transcribing the interviews with the participant's letter to include in the transcription.

In September 2019, the researcher emailed three administrators in the district in order to determine if they were willing to participate in the research study. Two of the three administrators responded to the request. The researcher emailed the two willing administrator participants the Beginning of Year/Midyear Questionnaire for Administrators Disclosure (Appendix E) and the Beginning of Year/Midyear Questionnaire for Administrators (Appendix N). Questionnaire responses were again collected through Google Forms, from the participants, and participants were assigned a letter designation after the title administrator in order to identify their responses from the beginning-of-the-year to the midyear questionnaire.

After interview transcripts were completed, the researcher began to analyze the initial data from the questionnaires and interviews in order to begin the coding process. Cresswell (2015) defined coding as, "the process of analyzing qualitative text data by taking them apart to see what they yield before putting the data back together in a meaningful way" (p. 156). Coding is an essential component of the data analysis portion of research because, as Cresswell (2015) again pointed out, "text data are dense data, and it takes a long time to go through them and make sense of them" (p. 152). Coding, therefore, allows the researcher to make sense of a large collection of text data to distill themes and commonalities between the multiple data sources.

Also in September 2019, the researcher approached the administrator participants to schedule a one-on-one interview with each administrator participant. Prior to starting the interview, the researcher again explained that participation in the study was voluntary. Again, interviews were conducted one-on-one to ensure that the administrator participant was able to share his or her concerns freely.

During this same month, the researcher began the observations of paraprofessionals. Each paraprofessional participant was provided the Classroom Observation Data Collection Tool Disclosure (Appendix I). After these disclosures were returned, the researcher began to conduct the classroom observations using the Classroom Observation Data Collection Tool (Appendix O). The focus of the observations was to capture the strategies and techniques the paraprofessionals used with learning-support and emotional-support students in order to determine if the researcher observed the same techniques and strategies that were noted in both the questionnaire and the interviews.

Through the review of the initial questionnaires, interviews, and classroom observations, the researcher began developing a targeted professional development plan that was implemented with the paraprofessionals from October 2019 through February 2020. This professional development plan will be discussed more in depth in the next chapter.

Towards the end of January 2020, the researcher sent out the Midyear Questionnaire to all paraprofessional, teacher, and administrator participants (Appendices J, K, and N, respectively). As results of this questionnaire were collected, the researcher again used the same coding system as in the initial data to analyze the respondents' answers. At the same time, the researcher engaged in Midyear Interviews with

paraprofessional, teacher, and administrator participants (Appendices P, Q, and R, respectively). Paraprofessionals were again grouped into the same two groups for interviewing purposes. Teachers and administrators were interviewed separately. As interviews were completed, the researcher again had the interviews transcribed and the transcriptions were coded using the same system as the initial data. The researcher compiled the initial and midyear data to analyze the results which appear in the next chapter.

Validity

By collecting several types of data to answer the research questions, the researcher attempted to eliminate potential concerns over the validity of the data collected. According to Sapsford and Jupp (2006), “validity refers to the extent to which observations accurately record the behaviour in which the researcher is interested” (p. 86). The authors explained that “one aspect of validity is reliability. This refers to the consistency of observations, usually whether two (or more) observers, or the same observer on separate occasion, studying the same behaviour come(s) away with the same data” (p. 86). Kumar (2012) further explained reliability when he wrote, “if a research tool is consistent and stable, hence predictable and accurate, it is said to be reliable” (p. 181). In this study, given that all the data were collected by a single researcher, the data collection methods were done in a consistent way that protected the validity and reliability of the study.

However, the use of a single researcher does not eliminate all concerns related to validity and reliability. Sapsford and Jupp (2006) also noted, “procedural reactivity occurs when subjects behave differently because they know they are being studied or

observed” (p. 87). By nature of this research study, the researcher attempted to mitigate this concern through multiple data collection methods in an effort to compare whether or not the results of the semi-structured interviews, questionnaires, and observations yielded the same results.

This study was designed to ensure that face validity and content validity were present. Kumar (2012) explained face validity as “each question or item on the research instrument must have a logical link with an objective. Establishment of this link is called face validity” (p. 180). He continued to explain content validity by writing, “It is equally important that the items and questions cover the full range of the issue or attitude being measured. Assessment of the items of an instrument in this respect is called content validity” (p. 180). The design of the questionnaires, semi-structured interviews, and the observation tool were purposeful to ensure that each data item collected directly tied to one of the four research questions studied in this project.

Finally, the researcher attempted to ensure the validity of this study through the triangulation of data. Sapsford and Jupp (2006) articulated that triangulation increases the validity of a research study when the data collected are compared to other sources of data. They wrote that triangulation “can involve comparing data produced by different methods – for example observational data can be compared with interview data – or it can involve comparing data from different times, sub-settings, or subjects” (p. 89). The inclusion of three data collection methods met Sapsford’s and Jupp’s (2006) definition of triangulation.

Closing

This study was designed in a manner to ensure that the data collected were both valid and reliable. While research studies should be reproducible in different settings by different researchers, it's important to understand that this research study was designed based on the context of the participant school district. The data collection methods can be utilized by other researchers in other studies, but future researchers must tailor these data collection tools to the unique context of the district they are studying. The following chapter will present the results of this study.

CHAPTER IV

Data Analysis and Results

Results from this study provided valuable findings that can influence how school districts engage in professional development for paraprofessionals and how districts can work to increase the effectiveness of paraprofessionals who support the academic, social, and emotional needs of learning support and emotional support students. While generalizations can be made from these results that will be beneficial to every district, it is important to keep in mind that these results must also be interpreted within the context of the research district. As such, other districts may find the results of this research approach to yield different results based on their own unique circumstances, policies, and professional development procedures.

Data Analysis

Data were collected over a six month period of time in the same district. The researcher conducted both group and individual interviews with participant groups and provided an online survey to participants that collected information both at the beginning of the school year and at the midyear point of the school year. The researcher also conducted at least two separate classroom observations of each paraprofessional participant. At least one of these observations was conducted at the beginning of the study, and at least one was conducted at the midyear point of the study.

In order to ensure that the data from this research study was valid, the researcher utilized several different data collection methods. Questionnaires, interviews, and classroom observations were coded using a consistent data-driven coding system. Data-driven coding is when the researcher looks for “ideas/concepts in the text without a

preceding conceptualisation [sic] and let the text speak for itself” (Cessda, paragraph 3). Unlike concept-driven coding, where the researcher establishes a series of themes first and then looks for those themes in the data, data-driven coding allows the themes to emerge from the data, without preconceived biases or interpretations. The researcher refined the coding system as the data were analyzed in order to create a more concise system of codes for data analysis. As the researcher analyzed both the initial and final data sets, several common themes emerged and will be discussed later in this chapter to help answer the four research questions.

Data collection occurred in several distinct phases as outlined in Table 2 on page 57 and analysis occurred simultaneously. The researcher began by analyzing the Beginning of Year Questionnaires (Appendices J, K, and N) in order to find common themes that emerged from the results. As the researcher conducted group interviews of paraprofessional participants (Appendix L) and individual interviews of teacher and administrator participants (Appendix M) the researcher or an outside individual transcribed these interviews for coding. As transcriptions were completed, the researcher began the process of coding each interview separately. That is, each transcription was coded as an isolated piece of data rather than coding multiple interviews at the same time. Codes from the initial interviews were examined after all interviews were coded in order to develop broad categories and themes. Classroom observations occurred after all beginning of year interviews were completed. The data from these classroom observations was collected during the class period that the researcher was observing the paraprofessional through a Google Sheet. The researcher captured, when possible, direct quotes from the participants. When direct quotes were not possible, the researcher

captured summarized notes. The classroom observations were coded throughout the data collection process as the classroom observation was finished.

The researcher used the common themes from the initial data collection to develop a professional development plan for the paraprofessional participants. This professional development plan was implemented between the initial data collection phase and the final data collection phase. More specifics regarding the professional development plan will be discussed later in this chapter.

A similar process occurred during the final data collection process with the researcher coding the questionnaires as they were submitted, the interviews as they were transcribed, and the classroom observations after they were conducted. After the final data were collected and coded, the researcher examined all the data for common themes that emerged from the results.

Initial Results

When analyzing the results of this research study it is important to look at the two sets of data that were collected. The initial data was collected in order to gauge participant perceptions prior to any intervention being implemented. The researcher used this initial data in order to develop a professional development plan that was implemented with the paraprofessionals throughout the school year. After that professional development was implemented, the researcher collected final data wherein participants again completed questionnaires and interviews in order to determine whether or not the professional development plan changed perceptions among the participant groups. In order to understand the results of this research study, it is important to analyze

both the initial data and final data. Both the initial data set and final data set share several common themes that will be discussed in this chapter.

Results from beginning of year questionnaires.

The initial data results from the beginning of year questionnaires (Appendices J, K, and N) show a difference in the perceptions of paraprofessionals toward their effectiveness and the perceptions teachers and administrators had toward the effectiveness of paraprofessionals. All participants were asked to rate the effectiveness of paraprofessionals in helping students they are assigned to work with improve academically. Table 3 shows the ratings from paraprofessionals, teachers, and administrators on whether or not they believed that paraprofessionals were effective at supporting students academically.

Table 3

Participant Ratings of Paraprofessionals’ Effectiveness in Supporting Students’ Academic Growth

	Middle/ High School Paraprofessionals	Elementary Paraprofessionals	Middle/ High School Teachers	Elementary Teachers	Administrators
Highly Effective	4	3	0	1	0
Somewhat Effective	0	1	4	2	1
Somewhat Ineffective	0	0	2	1	1
Highly Ineffective	0	0	3	0	0

All paraprofessionals in the study rated themselves as either highly or somewhat effective on the questionnaire. Middle/high school teachers, however, generally found that paraprofessionals were ineffective in supporting academic growth. The majority of elementary teachers believed that paraprofessionals were effective in supporting

academic growth. The administrators were evenly split regarding their perception of the paraprofessionals’ effectiveness in supporting academic growth.

Participants were also asked to rate the paraprofessionals’ effectiveness in helping students improve socially. Table 4 shows ratings from paraprofessionals, teachers, and administrators on whether or not they believed that paraprofessionals were effective at helping students improve socially.

Table 4

Participant Ratings of Paraprofessionals’ Effectiveness in Supporting Students’ Social Growth

	Middle/ High School Paraprofessionals n=4	Elementary Paraprofessionals n=4	Middle/ High School Teachers n=9	Elementary Teachers n=4	Administrators n=2
Highly Effective	2	1	0	0	1
Somewhat Effective	1	2	3	1	0
Somewhat Ineffective	1	1	3	2	1
Highly Ineffective	0	0	3	1	0

Two of the four middle/high school paraprofessionals rated themselves as highly effective in helping students improve socially while the other two middle/high school paraprofessionals rated themselves as somewhat effective and somewhat ineffective. One of the elementary paraprofessionals rated themselves as highly effective for this question, two rated themselves as somewhat effective, and one rated themselves as somewhat ineffective.

The majority of middle/high school teachers rated the paraprofessionals as ineffective in helping students grow socially, with only one-third of middle/high school

teachers rating the paraprofessionals as somewhat effective. Likewise, the majority of elementary teachers rated the paraprofessionals as somewhat ineffective or highly ineffective on this question. One administrator rated the paraprofessionals as highly effective and one rated them as somewhat ineffective on helping students improve socially.

Participants were also asked to rate the paraprofessionals’ effectiveness in supporting the emotional growth of students with whom they work. Table 5 shows how paraprofessionals rated themselves, and how teachers and administrators rated paraprofessionals on this question.

Table 5

Participant Ratings of Paraprofessionals’ Effectiveness in Supporting Students’ Emotional Growth

	Middle/ High School Paraprofessionals n=4	Elementary Paraprofessionals n=4	Middle/ High School Teachers n=9	Elementary Teachers n=4	Administrators n=2
Highly Effective	1	0	0	0	0
Somewhat Effective	1	2	2	0	1
Somewhat Ineffective	1	2	4	2	1
Highly Ineffective	1	0	3	2	0

Middle/high school paraprofessionals were evenly split among all four categories when rating themselves. Two elementary paraprofessionals rated themselves as somewhat effective and two rated themselves as somewhat ineffective.

The majority of teachers rated the paraprofessionals as ineffective in supporting the emotional growth of students. Out of the 13 teacher participants, only two rated the

paraprofessionals as effective. One administrator rated the paraprofessionals as somewhat effective and the other rated them as somewhat ineffective for this question.

Paraprofessionals were also asked on the initial questionnaire to anticipate what rating classroom teachers would give them on their effectiveness in helping students improve academically. Likewise, teachers and administrators were asked to anticipate what rating paraprofessionals would give themselves on their effectiveness in helping students improve academically. Table 6 shows participant responses to this question.

Table 6

Anticipated Rating of Academic Effectiveness

	Paraprofessionals anticipated how teachers would rate their effectiveness in helping students improve academically		Teachers and Administrators anticipated how paraprofessionals would rate themselves on helping students improve academically		
	Middle/ High School Paraprofessionals n=4	Elementary Paraprofessionals n=4	Middle/ High School Teachers n=9	Elementary Teachers n=4	Administrators n=2
Highly Effective	2	0	7	4	1
Somewhat Effective	2	3	2	0	1
Somewhat Ineffective	0	1	0	0	0
Highly Ineffective	0	0	0	0	0

Two of the middle/high school paraprofessionals anticipated that they would be rated as highly effective by classroom teachers and two anticipated that they would be rated as somewhat effective by classroom teachers. Three of the elementary paraprofessionals anticipated that teachers would rate them as somewhat effective and one anticipated that teachers would rate them as somewhat ineffective.

Seven middle/high school teachers anticipated that paraprofessionals would rate themselves as highly effective and the remaining two anticipated that paraprofessionals would rate themselves as Somewhat Effective. All of the elementary teachers believed that paraprofessionals would rate themselves as highly effective in helping students improve academically. One administrator believed that paraprofessionals would rate themselves as highly effective and one anticipated that they would rate themselves as somewhat effective.

Paraprofessional participants were asked what professional development topics they would like to participate in during the school year to help students improve academically, socially, and emotionally. Teacher participants and administrator participants were also asked the same questions in order to determine what professional development topics teachers and administrators believed were important for paraprofessionals to have during the school year.

Table 7 presents the responses from paraprofessionals, teachers, and administrators on the professional development that each group wanted paraprofessionals to participate in to help students improve academically. The table lists the total number of participants who included this topic as a response. Underneath the total response count is an indication of how many of those total respondents indicated that this topic was beneficial when working with learning support students and how many of those total respondents indicated that this topic was beneficial when working with emotional support students.

Table 7

Academic Professional Development Topics Desired for Paraprofessionals

Paraprofessionals n=8	Teachers n=13	Administrators n=2
<i>Making Modifications</i> Total Responses: 3 Beneficial to LS: 3 Beneficial to ES: 3	<i>Making Modifications</i> Total Responses: 11 Beneficial to LS: 11 Beneficial to ES: 9	<i>Making Modifications</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
<i>Reading Strategies</i> Total Responses: 5 Beneficial to LS: 5 Beneficial to ES: 0	<i>Reading Strategies</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 0	<i>Understanding the IEP Process</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2
<i>Collins Writing</i> Total Responses: 3 Beneficial to LS: 3 Beneficial to ES: 0	<i>Making Adaptations</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 1	<i>Data Collection Methods</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
<i>Organizational Skills</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 1	<i>Understanding Role</i> Total Responses: 7 Beneficial to LS: 7 Beneficial to ES: 7	<i>Understanding Role</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2
<i>Writing Strategies</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 0	<i>Study Skills</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2	<i>Inclusion Strategies</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
<i>Motivating Students</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1	<i>Content Specific Knowledge</i> Total Responses: 4 Beneficial to LS: 4 Beneficial to ES: 2	<i>Understanding Learning Styles</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2
<i>None</i> Total Responses: 4	<i>Wilson Reading</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 0	<i>Understanding Differences between Learning Disabilities</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 0
<i>Unsure</i> Total Responses: 2	<i>AIMSweb Plus</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1	
	<i>Collecting Data</i> Total Responses: 3 Beneficial to LS: 3 Beneficial to ES: 3	
	<i>Unsure</i> Total Responses: 1	

Making modifications for students appeared in all three groups with 15 of the total 23 participants including it as an important academic professional development topic.

Reading strategies appeared in the paraprofessional and teacher responses.

Paraprofessionals were the only group to indicate a response of none in terms of academic professional development topics that they would like to participate in during the school year. Two paraprofessionals and one teacher responded that they were unsure what academic professional development topics would like paraprofessionals to participate in during the school year.

Understanding the role of the paraprofessional appeared both in teacher responses and administrator responses with nine of the 15 respondents in these groups including it on their list. Data collection also appeared in both the teacher and administrator responses but it did not appear in the paraprofessional response. Topics specifically related to understanding differences in learning styles, learning disabilities, and the IEP process only occurred in the administrator responses.

Table 8 presents the responses from paraprofessionals, teachers, and administrators on the professional development that each group wished to receive professional development on related to help students improve socially. The table lists the total number of participants who included this topic as a response. Underneath the total response count is an indication of how many of those total respondents indicated that this topic was beneficial when working with learning support students and how many of those total respondents indicated that this topic was beneficial when working with emotional support students.

Table 8

Social Professional Development Topics Desired for Paraprofessionals

Paraprofessionals n=8	Teachers n=13	Administrators n=2
<i>Unsure</i> Total Responses: 4	<i>Appropriate Peer and Adult Boundaries</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2	<i>Modeling Appropriate Social Interactions</i> Total Responses: 2 Beneficial to LS: 1 Beneficial to ES: 2
<i>None</i> Total Responses: 4	<i>How to Approach Social Situations</i> Total Responses: 4 Beneficial to LS: 4 Beneficial to ES: 4	<i>Using Social Stories with Students</i> Total Responses: 2 Beneficial to LS: 1 Beneficial to ES: 2
	<i>Learning about Triggers in Self and Others</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1	<i>Responding Appropriately to Social Cues</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
	<i>Positive Reinforcement Strategies</i> Total Responses: 3 Beneficial to LS: 3 Beneficial to ES: 3	<i>Positive Reinforcement Strategies</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2
	<i>Learning How They Should Interact Socially with Adults and Students</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2	
	<i>When Not to Use Sarcasm with Students</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1	
	<i>How to Intervene in Tense Student Situations</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2	

All paraprofessionals responded that they either did not need any professional development related to helping students improve socially or that they were unsure what professional development they needed. Both teachers and administrators listed positive reinforcement strategies as a needed social professional development topic. Two teachers

also suggested that paraprofessionals needed professional development to learn how to interact socially with adults and students.

Table 9 presents the responses from paraprofessionals, teachers, and administrators on the professional development that each group believed important related to helping students improve emotionally. The table lists the total number of participants who included this topic as a response. Underneath the total response count is an indication of how many of those total respondents indicated that this topic was beneficial when working with learning support students and how many of those total respondents indicated that this topic was beneficial when working with emotional support students.

Table 9

Emotional Professional Development Topics Desired for Paraprofessionals

Paraprofessionals n=8	Teachers n=13	Administrators n=2
<i>Understanding Emotional Disturbance</i> Total Responses: 6 Beneficial to LS: 0 Beneficial to ES: 6	<i>Understanding Emotional Disturbance</i> Total Responses: 9 Beneficial to LS: 0 Beneficial to ES: 9	<i>Understanding ES Behaviors</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1
<i>Strategies to Work with ES Students</i> Total Responses: 4 Beneficial to LS: 0 Beneficial to ES: 4	<i>Strategies to Work with ES Students</i> Total Responses: 4 Beneficial to LS: 0 Beneficial to ES: 4	<i>How to Support the Teacher in Behavior Management</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
<i>Dealing with Behaviors</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2	<i>De-Escalation Strategies</i> Total Responses: 3 Beneficial to LS: 2 Beneficial to ES: 3	<i>De-Escalation Strategies</i> Total Responses: 2 Beneficial to LS: 1 Beneficial to ES: 2
<i>None</i> Total Responses: 2	<i>Differences between LS and ES</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2	<i>Understanding Causes of Emotional Disturbances</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1
	<i>Understanding Triggers</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1	<i>Understanding Positive Behavior Support Plan</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1
	<i>Not Causing Meltdowns</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1	<i>Effectively Managing Behaviors</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
	<i>Tracking Behaviors</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1	<i>Data Tracking</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
	<i>Dealing with Meltdowns</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1	
	<i>Unsure</i> Total Responses: 2	

The majority of paraprofessionals, six of the eight, included understanding emotional disturbance under their necessary professional development topics. Half of the paraprofessionals indicated a need for professional development in strategies to work

with ES students. Understanding emotional disturbance also appeared on the teacher responses with nine respondents including it in their list. Strategies to work with ES students appeared four times on the teacher list as well.

Two paraprofessionals indicated that they did not believe any professional development to help students improve emotionally was needed. Two teachers indicated that they were unsure what professional development was necessary for paraprofessionals to help students improve emotionally. De-escalation strategies appeared on both the teacher and administrator lists but did not appear on the paraprofessional list.

Finally, paraprofessional participants were asked to share what types of strategies they use in the classroom to support the academic growth, social growth, and emotional growth of students. Teacher and administrator participants were asked to share what types of strategies they saw paraprofessionals use in the classroom to support the academic growth, social growth, and emotional growth of special education students. Table 10 lists the academic strategies identified by paraprofessionals, teachers, and administrators. Table 11 lists the social strategies identified by paraprofessionals, teachers, and administrators. Table 12 lists the emotional strategies identified by paraprofessionals, teachers, and administrators. The number in parentheses indicates the number of respondents who included this strategy as a response to this question.

Table 10

Academic Strategies Utilized in the Classroom

Paraprofessionals n=8	Teachers n=13	Administrators n=2
Redirection to task (3)	Redirection to task (9)	Redirection to task (2)
Prompting (3)	Prompting (2)	Breaking down information (1)
Explaining concepts (4)	Chunking information for students (2)	Reviewing information with students (1)
Keeping students organized (2)	One-on-One Instruction (4)	Helping students stay organized (2)
Unsure (2)	Collecting progress monitoring data (3)	Studying for tests with students (2)
	Unsure (1)	Testing students in small groups (2)
	None (2)	

Paraprofessionals indicated that redirection to task and prompting were common academic strategies they utilized in the classroom. This was echoed by teacher participants who also indicated that redirection to task and prompting were common academic strategies they saw paraprofessionals use with students. Administrators noted redirection to task but not prompting. The questionnaire did not provide an opportunity for participants to explain whether or not they used these terms interchangeably or if redirection to task and prompting were two separate behaviors.

Organization was a strategy noted by the paraprofessional group and the administrator group but not the teacher group. All three groups included some type of instruction or review in their responses as an academic strategy. Paraprofessionals noted this as explaining concepts, while teachers included one-on-one instruction and chunking of information. Administrators included breaking down information, reviewing information, and reviewing for tests in their response to this question.

Table 11

Social Strategies Utilized in the Classroom

Paraprofessionals n=8	Teachers n=13	Administrators n=2
Reviewing School-Wide Positive Behavior Support Program Rules (2)	Unsure (11)	Implementing Reviewing School-Wide Positive Behavior Support Program Rules (1)
Social stories (1)	None (2)	Using Social Stories (1)
Reviewing Appropriate Social Skills (1)		Teaching Kindness (1)
Unsure (6)		Addressing Negative Behaviors (1)
		Verbal Prompting for Behavior (1)

Paraprofessionals and administrators included the use of the School-Wide Positive Behavior Support Program as a social strategy. Both of these groups also included the use of social stories as a strategy to improve the social growth of students. No teacher participant included any strategies for this question. All teachers indicated that they were unsure if they saw paraprofessionals use any strategies to improve the social growth of students or that they saw paraprofessionals using no strategies to improve the social growth of students.

Table 12

Emotional Strategies Utilized in the Classroom

Paraprofessionals n=8	Teachers n=13	Administrators n=2
De-Escalation Strategies (2)	De-Escalation Strategies (3)	De-Escalation Strategies (2)
Calming Students Down when Upset (1)	Giving Students a Break when Overwhelmed (1)	Calming Strategies (1)
Going for Walks (1)	Allowing Students to Engage in Preferred Activities First (1)	
Sending to ES Teacher (2)	Unsure (8)	
Unsure (4)		

All three groups included de-escalation strategies as one of their responses. Both paraprofessionals and administrators included calming strategies as a separate response from de-escalation strategies. Four of the eight paraprofessionals indicated that they were unsure what strategies they used to help students grow emotionally, while eight of the thirteen teachers indicated the same.

Results from beginning of year interviews for paraprofessionals.

Group or individual interviews were conducted with participants as described in Chapter III. Paraprofessionals were interviewed in small groups based upon their job location (Appendix L). Paraprofessionals who worked primarily in the elementary school were interviewed together, while paraprofessionals who worked primarily in the middle/high school were interviewed together. Paraprofessionals were asked to share their thoughts on the professional development they received during the previous school year (2018-2019) and to share what they found beneficial from that professional development. Both groups, elementary and middle/high school paraprofessionals, shared that trainings related to school safety, suicide prevention, and child abuse were beneficial to their job responsibilities. Two of the elementary paraprofessionals and three of the middle/high school paraprofessionals discussed the benefits of active shooter trainings that had taken place during the 2018-2019 school year and the school safety training that was conducted for all staff. One elementary paraprofessional indicated that a positive of the online modules was being able to pick and choose online professional development modules from the PaTTAN website or the Intermediate Unit's website.

Paraprofessional participants were also asked what they found to be least beneficial about the professional development they received during the 2018-2019 school

year. The elementary paraprofessionals interviewed shared a common response that they believed the professional development was hands-off and not tailored to their individual job duties. Paraprofessional B shared that the professional development they received was through virtual courses through PaTTAN or the Intermediate Unit and paraprofessionals were only included in in-person professional development when the topics related to school safety or mandatory trainings. The other three elementary paraprofessionals agreed with Paraprofessional B. The middle/high school paraprofessionals echoed the idea the professional development was primarily done through virtual methods, but at least two of the four middle/high school paraprofessionals indicated that they preferred this mode of delivery to in person professional development. Both the elementary and middle/high school paraprofessionals indicated that they wished the professional development offered during the 2018-2019 school year was more directly related to their job duties. Paraprofessional H commented, “We sort of just get to pick and choose which online courses we complete to get our required hours. But no one ever checks that the courses we pick have anything to do with our daily jobs.”

Paraprofessionals E, F, and G also shared that they completed the required online trainings because they had to do so but they found it to be a waste of time.

Paraprofessional F shared that she had completed several of modules that were unrelated to her job duties because she could not find modules that fit her current duties.

Paraprofessional G agreed with this assessment and indicated that the completing of modules was more to fulfill their minimum hour requirement than to improve their effectiveness at their job.

The middle/high school paraprofessionals did not indicate that the modules were as ineffective as the elementary paraprofessionals. However, Paraprofessional A did comment that she wished there were more topics to choose from that directly related to the work she did with learning support and emotional support students. Paraprofessional A commented, "I always learn at least one thing from the trainings but lots of the stuff covered in those online courses just doesn't apply to what I do. I mean, even though I'm new, I think I have a good idea of what I'm doing already."

Both groups of paraprofessionals were asked whether or not they believed that professional development for paraprofessionals was given much attention in the district. Seven of the eight paraprofessionals interviewed indicated that they believed paraprofessional professional development was not given much attention. The remaining paraprofessional indicated that she had not been in the district long enough to make a determination on this question.

Both groups of paraprofessionals also indicated that they did not believe they were given an opportunity to provide feedback or suggestions with regard to the professional development areas they engaged in during the school year. Paraprofessional C indicated that in her sixteen years in the district she had never been asked what type of professional development she would like to participate in during the school year with the exception of being able to choose what module she completed for the online trainings they were asked to complete.

Paraprofessional participants were asked whether they believe they have been given the necessary training, tools, and resources to effectively help students improve academically, socially, and emotionally. With regard to the training, tools, and resources

needed to help students improve academically, there was a divide in the paraprofessional beliefs. Four of the eight paraprofessional had more than 13 years of experience in their role (Paraprofessional C, E, F, and G). All four of these paraprofessionals indicated that they believed they had the necessary training due to their years on the job.

Paraprofessional C commented, “When you’ve been doing this as long as I have, you just know what to do to help the kids.” Paraprofessional F made a similar comment when she said, “I’ve been doing this for almost 25 years. At this point, I think I know what I’m doing. I’m not sure what else I need to learn, you know what I mean?” The other four paraprofessionals (Paraprofessional A, B, D and H) indicated that they could all use more training to help students improve academically. All four also indicated that the majority of strategies they utilize to help students improve academically are ones that they learned by either watching the classroom teachers with whom they work or by being explicitly told to use a particular strategy by the classroom teacher.

The responses to question about whether or not the paraprofessionals were given the training, tools, or resources to help students improve socially was more consistent among the two groups. Both groups indicated that they felt that they did not have the same comfort level with helping students to grow socially as they did academically. When the researcher asked the groups to explain this response, Paraprofessional F indicated:

The kids we work with now are different than they were even five years ago. I see a lot more bad behaviors in class. I see a lot more bullying and meanness than I did before. I spent a lot more time correcting behavior than I do focusing on academics.

Paraprofessional G concurred when she said, “Kids are coming to school with a lot more problem. They don’t know how to interact with each other. Especially the older (elementary) students. They have a lot more behaviors than they used to.”

The middle/high school paraprofessionals echoed similar responses related to a perceived decline in behavior of students compared to the past. All four also indicated that they had not received much professional development related to improving the social growth of students.

Similar attitudes existed when paraprofessionals in both buildings were asked if they believed they had the necessary training, tools, or resources to help students improve emotionally. Both groups indicated that they believed the task of helping students improve emotionally should be left to the emotional support teacher and that their job was solely to focus on academics. At least two elementary paraprofessionals and two middle/high school paraprofessionals indicated that they preferred to work with learning support students rather than emotional support students. All eight paraprofessionals agreed that they felt underprepared to work effectively with emotional support students. Again, all eight indicated that they would benefit from more professional development to help students improve emotionally, but other than requesting a general understanding of emotional disturbance, the paraprofessionals were unable to list specific professional development topics they would like to engage in during the school year.

Finally, paraprofessionals were asked to share what strategies they found the most effective at helping students improve academically, socially, and emotionally. Table 13 lists their responses. The number in parentheses indicates the number of paraprofessionals who responded with the same strategy or who agreed when the strategy

was mentioned by a colleague. The letters in the parentheses indicate if the response was provided by elementary paraprofessionals (EP) or middle/high school paraprofessionals (MHP).

Table 13

Effective Academic, Social, and Emotional Strategies Utilized in the Classroom

Academic Strategies	Social Strategies	Emotional Strategies
Redirection to Task (EP – 3; MHP-4)	School-Wide Positive Behavior Support Program (EP – 1; MHP -1)	Sending to Emotional Support Teacher (EP – 2; MHP -2)
Physical Prompting (Such as Finger Pointing, Tapping, etc.) (EP -1)	Correcting Behavior (EP – 2; MHP -2)	Involving Classroom Teacher (EP – 1; MHP -2)
Reviewing Material with Students (EP – 2; MHP 4)	Social Stories (EP – 2)	Calming Strategies (Taking a Walk, Deep Breaths, Taking a Break) (EP – 2; MHP -2)
Studying with Students (EP – 3)	Playing Games with Students (EP – 1)	Positive Encouragement (EP -1)
Organizational Strategies (EP – 2; MHP -2)		Access to Sensory Room (MHP -1)

Results from beginning of year interviews for teachers.

Teacher interviews were conducted individually to ensure that teachers were comfortable talking honestly about their responses to the semi-structured questions (Appendix M). Teachers were first asked to describe why they rated the effectiveness of paraprofessionals as they did. Of the four middle/high school teachers who rated the paraprofessionals as somewhat effective for helping students improve academically, two of the four indicated that they believed the primary role of the paraprofessional was to help students stay organized and meet deadlines in their classes. Because of this belief, the teachers rated the paraprofessionals as somewhat effective since the students with whom the paraprofessionals work were generally organized and met deadlines. The other two middle/high school teachers who indicated that they rated paraprofessionals as

somewhat effective in helping students improve academically indicated that they did so because the paraprofessionals with whom they work follow teacher directions and work with the students the teacher directs the paraprofessional to support during the class period.

One elementary teacher rated the paraprofessionals as highly effective in supporting the academic growth of students. The teacher explained that the paraprofessional knew what was expected and was able to work with students to improve their reading and math skills. Two elementary teachers rated the paraprofessionals as somewhat effective and provided a similar response. They viewed the paraprofessionals as understanding their role and able to help students with their reading and math work.

The two teachers who rated the paraprofessionals as somewhat ineffective in supporting students academically did so because they believed that the paraprofessionals were able to help some students succeed academically but the paraprofessional was not able to help all students with whom they work succeed academically. One elementary teacher rated the paraprofessionals as somewhat ineffective and explained the rating is because the LS and ES students in her classroom still did not do well on tests, even with the paraprofessionals' support.

Finally, the three middle/high school teachers who rated the paraprofessionals as highly ineffective indicated that they did so because they see no academic benefit to the paraprofessional's presence in their classroom. One participated who rated the paraprofessional as highly ineffective stated that he believed the paraprofessional caused confusion with students by incorrectly or inaccurately explaining concepts to students.

When asked to explain their rating of the paraprofessionals' effectiveness in supporting student socially, three middle/high school teachers rated the paraprofessionals as somewhat effective. All three teachers who did so were middle school teachers who did not teach any high school classes. One shared that they rated the paraprofessionals as somewhat effective because the teacher had seen paraprofessionals address issues of bullying, even though, according to the respondent, the paraprofessional was not always entirely effective in how it was addressed. The other two teachers who rated paraprofessionals as somewhat effective stated they did so because they have seen paraprofessionals debrief peer situations with students in order to help the student make better choices with regard to social situations in the future.

One elementary teacher rated the paraprofessionals as somewhat effective because the teacher believed the paraprofessional effectively implemented the School-Wide Positive Behavior Support Program and was able to help students understand how to behave in different social situations.

Three middle/high school teachers rated the paraprofessionals as somewhat ineffective. These three teachers indicated they did so because they have seen paraprofessionals attempt to address social issues with students, but that they were often ineffective in how they attempted to address the situation.

Two elementary teachers rated the paraprofessionals as somewhat ineffective. One of these elementary teachers indicated that paraprofessionals avoided intervening in social situations with students and let the classroom teacher handle them. The other indicated that the paraprofessional often caused more problems between students by seeming like the paraprofessional was taking sides between students.

The remaining three middle/high school teachers rated the paraprofessionals as highly ineffective. One of these teachers indicated that the paraprofessional often exacerbated the situation with students in the teacher's opinion. The other two indicated that they did not recall any times when they had witnessed a paraprofessional address a social situation with the students. One elementary teacher rated the paraprofessionals as highly ineffective in supporting students socially and indicated that the paraprofessional did not have the skills or training to help students process social issues as they came up in the classroom. Instead, the teacher believed that it was counterproductive to have the paraprofessional address social issues because it would often lead to other problems between the students.

When asked to explain their ratings of the paraprofessionals' effectiveness in supporting students emotionally, two of the middle/high school teachers rated the paraprofessionals as somewhat effective. One of these teachers did so because the paraprofessionals were able to see when a situation started to become escalated and give that student a break or send him/her to the emotional support teacher. The other teacher stated that the paraprofessionals always keep track of the emotional support students' behavior chart and remind the students to get them signed every period. No elementary teachers rated the paraprofessionals as highly effective or somewhat effective in supporting students' emotional growth.

Of the four middle/high school teachers who rated the paraprofessionals as somewhat ineffective in supporting students emotionally, all four indicated that they did not recall specific instances when they witnessed the paraprofessional support a student's emotional growth, but they did not want to make it seem like the paraprofessional was

incompetent at their jobs. Two elementary teachers indicated that they rated the paraprofessionals as somewhat ineffective in supporting the emotional growth of students because they saw the paraprofessional attempt to support the emotional growth of students but only with limited success.

Finally, there were three middle/high school teachers who rated the paraprofessionals as highly ineffective. All three indicated that they believed paraprofessionals caused more melt downs with ES students than they prevented. Two elementary teachers who rated the paraprofessionals as highly ineffective did so because they believed the paraprofessionals had no skills to effectively support the emotional growth of students.

Teacher participants were then asked to share the biggest strengths and weaknesses they saw in paraprofessionals when paraprofessionals attempted to improve the academic growth of students. Six of those interviewed indicated that they believed paraprofessionals did not have many strategies at their disposal to use with students. Of those six, four indicated that the paraprofessionals in their classroom only used redirection to task as their strategy to help students academically. Two elementary teachers indicated that the paraprofessionals in their classroom were effective when working with small groups to reinforce or review content that had just been taught in the classroom. Three of the middle/high school teachers indicated that learning support students were more likely to complete classroom work or homework because paraprofessionals kept track of students' assignments and checked for completion prior to the class period.

Two high school teachers indicated that they believed a lack of content knowledge was one of the largest weaknesses they saw in the classroom. Teacher E commented “One of the biggest difficulties I face is paraprofessionals that consistently help students, but give incorrect information, or instructions.” Teacher C provided a similar response by commenting, “I would prefer that paraprofessionals just make sure students complete the work assigned. I don’t feel comfortable with them reviewing content, because they often get it wrong.” The concern over content knowledge did not appear in the responses from the elementary teachers. Instead, all the elementary teachers believed that the paraprofessionals were capable of providing content knowledge to their students and all indicated one of the greatest strengths was that they could give the paraprofessional a topic and the paraprofessional would be able to work with the student regardless of what that topic was.

Teacher E went on to explain the weakness of using paraprofessionals to improve the academic skills of students by stating:

I do not see paraprofessionals help improve the academic growth of students. I see paraprofessionals simply trying to get kids through. So while the student may pass a class, they have not truly learned anything other than dependence on someone else to complete a task. This is not a criticism of the paraprofessionals, but I think they are being used improperly. Most of the students that the paraprofessionals work with have severe deficits in content knowledge due to their specific disabilities. These students would be much better served if paraprofessionals could focus their time on developing skills specific to the student’s disability, rather than just trying to get them through a class that they do not belong in. A

simple example would be as follows. An algebra student is given a problem such as $3X = 18$. The student knows that they need to divide both sides of the equation by 3 to solve for x , but they have no idea what $18/3$ is.

Teacher E went on to share that he would prefer that no paraprofessional be in the room during his classes as he believes they are more of a distraction to learning support students than they are a benefit.

All of the elementary teachers indicated that one of the biggest strengths they saw was the ability of paraprofessionals to provide repetition of skills to learning support students. All indicated that they believed that the ability to have paraprofessionals review skills frequently with students was one of the most effective strategies to improve the student's academic ability. Only one of the middle/high school teachers mentioned repetition as a strength of the paraprofessional when discussing academic improvement.

Two of the four elementary teachers also shared that they felt paraprofessionals were essential to providing new content to students. Both teachers indicated that they would be unable to cover all content with students if the paraprofessionals did not introduce some new content to the students with whom they work. When asked by the researcher how the paraprofessional knew what content to cover, both teachers indicated that they plan for the paraprofessional and simply tell the paraprofessional what to cover. Both also indicated that since the elementary uses a structured math and reading curriculum, it was easy for them to tell the paraprofessional what lesson the paraprofessional needed to cover with students.

All of the elementary teachers and seven of the middle/high school teachers indicated that paraprofessionals were better at improving academics with learning support

students rather than improving academics with emotional support students. When the researcher asked why the teacher believed this to be the case, the teachers indicated that they believed that paraprofessionals did not know how to approach an emotional support student differently than a learning support student. Three teachers indicated that paraprofessionals often triggered emotional support students to engage in negative behaviors because they focused too much on academics without taking into account triggers of the emotional support student. One elementary teacher purposefully would not pair at least one of the paraprofessionals with any emotional support students because the paraprofessional would always cause the students to engage in negative behaviors. That, in turn, according to the teacher, would then cause the teacher to have to deal with the negative behaviors while the paraprofessional went on to work with other students.

Four middle/high school teachers indicated that the emotional support students in their class did not need any type of academic support. These teachers preferred that the paraprofessional did not work with the emotional support students on academics because the ES student was capable of doing the work on his/her own. These same four teachers also indicated that they preferred the ES teacher to address negative behaviors because the paraprofessionals would often cause the students to continue engage in negative behaviors rather than helping the student refocus on his/her work.

Teachers were also asked to describe the biggest strengths and weaknesses they noticed when paraprofessionals attempted to improve the social skills of students. Three elementary teachers and four middle/high school teachers noted that paraprofessionals would address negative social situations when they arose with students. However, of these, only two of the elementary teachers indicated that paraprofessionals were effective

at resolving the issue. The others indicated that paraprofessionals often escalated the situation. Three of the middle/high school teachers who indicated that paraprofessionals addressed negative social situations when they arose also indicated that paraprofessionals would often attempt to punish students for perceived misbehavior. This attempt at punishment would then escalate the situation to the point that the teacher needed to intervene and ask the paraprofessional to stop addressing the situation. Most often, according to these three high school teachers, these social situations were peer issues that arose in the classroom.

Three elementary teachers and six middle/high school teachers indicated that paraprofessionals were untrained or undertrained to deal with social issues and to teach either learning support or emotional support students' social skills. Teacher H commented, "I would rather take the time to teach social skills myself or talk to the ES teacher than rely on the paraprofessional. They don't have the training to effectively teach social skills, especially to middle school students."

One middle/high school teacher noted that paraprofessionals seemed hesitant to interact with emotional support students when a social issue arose in the classroom.

Teacher F commented:

I've noticed that [paraprofessional's name redacted] avoids interacting with the ES students in my classroom, especially when some issue is going on. It's almost like [the paraprofessional] goes out of the way to seem busy working with other students when one of the ES students is having an issue. This just means that then I have to stop what I'm doing to intervene in the situation.

Ten out of the thirteen teachers interviewed indicated that the paraprofessionals' ability to improve the emotional skills of students was lacking. Eight of those ten responded that lack of professional development was one cause that resulted in the paraprofessionals' inability to effectively improve the emotional growth of students. Teacher I commented, "The para in my room tries to approach every student the same, regardless of their disability. That just doesn't work. [The paraprofessional] doesn't understand the difference between the ES kids in my room and the LS kids, which usually causes problems that could be avoided."

This was a common theme that emerged among the ten teachers who indicated that paraprofessionals lacked the training to effectively improve the emotional skills of students with whom they work. Teacher G commented, "We see a lot more ES kids in our classes than we have in the past. I think the paras just don't know what to do to help those kids. They aren't equipped to work with an ES kid the same way they are equipped to work with an LS kid."

Teachers were also asked whether or not they believed that paraprofessionals had the necessary professional development to work with students to improve the students' academic, social, and emotional skills. Table 14 provides a record of their response.

Table 14

Teacher Perceptions of Whether or Not Paraprofessionals Have the Necessary Professional Development to Effectively Improve Students' Academic, Social, and Emotional Skills

	Do paraprofessionals have the necessary professional development to improve students' academic skills?		Do paraprofessionals have the necessary professional development to improve students' social skills?		Do paraprofessionals have the necessary professional development to improve students' emotional skills?	
	Elementary Teachers n=4	Middle/High School Teachers n=9	Elementary Teachers n=4	Middle/High School Teachers n=9	Elementary Teachers n=4	Middle/High School Teachers n=9
Yes	2	4	1	2	1	1
No	2	5	3	7	3	8

The majority of middle/high school teachers indicated that paraprofessionals did not have the necessary skills to improve students' academic, social, or emotional skills. Two elementary teachers indicated that they believed paraprofessionals had the necessary professional development to improve students' academic skills, but only one indicated that paraprofessionals had the necessary professional development to improve students' social or emotional skills.

Results from beginning of year interviews for administrators.

Appendix M includes the semi-structured interview questions for administrators. When asked to explain the strengths and weaknesses the administrators saw when paraprofessionals worked with students to improve the students' academic, social, and emotional skills there was a clear distinction between the elementary paraprofessionals and the middle/high school paraprofessionals. Both administrators listed several strengths in the elementary paraprofessionals for all three categories including the

paraprofessionals' ability to teach content to students when directed by the learning support teacher, the paraprofessionals' ability to reinforce school rules and social cues in both the regular education and special education classroom, and the paraprofessionals' ability to use coping strategies with emotional support students when they displayed signs of escalation.

Both administrators did indicate, however, that all paraprofessionals would benefit from continued professional development in all three areas. Both also remarked that paraprofessionals' ability to improve the emotional skills of students was the weakest of the three areas for the elementary school.

The administrator assessment of the middle/high school paraprofessionals included more weaknesses than the elementary paraprofessionals. One strength that was noted in the middle/high school paraprofessionals was the paraprofessionals' ability to help students stay organized in their classes and with their homework. However, it was also noted that the paraprofessionals' ability to reteach or explain high school content was a concern. A similar weakness was that some of the middle/high school paraprofessionals believed that they understood the content but would incorrectly explain it to students causing the student to become confused.

Both administrators remarked that a weakness of paraprofessionals was their ability to tailor their approach to learning support students and emotional support students. Both administrators noted that they see paraprofessionals utilize the same strategies with both types of students and only begin to incorporate emotional support strategies when a student is escalated or when directed by the teacher. Both administrators mentioned that they believed this inability to tailor the approach was due

to the fact that the district has seen an increase in students with emotional disturbances and that within the last two years more emotional support students were being included in the learning support and regular education classrooms. Prior to this recent trend, the administrators noted, most emotional support students were educated in outside placements.

Administrators were also asked whether or not they believed that paraprofessionals had the necessary professional development to work effectively with students to improve the students' academic, social, and emotional skills. Both administrators indicated that they believed paraprofessionals at the elementary had adequate professional development to improve academic skills but that more professional development was needed to improve students' social and emotional skills. Both also indicated that paraprofessionals needed more professional development in all three areas to be considered highly effective.

Comparison of professional development suggestions among participants

All three groups were asked to share the professional development topics that they believed were necessary for paraprofessionals in order to improve their ability to work with students to improve the students' academic skills, social skills, and emotional skills. The researcher also asked whether or not the participants believed these professional development topics were necessary for learning support students, emotional support students, or both.

Table 15 provides a summary of the topics that were shared related to academic skills. The table includes whether or not this topic was mentioned by one or more paraprofessionals, one or more teachers, and/or one or more administrators. It also

includes whether participants indicated that it would be helpful for learning support or emotional support students.

Table 16 provides a summary of the topics that were shared related to social skills. The table includes whether or not this topic was mentioned by one or more paraprofessionals, one or more teachers, and/or one or more administrators. It also includes whether participants indicated that it would be helpful for learning support or emotional support students.

Table 17 provides a summary of the topics that were shared related to emotional skills. The table includes whether or not this topic was mentioned by one or more paraprofessionals, one or more teachers, and/or one or more administrators. It also includes whether participants indicated that it would be helpful for learning support or emotional support students.

Table 15

Professional Development Suggestions for Academic Skills

Academic Professional Development Topic	Included in Paraprofessional Response	Included in Teacher Response	Included in Administrator Response	Beneficial for Learning Support Students, as noted by one or more groups	Beneficial for Emotional Support Students, as noted by one or more groups
Accommodations, Understanding and Applying	No	Yes	Yes	Yes	Yes
Inclusion, Understanding Purpose	No	Yes	Yes	Yes	Yes
Specific Learning Disability, Understanding Types	Yes	Yes	Yes	Yes	No
IEP Components and Process	No	Yes	Yes	Yes	Yes
Modifications, Understanding and Applying	Yes	Yes	Yes	Yes	No
Chunking Content for Students	No	Yes	Yes	Yes	No
Content Knowledge	No	Yes	Yes	Yes	Yes
Organizational Skills	Yes	Yes	Yes	Yes	Yes
Review Strategies	No	Yes	No	Yes	No
Redirection to Task Strategies	Yes	Yes	No	Yes	Yes
Differences between LS and ES students, understanding and adapting approach	No	Yes	Yes	Yes	Yes

Table 16

Professional Development Suggestions for Social Skills

Social Professional Development Topic	Included in Paraprofessional Response	Included in Teacher Response	Included in Administrator Response	Beneficial for Learning Support Students, as noted by one or more groups	Beneficial for Emotional Support Students, as noted by one or more groups
Social Stories, Using with Students	No	Yes	Yes	No	Yes
School-Wide Positive Behavior Program Philosophy	No	Yes	No	Yes	Yes
Child Development, Understanding how Children Develop Socially	No	No	Yes	Yes	Yes
Autism Awareness	No	Yes	Yes	No	Yes
Developmental Delays, Understanding and Recognizing	No	Yes	No	Yes	Yes
Implementing Social Skills Curriculum	No	Yes	Yes	No	Yes
Using Coping Strategies in Social Situations	No	No	No	Yes	Yes

Table 17

Professional Development Suggestions for Emotional Skills

Emotional Skill Professional Development Topic	Included in Paraprofessional Response	Included in Teacher Response	Included in Administrator Response	Beneficial for Learning Support Students, as noted by one or more groups	Beneficial for Emotional Support Students, as noted by one or more groups
Understanding Emotional Disturbance, causes and behaviors	Yes	Yes	Yes	No	Yes
How ES students are different from LS students	No	Yes	Yes	No	Yes
De-Escalation Strategies	No	Yes	Yes	No	Yes
Understanding Trauma Informed Instruction	No	No	Yes	Yes	Yes

Results from beginning of year classroom observations.

After the researcher completed the beginning of year interviews with the paraprofessional participants, the researcher began conducting classroom observations using the Classroom Observation Tool in Appendix O. The researcher observed each paraprofessional on two different occasions for at least half of the instructional period, although for at least eight of the twelve observations the researcher stayed for an entire instructional period. For four of the observations, there were two paraprofessionals working in the same classroom at the same time. The researcher included notes for both as independent observations. That is, the researcher recorded the strategies used by each paraprofessional separately as they were working with different groups of students.

Table 18 provides a record of the observations, including which paraprofessional or paraprofessionals were observed and the location of the observation.

Table 18

List of Paraprofessional Observations and Locations

Observation Number	Paraprofessional(s) Observed	Building Location of Observation	Type of Classroom
Observation #1	Paraprofessional A	Middle School	Regular Education Classroom
Observation #2	Paraprofessional B Paraprofessional E	Elementary School	Special Education Classroom
Observation #3	Paraprofessional C Paraprofessional D	Middle School	Special Education Classroom
Observation #4	Paraprofessional F	Elementary School	Regular Education Classroom
Observation #5	Paraprofessional G	Elementary School	Special Education Classroom
Observation #6	Paraprofessional H	High School	Regular Education Classroom
Observation #7	Paraprofessional E Paraprofessional F	Elementary School	Special Education Classroom
Observation #8	Paraprofessional H	High School	Regular Education Classroom
Observation #9	Paraprofessional A	Middle School	Special Education Classroom
Observation #10	Paraprofessional C	Middle School	Regular Education Classroom
Observation #11	Paraprofessional B Paraprofessional G	Elementary School	Special Education Classroom
Observation #12	Paraprofessional D	High School	Regular Education Classroom

Of the strategies noted by the researcher on the beginning of year classroom observations, 80.6% were classified as an academic strategy, 1.8% were classified as a social strategy, and 17.6% were classified as an emotional strategy.

Figure 1 lists the six most frequent academic strategies and the percentage that resulted in the desired outcome compared to the percentage that did not result in the desired outcome.

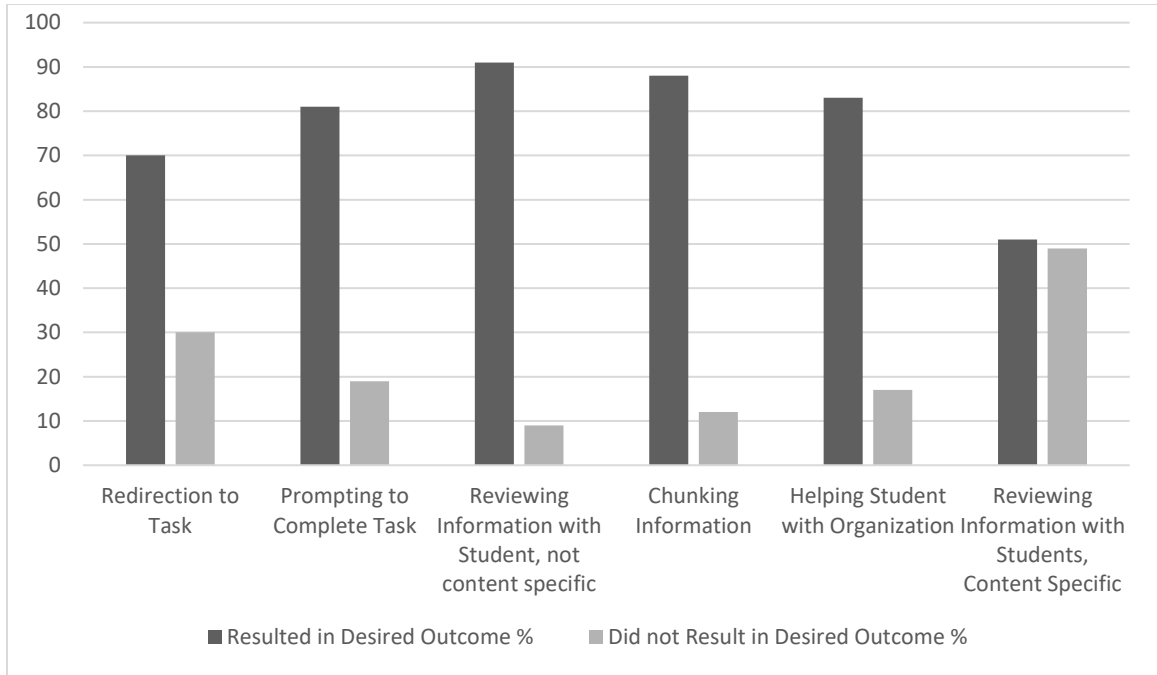


Figure 1. Academic Strategies Noted during Beginning-of-Year Observations

With the exception of reviewing information with students that was content specific, such as particular mathematical formulas, specific science vocabulary or concepts, or historical information, the majority of academic strategies employed by the paraprofessionals did result in the outcome expected. That is, the student responded in a way which the researcher believed showed the strategy was effectively used.

It is important to note, however, that the researcher also noted several instances during the observations when the researcher anticipated that the paraprofessional would utilize an academic strategy and the paraprofessional did not. Often, the paraprofessional did not engage in any interaction with the student during these instances. When observing Paraprofessional H, for instance, the student with whom the paraprofessional was assigned to work in the regular education classroom, raised his hand three times for

clarification on a math concept. In each instance, the paraprofessional did not ask the student what his question was. Instead, the paraprofessional waited for the regular classroom teacher to approach the student to answer the question.

The researcher observed Paraprofessional A during a regular education math class that included regular education students, learning support students, and emotional support students. The content teacher was providing a whole-class lesson. Paraprofessional A sat in the back of the classroom completing a puzzle for the entire lesson. After the class was over, Paraprofessional A explained to the researcher that the paraprofessional waited for the classroom teacher to indicate which students to work with before approaching them.

The social strategies that were observed all occurred at the elementary school and were initiated by the same paraprofessional during both observations. In all instances, the paraprofessional referenced a social story about getting along with peers while the paraprofessional worked with a small group of elementary students in the special education classroom. The references to the social story were directed to one of the students in the small group who was classified as an emotional support student. The other two students in the small group were learning support students. In all instances when the paraprofessional references the social story, the student responded by arguing with the paraprofessional or stating that the student was not behaving in the manner in which the paraprofessional said.

Figure 2 lists the emotional strategies that were noted during the observations and the percentage that resulted in the desired outcome compared to the percentage that did not result in the desired outcome.

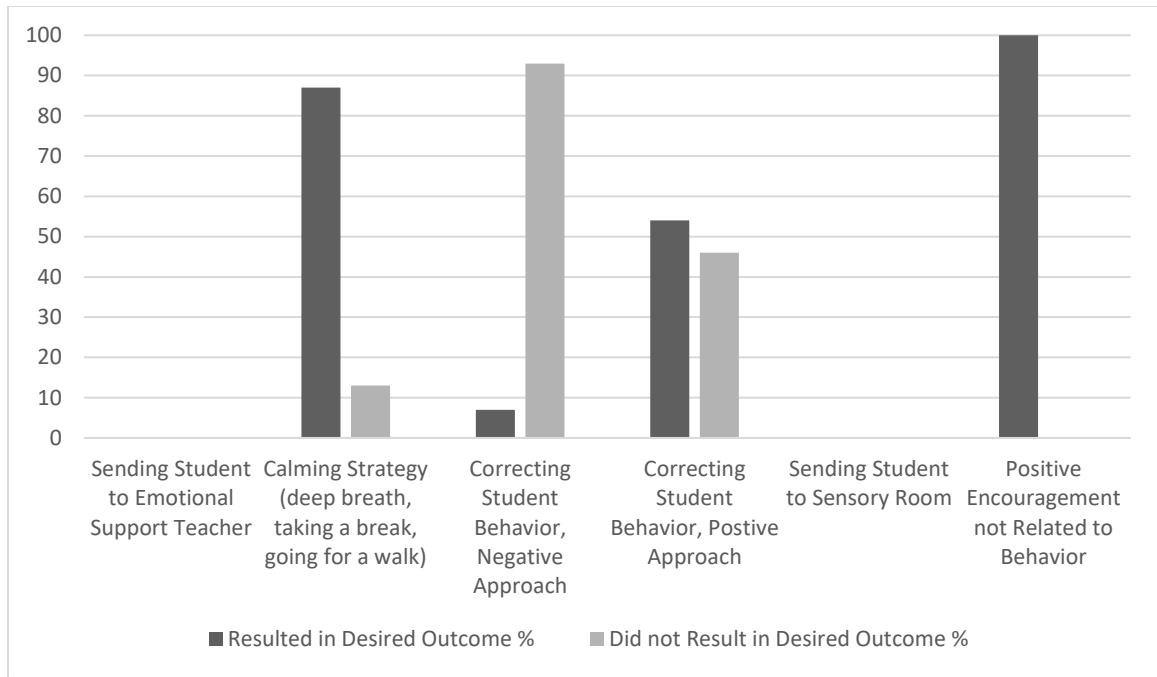


Figure 2. Emotional Strategies Noted during Beginning-of-year Observations

In two instances, when the paraprofessional sent the student to the emotional support teacher or when the paraprofessional sent the student to the sensory room, the researcher was unable to determine whether this action resulted in the desired outcome since the researcher did not follow the student. However, in the instances where this occurred, the student was removed from a tense situation with peers in the classroom so in that regard it did result in defusing the situation. The researcher, however, was unable to determine whether or not the student successfully de-escalated without any other interventions. In all instances where this occurred, the student did not return to the class that the researcher was observing. In both instances, the paraprofessional did not try any other strategy with the student prior to sending the student to either the ES teacher or the sensory room. In both instances, it was the first and only strategy employed by the paraprofessional to handle the situation.

When the paraprofessional attempted to correct behavior for an ES student with a negative approach such as telling the student to stop doing something or not to do something, it only resulted in the student stopping the behavior 7% of the time. When the paraprofessional used a positive approach to correcting behavior such as please use a quieter voice or praising another student who was demonstrating the desired behavior, the student to whom the strategy was directed complied and changed his/her behavior 54% of the time.

Professional Development Plan

Based on the initial data, the researcher developed a paraprofessional professional development plan that was implemented during the 2019-2020 school year in order to determine whether or not perceptions about paraprofessional effectiveness changed after targeted professional development was instituted.

The first focus of the professional development plan was related to understanding special education. In particular, professional development was provided that included topics such as understanding what an IEP was, the process of identification and implementation of an IEP, how an IEP differs from other types of services, what a modification is and what accommodations are for special education students. Along with this professional development, paraprofessionals were provided with training on recognizing accommodations and modifications and what accommodations and modifications looked like in the classroom. Additional time was spent on providing paraprofessionals with resources on different modifications and accommodations they could make when working with learning support and emotional support students based on the student's disability.

A second focus of the paraprofessional professional development focused on understanding differences between learning support and emotional support students, as well as understanding different types of learning disabilities. Paraprofessionals were provided with an explanation of the differences between a learning support and emotional support student, how students are identified as having a learning disability or emotional disturbance, and common characteristics of each type of student. Paraprofessionals were also provided with professional development related to different types of learning disabilities, how these disabilities may manifest in the classroom, and what strategies have been found to be most effective when working with these students.

A third focus was a more in-depth professional development related to emotional disturbances and emotional support students' unique needs. Paraprofessionals were provided with information regarding various emotional disturbances, common characteristics of these emotional disturbances, and strategies that have been found to be the most effective when working with students. Training also included understanding Trauma Informed Care principles and how those principles related to their work with ES students.

A fourth focus of the paraprofessional professional development focused on research-based academic, social, and emotional strategies that could be employed by the paraprofessionals when working with students. Paraprofessionals were provided with several different strategies in each area, viewed examples of those strategies, and discussed when it would be appropriate to use that strategy in the classroom. They were also provided with information on recognizing when each category is appropriate to use based on the needs of the student and the situation with which they were faced. Table

19 lists the academic, social, and emotional strategies that were introduced and practiced with paraprofessionals as part of the professional development plan.

Table 19

Academic, Social, and Emotional Strategies Covered during Professional Development

Academic Strategies	Social Strategies	Emotional Strategies
Word Supply and Sentence Repeat	Silent Signals	Silent Signals
Paired Reading Passages	Specific Praise	Discretionary Motor Breaks
Story Maps	Proximity Control	Self-Monitoring Strategies
Ask-Read-Tell	Social Stories	Using Open-Ended Questions
Main Idea Maps	Role Play	Emphasizing Positives in Requests
Cover-Copy-Compare	Social Skill Autopsy	Specific Praise
Intermixing Complexity		Student Designed Behavior Charts
Question-Answer Relationships		Facing-Saving Outs
Summarization Strategies		Non-Verbal and Para-Verbal Strategies
Chunking		Providing Choice
Organization Strategies		

The final focus for professional development during the research study was on understanding the role of the paraprofessional and what was expected of paraprofessionals in the regular education classroom, the special education classroom, and when working one-on-one with students in a support setting. The specific tasks that paraprofessionals were allowed to perform in the classroom and their role in supporting the regular education and special education teacher were also covered as part of this professional development.

Final Results

Results from midyear questionnaires.

After the professional development plan was implemented, paraprofessionals were again administered a questionnaire (Appendix J) in order to determine whether their responses had changed from the beginning of the year. Paraprofessional participants were again asked to rate their perceived effectiveness in supporting students’ academic growth. Teacher and administrator participants were also administered a questionnaire (Appendices K and N) and were asked to rate the effectiveness of paraprofessionals in supporting the academic growth of special education students. Table 20 provides the midyear results from paraprofessionals as well as their beginning of year responses.

Table 20

Comparison of Participant Ratings of Paraprofessionals’ Effectiveness in Supporting Students’ Academic Growth

	Middle/High School Paraprofessionals n=4		Elementary Paraprofessionals n=4		Middle/High School Teachers n=9		Elementary Teachers n=4		Administrators n=2	
	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear
Highly Effective	4	1	3	1	0	2	1	2	0	0
Somewhat Effective	0	3	1	2	4	4	2	2	1	2
Somewhat Ineffective	0	0	0	1	2	3	1	0	1	0
Highly Ineffective	0	0	0	0	3	0	0	0	0	0

Both middle/high school and elementary paraprofessionals rated themselves lower overall on the Midyear Questionnaire than they did on the Beginning of Year Questionnaire. One middle/high school paraprofessional rated herself as highly effective compared to four at the beginning of the year. Three middle/high school

paraprofessionals rated themselves as somewhat effective compared to zero ratings of this category at the beginning of the year.

One elementary paraprofessional rated herself as highly effective on the Midyear Questionnaire compared to three who rated themselves as highly effective on the Beginning of Year Questionnaire. Two elementary paraprofessionals rated themselves as somewhat effective compared to one on the Beginning of Year Questionnaire. One elementary paraprofessional rated herself as somewhat ineffective on the Midyear Questionnaire.

Two middle/high school teachers rated the paraprofessionals as highly effective in supporting students' academic growth when none rated them as such at the beginning of the year. Four middle/high school teachers rated the paraprofessionals as somewhat effective which remained the same from the beginning of the year. Three middle/high school teachers rated the paraprofessionals as somewhat ineffective, with no middle/high school teachers rating the paraprofessionals as highly ineffective.

Two elementary teachers rated paraprofessionals as highly effective, up from one at the beginning of the year. And, two elementary teachers rated paraprofessionals as somewhat effective. No elementary teachers rated paraprofessionals as somewhat or highly ineffective. Both administrators rated paraprofessionals as somewhat effective which is an increase of one compared to the Beginning of Year Questionnaires.

Table 21 provides a comparison of participant ratings on their effectiveness in helping students improve socially.

Table 21

Comparison of Participant Ratings of Paraprofessionals' Effectiveness in Supporting Students' Social Growth

	Middle/High School Paraprofessionals n=4		Elementary Paraprofessionals n=4		Middle/High School Teachers n=9		Elementary Teachers n=4		Administrators n=2	
	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear
Highly Effective	2	2	1	1	0	1	0	1	1	1
Somewhat Effective	1	2	2	3	3	4	1	2	0	1
Somewhat Ineffective	1	0	1	0	3	3	2	1	1	0
Highly Ineffective	0	0	0	0	3	1	1	0	0	0

Two middle/high school paraprofessionals rated themselves as highly effective which represented no change from the beginning of the year. However, one paraprofessional who rated herself as somewhat ineffective increased her rating to somewhat effective on the Midyear Questionnaire.

One elementary paraprofessional rated herself as highly effective both in the beginning of the year and at midyear. Three elementary paraprofessionals rated themselves as somewhat effective, an increase of one compared to the beginning of year results.

One middle/high school teacher rated the paraprofessionals as highly effective at the midyear compared to none at the beginning of the year. The number of paraprofessionals rated as somewhat effective increased by one at the midyear point. The number of paraprofessionals rated as somewhat ineffective remained the same, but the number of highly ineffective paraprofessionals decreased by two at the midyear point.

The elementary teacher ratings increased by one in the highly effective category and decreased by one in the highly ineffective category. The highly effective rating by the administrators at the beginning of the year remained the same and the somewhat ineffective rated moved to somewhat effective from the beginning of year to the midyear points.

Participants were also asked to rate the paraprofessionals effectiveness in supporting the emotional growth of students on the Midyear Questionnaire. Table 22 provides a comparison of the beginning of year ratings and the midyear ratings on this question.

Table 22

Comparison of Participant Ratings of Paraprofessionals' Effectiveness in Supporting Students' Emotional Growth

	Middle/High School Paraprofessionals n=4		Elementary Paraprofessionals n=4		Middle/High School Teachers n=9		Elementary Teachers n=4		Administrators n=2	
	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear
Highly Effective	1	1	0	1	0	1	0	0	0	0
Somewhat Effective	1	3	2	3	2	4	0	3	1	1
Somewhat Ineffective	1	0	2	0	4	4	2	1	1	1
Highly Ineffective	1	0	0	0	3	0	2	0	0	0

One middle/high school paraprofessional rated herself as highly effective on both the Beginning of Year and Midyear Questionnaires. Three middle/high school paraprofessionals rated themselves as somewhat effective, an increase of two, from the beginning to midyear points. One elementary paraprofessional rated herself as highly effective on the Midyear Questionnaire and the remaining three rated themselves as

somewhat effective. No middle/high school or elementary paraprofessionals rated themselves as somewhat or highly ineffective at the midyear point.

One middle/high school teacher rated the paraprofessionals as highly effective, an increase of one compared to the beginning of year. Four middle/high school teachers rated the paraprofessionals as somewhat effective and somewhat ineffective. No middle/high school teachers rated the paraprofessionals as highly ineffective, a decrease of three from the beginning of the year.

Three elementary teachers rated the paraprofessionals as somewhat effective on the Midyear Questionnaire, an increase of three from the beginning of year. One elementary teacher rated the paraprofessionals as somewhat ineffective, a decrease of one compared to the beginning of the year.

The administrators' ratings remained the same at one rating the paraprofessionals as somewhat effective and one rating the paraprofessionals as somewhat ineffective on both the Beginning of Year and Midyear Questionnaires.

Paraprofessionals were also asked to anticipate where they believed teachers would rate them in terms of their effectiveness in helping students grow academically. Teachers and administrators were asked to anticipate how paraprofessionals would rate themselves in terms of their effectiveness in helping students grow academically. Table 23 provides the results of those questions from both the Beginning of Year Questionnaire and Midyear Questionnaire.

Table 23

Comparison of Anticipated Rating of Academic Effectiveness

	Paraprofessionals anticipated how teachers would rate their effectiveness in helping students improve academically				Teachers and Administrators anticipated how paraprofessionals would rate themselves on helping students improve academically					
	Middle/High School Paraprofessionals n=4		Elementary Paraprofessionals n=4		Middle/High School Teachers n=9		Elementary Teachers n=4		Administrators n=2	
	Begin.	Mid.	Begin.	Mid.	Begin.	Mid.	Begin.	Mid.	Begin.	Mid.
Highly Effective	2	1	0	1	7	6	4	3	1	0
Somewhat Effective	2	2	3	2	2	3	0	1	1	2
Somewhat Ineffective	0	1	1	1	0	0	0	0	0	0
Highly Ineffective	0	0	0	0	0	0	0	0	0	0

One middle/high school paraprofessional anticipated that teachers would rate her as highly effective on the Midyear Questionnaire, compared to two who anticipated this rating on the Beginning of Year Questionnaire. Two middle/high school paraprofessionals anticipated that they would be rated as somewhat effective, which was no change from the beginning to midyear. One middle/high school paraprofessional believed the paraprofessionals would be rated as somewhat ineffective, which is an increase of one from the beginning of the study.

One elementary paraprofessional believed paraprofessionals would be rated as highly effective, an increase of one from the beginning of the study. Two elementary paraprofessionals believed they would be rated as somewhat effective, compared to three who believed this at the beginning of the study. One elementary paraprofessional

believed the paraprofessionals would be rated as somewhat ineffective by teachers, which remained the same from the beginning of the study.

Only one middle/high school teacher changed his/her rating from the beginning of the year to the midyear. The anticipation that paraprofessionals would rate themselves as highly effective decreased by one at the midyear and the somewhat effective rating increased by one. Likewise, one elementary teacher changed his/her rating from the beginning of the year to the midyear by anticipating that paraprofessionals would rate themselves as somewhat effective rather than highly effective. Finally, both administrators anticipated that paraprofessionals would rate themselves as somewhat effective, an increase of one from the beginning of the year.

Participants were again asked what professional development topics they believed were still necessary to improve the ability of paraprofessionals to effectively improve the academic growth of students. Table 24 provides a list of participant responses. The table lists the total number of participants who included this topic as a response. Underneath the total responses is an indication of how many of those respondents indicated that this topic was beneficial when working with learning support students and how many of those respondents indicated that this topic was beneficial when working with emotional support students.

Table 24

Academic Professional Development Topics from Midyear Questionnaire

Paraprofessionals n=8	Teachers n=13	Administrators n=2
<i>More Strategies to Break Down Information for Struggling Students</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1	<i>Making Accommodations for Students</i> Total Responses: 8 Beneficial to LS: 8 Beneficial to ES: 8	<i>Making Accommodations for Students</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 6
<i>Strategies to Help Academically</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 0	<i>Making Modifications</i> Total Responses: 7 Beneficial to LS: 7 Beneficial to ES: 7	<i>Making Modifications</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2
<i>Making Modifications for Students</i> Total Responses: 3 Beneficial to LS: 3 Beneficial to ES: 3	<i>Collecting Data</i> Total Responses: 3 Beneficial to LS: 3 Beneficial to ES: 3	<i>Collecting Data</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2
<i>Implementing Accommodations</i> Total Responses: 6 Beneficial to LS: 6 Beneficial to ES: 6	<i>Content Specific Knowledge</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 0	<i>Inclusion Strategies</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1
<i>More Time to Review Student IEPs</i> Total Responses: 2 Beneficial to LS: 2 Beneficial to ES: 2	<i>Understanding Role</i> Total Responses: 1 Beneficial to LS: 1 Beneficial to ES: 1	

No participants responded by stating that they were unsure or that there were no professional development topics that were necessary. Making modifications again appeared in responses from all three participant groups as it did at the beginning of the year, but on the Midyear Questionnaire, making accommodations also appeared in all three sets of responses.

Participants were also asked to list what professional development topics they would like paraprofessionals to participate in in order to improve the paraprofessionals' ability to support the social growth of students. Table 25 provides the participant responses. The table lists the total number of participants who included this topic as a

response. Underneath the total responses is an indication of how many of those respondents indicated that this topic was beneficial when working with learning support students and how many of those respondents indicated that this topic was beneficial when working with emotional support students.

Table 25

Social Professional Development Topics for Paraprofessionals from Midyear Questionnaire

Paraprofessionals n=8	Teachers n=13	Administrators n=2
<i>Using Social Stories</i> Total Responses: 6 Beneficial to LS: 0 Beneficial to ES: 6	<i>Social Stories</i> Total Responses: 4 Beneficial to LS: 0 Beneficial to ES: 4	<i>Social Stories</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2
<i>Developing Social Stories</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2	<i>Positive Praise</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2	<i>Social Role Play</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1
<i>More Role Play Practice</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2	<i>None</i> Total Responses: 8	<i>Collecting Data</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1
<i>How to Collect Social Data</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1		
<i>Developing Consistent Social Skill Strategies with Students</i> Total Responses: 1 Beneficial to LS: 0 Beneficial to ES: 1		
<i>Practice with Social Skill Autopsy</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2		

Social stories appeared in all participants answers during the Midyear Questionnaire. No paraprofessional responded with unsure or none when asked about social professional development topics on the Midyear Questionnaire, compared to all eight

paraprofessionals responding unsure or non on the Beginning of Year Questionnaire. Eight teachers responded none on the Midyear Questionnaire compared to no teacher responses of none on the Beginning of Year Questionnaire.

Participants were asked to provide professional development topics related to improving the effectiveness of paraprofessionals when working on developing emotional skills in students. Table 26 provides a summary of responses. The table lists the total number of participants who included this topic as a response. Underneath the total responses is an indication of how many of those respondents indicated that this topic was beneficial when working with learning support students and how many of those respondents indicated that this topic was beneficial when working with emotional support students.

Table 26

Emotional Professional Development Topics from Midyear Questionnaire

Paraprofessionals n=8	Teachers n=13	Administrators n=2
<p><i>Understanding Emotional Disturbance</i> Total Responses: 8 Beneficial to LS: 0 Beneficial to ES: 8</p>	<p><i>Understanding Emotional Disturbance</i> Total Responses: 7 Beneficial to LS: 0 Beneficial to ES: 7</p>	<p><i>Understanding Emotional Disturbance</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2</p>
<p><i>Strategies to work with Emotional Support Students</i> Total Responses: 8 Beneficial to LS: 0 Beneficial to ES: 8</p>	<p><i>Strategies to work with Emotional Support Students</i> Total Responses: 6 Beneficial to LS: 0 Beneficial to ES: 6</p>	<p><i>Strategies to work with Emotional Support Students</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2</p>
<p><i>Non-Verbal and Para-Verbal Strategies</i> Total Responses: 2 Beneficial to LS: 0 Beneficial to ES: 2</p>		

While the number of professional development topics related to emotional growth was fewer than on the Beginning of Year Questionnaire, there was greater consistency among participant groups. Understanding emotional disturbances appeared in all participant responses as did strategies to work with emotional support students.

Finally, paraprofessional participants were again asked to share what types of strategies they used in the classroom to support the academic growth, social growth, and emotional growth of students. Teacher and Administrator participants were asked to share what strategies they saw paraprofessionals use to support the academic growth, social growth, and emotional growth of students. Table 27 lists the academic strategies identified by paraprofessionals, teachers, and administrators. Table 28 lists the social strategies identified by paraprofessionals, teachers, and administrators. Table 29 lists the emotional strategies identified by paraprofessionals, teachers, and administrators. For all three tables, an asterisk (*) after the strategies denotes that it was one that was covered during the professional development plan as part of this research study. The researcher took respondents' answers and coded the strategy according to the list of strategies covered in the professional development plan. For instance, a respondent may have written "dividing information into smaller sections." The researcher coded that as "chunking" since it met the definition of chunking but did not use that term. If the researcher was unable to connect a respondents' response to a specific strategy, the researcher used the response as provided.

Table 27

Midyear Academic Strategies Utilized in the Classroom

Paraprofessionals n=8	Teachers n=13	Administrators n=2
Redirection to Task (4)	Redirection to Task (2)	Redirection to task (2)
Ask-Read-Tell (4)*	Prompting (3)	Prompting (2)
Cover-Copy-Compare (4)*	Story Maps (3)*	Organizational Strategies (2)*
Summarization Strategies (2)*	Organizational Strategies (4)*	Summarization and Retelling (1)*
Chunking (5)*	Summarization Strategies (2)*	Reviewing Material/Helping Students Study (1)
Breaking Down Information for Students (1)	Reviewing Material with Students (3)	Re-Teaching Concepts (1)
Organizational Strategies (6)*	Re-Teaching Concepts (3)	
Story Maps (3)*		

Nearly all of the paraprofessional responses, with the exception of breaking down information for students were strategies that were covered during the professional development that was provided during this research study. The researcher did not replace this response with chunking because the same paraprofessional listed both in her response, leading the researcher to believe that the paraprofessional believed they were separate strategies. Three strategies, redirection to task, summarization strategies, and organizational strategies appeared in all three groups' responses. Story Maps appeared in both the paraprofessionals' responses and teachers' responses.

Table 28

Midyear Social Strategies Utilized in the Classroom

Paraprofessionals n=8	Teachers n=13	Administrators n=2
Social stories (4)*	Social Stories (4)*	Social Stories (2)*
Silent Signals (3)*	Silent Signals (3)*	Silent Signals (1)*
Praising Students (6)*	Praising Students/Effort (4)*	Praising Students (2)*
Role Play (3)*	Role Play (2)*	
	None (5)	
	Unsure (2)	

Social stories, silent signals, and praise appeared in all three groups’ responses as a social strategy employed in the classroom. Role play appeared in both the paraprofessional group’s response and the teacher group’s response. Five teacher respondents replied that they saw no social strategies employed in their classroom and two responded that they were unsure what social strategies were employed in their classroom. All seven of the teachers who responded none or unsure were middle/high school teachers.

Table 29

Midyear Emotional Strategies Utilized in the Classroom

Paraprofessionals n=8	Teachers n=13	Administrators n=2
Silent Signals (5)*	Silent Signals (3)*	Silent Signals (1)*
Breaks for students (4)*	Breaks for students (4)*	Breaks for students (2)*
Student Self-Monitoring Strategies (3)*	Student Self-Monitoring Strategies (2)*	Student Self-Monitoring Strategies (2)*
Specific Praise (6)*	Praising Students (6)*	Praising Students (2)*
Non-Verbal Strategies (3)*	Providing Choice to Students (3)*	Providing Choice (3)*
Providing Choice (5)*	Unsure (5)*	
	None (2)*	

Silent signals, breaks for students, student self-monitoring strategies, and praise appeared in all three groups’ responses as examples of emotional strategies that were employed in

the classroom. Five teacher respondents replied that they saw no emotional strategies employed in their classroom and two responded that they were unsure what social strategies were employed in their classroom. All seven of the teachers who responded none or unsure were middle/high school teachers.

Results of midyear interview for paraprofessionals.

In order to determine whether or not changes in perceptions had taken place from the beginning of year to the midyear, the researcher again engaged in semi-structured interviews with paraprofessional participants(Appendix L). Paraprofessionals were once again interviewed in the same small groups they were in for the beginning of the study.

Paraprofessionals were first asked to share their thoughts on the professional development they had received this school year (2019-2020) and what they found beneficial from the professional development. Paraprofessional E began by saying:

Our professional development this year was much more intense than it has been for a long time – maybe ever. We covered a lot this year. Don't get me wrong, it was good stuff. But I know I will need a refresher on things again later this year. The strategies we covered at the beginning of the year were good, but I don't know if I remember them all at this point.

Paraprofessional F agreed and said:

We did cover a lot this year, but I feel like it was all good stuff. Everything we discussed as part of our in-service days were things that I thought I could use in my job. I was one of the ones who thought I didn't need any more trainings, that I was pretty good at my job. But, I learned several things this year that I've used when working with the students.

Paraprofessional B shared:

Being new, I appreciated that topics we covered. This was the first time I ever sat down and learned about the IEP process and why some kids got certain accommodations and why some didn't. I think just having that information has been really helpful for me. After learning about the parts of the IEP and the process, it may much more sense when [teacher's name] talked about those things with the students in our classroom. I felt like I understood what [the teacher] was talking about rather than just nodding my head.

All four of the elementary paraprofessionals indicated that the training on specific strategies was helpful in improving their perception of their own effectiveness in supporting the academic, social, and emotional growth of students. All four elementary paraprofessionals indicated that they used several of the strategies regularly and believed they were effective with students.

The middle/high school paraprofessionals' response to this question was more mixed than the elementary paraprofessionals' response. Two of the four middle/high school paraprofessionals indicated that they believed this year's professional development plan was more effective than the professional development they had in the past. Paraprofessional C indicated that the professional development this school year did not change the interaction with students. The paraprofessional commented:

I feel like I already did a lot of these things already. I've been doing this job long enough to know what works and what doesn't work. You know, I already knew about IEPs and what these students needed to be successful in their classrooms. I

mean, I think the strategies I use with them are effective. I don't see the need to try new things when what I'm doing already works, you know?

Paraprofessional H has a teaching degree and commented, "I already knew a lot of these strategies from college. There were some new ones but a lot were ones I already knew about." Paraprofessional A and D, however, did say that they felt the academic, social, and emotional strategies were helpful for them as newer paraprofessionals and ones who did not have a background in teaching.

Paraprofessional C also commented with regard to the emotional strategies:

I see my job as supporting these kids and their classes. Making sure they get their work done and get good grades. I think it should be [the emotional support teacher's] job to deal with their emotional stuff, you know what I mean? I can't do everything and there are too many other kids who need my help.

The researcher asked if any of the other middle/high school paraprofessionals felt the same about emotional support students, but none of the other participants responded to the question.

Paraprofessionals were also asked to share what they found the least beneficial from the professional development this year. Three of the four elementary paraprofessionals shared that they believed all of the topics were beneficial but that more time should be devoted to some topics such as the academic, social, and emotional strategies and information on various types of emotional disturbances. The other paraprofessional agreed with the rest regarding the strategies but felt that the information about emotional disturbances was sufficient.

Two of the four middle/high school paraprofessionals stated that they believed the various strategies were unnecessary or redundant. Paraprofessional C also indicated the information on IEPs and the evaluation process was unnecessary as Paraprofessional C knew enough about these topics prior to the school year. Paraprofessional A and D indicated that they found the professional development on IEPs and the evaluation process was valuable for them and would like to have more professional development on these topics in the future.

Paraprofessionals were asked if they believed that professional development for paraprofessionals was given much attention in the district. Six of the eight paraprofessionals indicated that they believed paraprofessional professional development was given more attention in the district this school year, compared to only one of the eight believing this at the beginning of the year. Two of the eight paraprofessionals indicated that they believed paraprofessional professional development was still not given much attention in the district.

Four of the eight paraprofessionals indicated that they believed they had the opportunity to provide feedback regarding their professional development for the school year. Two of the eight paraprofessionals indicated that they believed they did not have the opportunity to provide feedback related to their professional development. And, two of the eight indicated that they were able to provide some feedback on their professional development topics for the year.

Paraprofessional participants were asked whether they believed they had been given the necessary training, tools, and resources to effectively help students improve academically, socially, and emotionally. Seven of the eight paraprofessionals indicated

that they believed they had the necessary tools to help students academically, compared to four from the beginning of the year. Five of the eight paraprofessionals indicated that they had the necessary training, tools, and resources to help students improve socially compared to no paraprofessionals indicating they had the necessary trainings, tools, and resources at the beginning of the year. Three of the eight paraprofessionals indicated that they believed they had the necessary training, tools, and resources to help students improve emotionally, compared to zero of the respondents at the beginning of the year. However, those three all indicated that more training was needed for them to continue to improve. They did not believe they were experts at helping students improve emotionally.

Finally, paraprofessionals were asked to share what strategies they found the most effective at helping students improve academically, socially, and emotionally. Table 30 lists their responses. The number in parentheses indicates the number of paraprofessionals who responded with the same strategy or who agreed when the strategy was mentioned by a colleague. The letters in the parentheses indicate if the response was provided by elementary paraprofessionals (EP) or middle/high school paraprofessionals (MHP). An asterisk indicates that the strategy was one that was covered as part of the professional development for this research study.

Table 30

Effective Academic, Social, and Emotional Strategies Utilized in the Classroom

Academic Strategies	Social Strategies	Emotional Strategies
Redirection to Task (EP – 2; MHP-3)	Silent Signals (EP-4; MHP-2)*	Silent Signals (EP-4; MHP-2)*
Word Supply (EP-1)*	Social Stories (EP-4)*	Breaks for Students (EP-4; MHP-3)*
Story Maps (EP-3; MHP-1)*	Role Play (EP-4)*	Student Self-Monitoring Strategies (EP-3; MHP-2)*
Cover-Copy-Compare (EP-3; MHP-2)*	Social Skills Autopsy (EP-3; MHP-1)*	Sending to ES Teacher (MHP-2)
Chunking (EP-4; MHP-2)*	Correcting Behavior (MHP-2)	Praising Students (EP-3; MHP-1)*
Summarization Strategies (EP-2; MHP-4)*		Providing Choice (EP-2; MHP-1)*
Organizational Skills (EP-4; MHP-4)*		Non-Verbal Signals (EP-1)*
		Calling Home (MHP-1)

All but one of the academic strategies listed were covered as part of the professional development plan for this research study. All but one of the social strategies were ones that were included in paraprofessional professional development this year. Correcting behavior was listed as a social strategy by two middle/high school paraprofessionals but was not included as a strategy in the professional development plan. All but two of the emotional strategies were ones that were covered during paraprofessional professional development this school year. Sending students to the Emotional Support teacher was not a strategy that was covered but was listed as an effective emotional strategy by two middle/high school paraprofessionals. Calling home was also listed by one middle/high school paraprofessional as an effective emotional strategy.

Results of midyear interview for teachers.

Teachers were again interviewed individually at the midyear point to gauge any changes in their perceptions from the beginning of the year to the midyear point with regard to their rating of the effectiveness of paraprofessionals in supporting the academic growth of students (Appendix M). Both the middle/high school and elementary teachers had more ratings of highly effective and somewhat effective on the midyear questionnaire than they did on the beginning of year questionnaire. Two middle/high school teachers indicated that they increased their rating because they had seen the paraprofessionals take on a more direct approach to helping students academically. That is, these teachers believed that paraprofessionals intentionally sought out LS or ES students during class to check for understanding or explain difficult concepts again. Both indicated that this proactive approach was more infrequent at the beginning of the year. One elementary teacher indicated that his/her rating of the paraprofessionals improved because he/she noticed the paraprofessional using a variety of different strategies as the year progressed. The teacher indicated that the paraprofessional would try several different strategies with a student if it appeared the student was still struggling to understand the concept.

Three middle/high school teachers rated the paraprofessionals as somewhat ineffective at the midyear point. One of these teachers indicated that while he/she has seen a little improvement in the paraprofessional's ability to support student academically, he/she still believes that students would be better off without the paraprofessional support in the classroom. Another teacher who rated the paraprofessionals as somewhat ineffective echoed this sentiment and indicated that it was

preferable that the paraprofessional only help students with organization and that the paraprofessional would leave any content help to the teacher.

Five middle/high school teachers rated the paraprofessionals as highly or somewhat effective in supporting students' social growth on the midyear questionnaire compared to three who gave these ratings at the beginning of the year. Teacher G indicated that the rating improved after noticing the paraprofessional pulling aside a particular ES student and debriefing when there had been an issue in class. This, according to Teacher G, was not something that had been witnessed at the beginning of the year. Teacher H indicated that paraprofessionals would use specific strategies to help students process an issue with a peer rather than telling the student to ignore the issue as had been the case in the past. Two elementary teachers rated the paraprofessionals as highly or somewhat effective indicating that they believed the paraprofessionals had developed some skills in helping students process social situations. One also indicated that he/she was impressed with the paraprofessional's ability to use social stories to teach social skills.

Four middle/high school teachers rated the paraprofessionals as somewhat or highly ineffective in support students' social growth on the midyear questionnaire. All four indicated that they had seen no changes in paraprofessionals from the beginning of the year to the end of the year. One elementary teacher rated the paraprofessionals as somewhat ineffective also indicating that there had been no change from the beginning of the year to the midyear.

Teachers were also asked to explain their ratings of the effectiveness of paraprofessionals in supporting the emotional growth of students. Five middle/high

school teachers rated the paraprofessionals as highly or somewhat effective compared to two on the beginning of year questionnaire. All five indicated that they saw improvements in the ability of paraprofessionals to work with ES students. They also saw the paraprofessional uses several strategies to help the students whereas before they would see the paraprofessional not engage with the student and give up if the first attempt was not successful. Four middle/high school teachers rated that paraprofessionals as somewhat ineffective. Three of the four remarked that they had seen only slight improvement in the ability of paraprofessionals to support the emotional growth of students. Teacher C indicated that the paraprofessional was still causing more problems than the paraprofessional was solving with how students were approach.

Three elementary teachers rated paraprofessionals as somewhat effective in supporting students' emotional growth. All three indicated that they believed the paraprofessional was more willing to engage with ES students at the midyear than at the beginning of the year. Teacher I indicated that paraprofessionals were approaching LS students and ES students with different strategies. One elementary teacher rated the paraprofessionals as somewhat ineffective, indicating that while there has been some improvement from the beginning of the year, paraprofessionals lacked the training and skills to effectively help students grow emotionally.

Results of midyear interview for administrators.

Administrators were again interviewed individually using the semi-structured interview questions in Appendix M. Administrators were asked to explain the strengths and weaknesses they saw when paraprofessionals worked with students to improve the

students' academic, social, and emotional growth. Administrator A indicated that she saw a lot of progress in the paraprofessionals. Administrator A indicated:

I have seen my paraprofessionals trying new things with students to help them be successful in class and with their peers. They will often come up to me to tell me what they're working on with students and what they tried and whether or not it was working. I've also heard from my teachers that the paraprofessionals seem to be trying new strategies with students.

Administrator B echoed the idea that paraprofessionals were implementing new strategies, but also indicated that there was still a lot of room for growth. Administrator B commented, "I do think the paras are trying new things. Sometimes those things are successful, sometimes they're not. I still see paras as needing a lot more training, though."

Both administrators saw the biggest continued need for professional development to be related to students' emotional growth. Both indicated that this was the weakest area for most paraprofessionals. Administrator B remarked that several times when an ES student is having an issue or melt-down, the paraprofessional will exacerbate the situation causing the special education teacher to intervene to resolve the issue. While Administrator A did not indicate that the paraprofessionals exacerbated situations, she did remark that classroom teachers were often more effective in working with ES students and that she still preferred that teachers handle situations when they arise.

Both administrators indicated that they believed that, overall, paraprofessionals had improved their effectiveness in helping students growth academically, socially, and

emotionally, Both also indicated, however, that additional training in all three areas was needed to continue to help paraprofessionals improve their effectiveness.

Results of midyear classroom observations.

In order to determine whether or not the information collected from the questionnaires and the interviews was accurate, the researcher again conducted classroom observations of the paraprofessionals using the Classroom Observation Tool in Appendix O. The researcher observed each paraprofessional on two different occasions for at least half of the instructional period during the same time and in the same location as the beginning of year observations. For four of the observations, there were two paraprofessionals working in the same classroom at the same time. The researcher included notes for both as independent observations. That is, the researcher recorded the strategies used by each paraprofessional separately as they were working with different groups of students. Table 18 provides a record of the observations, including which paraprofessional or paraprofessionals were observed and the location of the observation.

Of the strategies noted by the researcher, 59.8% of them were classified as academic strategies on the midyear observations compared to 80.6% on the beginning of the year observations. Social strategies accounted for 20.7% of all strategies observed at the midyear compared to 1.8% at the beginning of the year. Emotional strategies accounted for 19.5% of strategies at the midyear compared to 17.6% at the beginning of the year.

All of the academic strategies that were noted during the beginning of year observations were also noted during the midyear observations. However, the researcher

also noted several different strategies during the midyear observations that he did not witness during the beginning of year strategies.

Figure 3 lists the ten most frequent academic strategies and the percentage that resulted in the desired outcome compared to the percentage that did not result in the desired outcome.

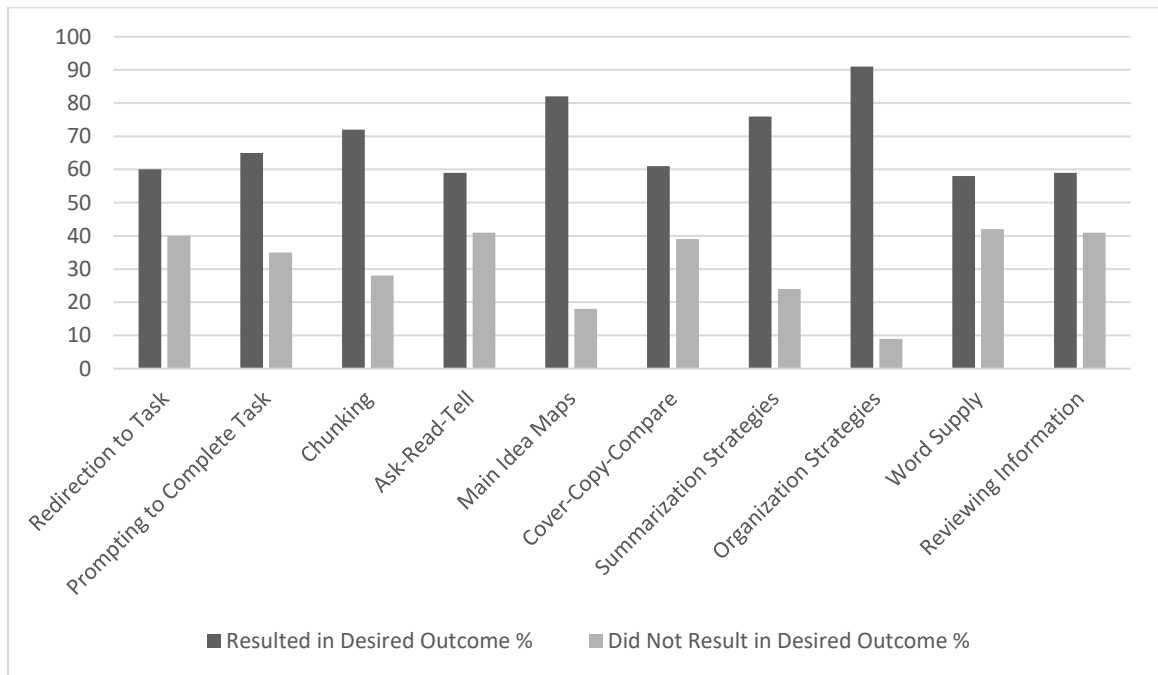


Figure 3. Academic Strategies Noted During Midyear Observations

Five of the strategies that were observed during the midyear observations were not observed at all during the beginning of year observations. Those strategies include Ask-Read-Tell, Main Idea Maps, Cover-Copy-Compare, Summarization Strategies, and Word Supply. All of the academic strategies noted during the midyear observations resulted more often than not in the desired outcome. That is, the student responded in a way which the researcher believed showed the strategy was effectively used. The researcher also noted that paraprofessionals were more likely to employ a second or third strategy when the first strategy did not result in the desired outcome compared to the beginning of

year observations. Likewise, there was only one instance when the researcher anticipated the paraprofessional would utilize an academic strategy and the paraprofessional did not compared to several instances of this during the beginning of year observations. The researcher noted that with the exception of story maps and re-teaching content to students, all of the academic strategies identified in Table 27 were noted during the observations.

The researcher also noted all of the social strategies listed in Table 28 during the midyear observations. During the beginning of year observations, the researcher only noted the use of social stories. However, during the midyear observations several different strategies were recorded. Figure 4 provides the four social strategies that were observed and the percentage that resulted in the desired outcome compared to the percentage that did not result in the desired outcome.

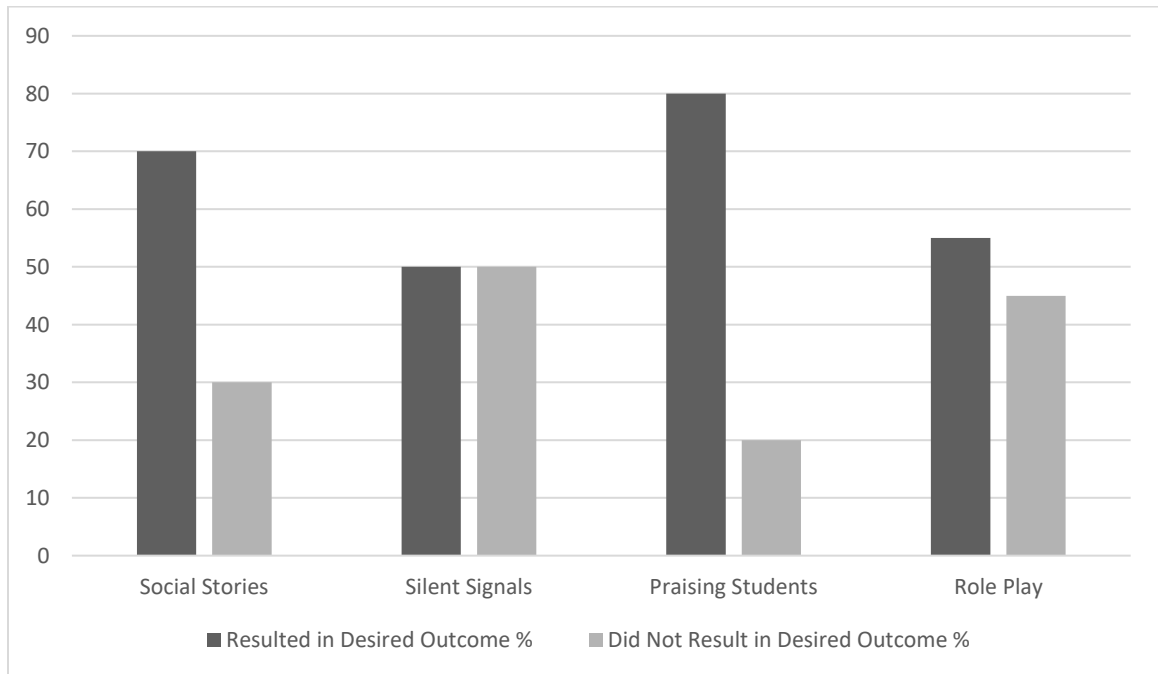


Figure 4. Social Strategies Noted During Midyear Observations

Social stories resulted in the desired outcome 70% of the time used by paraprofessionals. All instances of the use of social stories occurred at the elementary school. Likewise, all instances of the use of role play occurred at the elementary school and resulted in the desired outcome approximately 55% of the time. Silent signals were utilized at both the middle/high school and the elementary with a 50% success rate. Praising students was used in both the middle/high school and the elementary with an 80% success rate.

Figure 5 lists the emotional strategies that were noted during the midyear observations and the percentage that resulted in the desired outcome compared to the percentage that did not result in the desired outcome. All of the strategies listed in Table 29 were noted during the midyear observations.

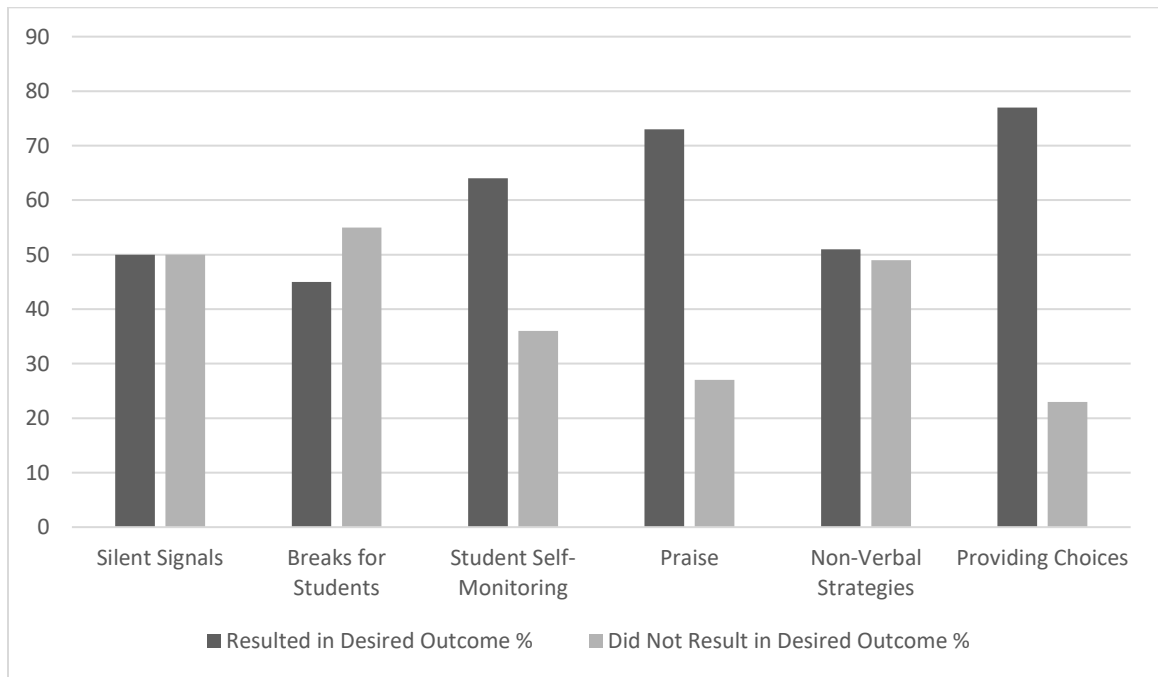


Figure 5. Emotional Strategies Noted During Midyear Observations

Once again, the paraprofessionals’ use of silent signals was only about 50% effective in achieving the desired outcome. Breaks for students was more ineffective than it was effective. In most instances when a break was given to a student, the student argued or

refused to return to the task after the break was finished. The researcher did note that the paraprofessionals who utilized the breaks for students provided them with unstructured free time or did not give them an indication how long the break would last until they told the student the break was over. Non-Verbal strategies such as ignoring behavior or proximity control were only slightly more effective than not at resulting in the desired outcome. Using praise, asking the student to engage in a self-monitoring strategy, and providing students with choices most often resulted in the desired outcome.

Overall Change in Perceptions from Pre to Post Study

In order to determine the overall change of perceptions pre and post research study, the researcher will report perceptions as Effective (being rated as highly or somewhat effective) or Ineffective (being rated as highly or somewhat ineffective).

Table 31 provides a summary of participants’ ratings related to the effectiveness of paraprofessionals in supporting the academic growth of students at the beginning of the study and at the end of the study.

Table 31

Comparison of Participant Ratings of Paraprofessionals’ Effectiveness in Supporting Students’ Academic Growth

	Middle/High School Paraprofessionals n=4		Elementary Paraprofessionals n=4		Middle/High School Teachers n=9		Elementary Teachers n=4		Administrators n=2	
	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear
Effective	4	4	4	3	4	6	3	4	1	2
Ineffective	0	0	0	1	5	3	1	0	1	0

Middle/high school paraprofessionals had no change in their perception related to their effectiveness in supporting students’ academic growth from the beginning of the study to the end. All middle/high school paraprofessionals rated themselves as effective

at both the beginning and end of the study. Elementary paraprofessionals’ perception went down at the end of the study compared to the beginning. All elementary paraprofessionals rated themselves as effective in supporting academic growth at the beginning of the study. By the end of the study, only 75% of elementary paraprofessionals rated themselves as effective.

Middle/high school teachers’ perceptions improved some by the end of the study compared to the beginning with two additional middle/high school teachers rating paraprofessionals as effective in supporting academic growth. Elementary teachers’ perceptions and administrators’ perceptions also improved by the end of the study with all elementary teachers and administrators rating paraprofessionals as effective in supporting academic growth by the end of the study.

Table 32 provides a summary of participants’ ratings related to the effectiveness of paraprofessionals in supporting the social growth of students at the beginning of the study and at the end of the study.

Table 32

Comparison of Participant Ratings of Paraprofessionals’ Effectiveness in Supporting Students’ Social Growth

	Middle/High School Paraprofessionals n=4		Elementary Paraprofessionals n=4		Middle/High School Teachers n=9		Elementary Teachers n=4		Administrators n=2	
	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear
Effective	3	4	3	4	3	5	1	3	1	2
Ineffective	1	0	1	0	6	4	3	1	1	0

Middle/high school paraprofessionals’ perceptions and elementary paraprofessionals’ perceptions both improved by the end of the study with all paraprofessionals rating themselves as effective in supporting students’ social growth. Teacher perceptions of

paraprofessionals also improved with eight of the 13 teachers rating paraprofessionals as effective by the end of the study compared to four at the beginning of the study.

Likewise, administrator perceptions of paraprofessionals’ effectiveness in supporting students’ social growth improved by the end of the study as well.

Table 33 provides a summary of participants’ ratings related to the effectiveness of paraprofessionals in supporting the emotional growth of students at the beginning of the study and at the end of the study.

Table 33

Comparison of Participant Ratings of Paraprofessionals’ Effectiveness in Supporting Students’ Emotional Growth

	Middle/High School Paraprofessionals n=4		Elementary Paraprofessionals n=4		Middle/High School Teachers n=9		Elementary Teachers n=4		Administrators n=2	
	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear	Beginning	Midyear
Effective	2	4	2	4	2	5	0	3	1	2
Ineffective	2	0	2	0	7	4	4	1	1	0

Paraprofessionals’ perceptions of their effectiveness in supporting the emotional growth of students improved by the end of the study with all paraprofessionals rating themselves as effective. Teacher perceptions improved from two teachers rating paraprofessionals as effective at the beginning to eight teachers by the end. Likewise, administrators’ perceptions improved by the end of the study as well.

Interpretation of the Data Analysis Process

The researcher attempted to design a study that would provide several sources of data to support answering the research questions. As the researcher was analyzing the data collected, it was clear that three data collection methods (questionnaires, interviews, and observations) helped to paint a complete picture of the research questions in the

research district. While the data does sufficiently answer the research questions posed in this study, it also points to the need for further analysis of the effectiveness of paraprofessionals in the district. If the data are accurate, the researcher would anticipate that paraprofessionals will continue to implement the professional development that was provided to them during the 2019-2020 school year in future years as well.

The researcher triangulated data in this study through the collection of multiple data sets. According to Patton (1999), “It is possible to achieve triangulation within a qualitative inquiry strategy by combining different kinds of qualitative methods, mixing purposeful samples, and including multiple perspectives (1193).” Patton (1999) goes on to explain that methods triangulation is the process by which a researcher attempts to find out “the consistency of findings generated by different data collection methods (1193).” Through the collection of questionnaire data, interview data, and observation data, the researcher was able to apply methods triangulation to the study by examining whether the data collected through each method provided consistent results in the study. Using multiple methods of data collection also ensured that participants had the opportunity to provide complete answers to the questions asked in this study.

Summary and Transition

The data collected provides answers to the original research questions posed as part of this study. However, it is important to keep in mind that this data is reflective of the particular context of the research district and the school year in question. Not all school years function the same. Student needs may differ from year to year, as does the scheduling of paraprofessional support. Therefore, while this study presents data from

the 2019-2020 school year, the researcher will make generalizations in the next chapter that are applicable to every school year.

CHAPTER V

Conclusions and Recommendations

Introduction

This research study was enlightening to the researcher in several ways. It was clear, as will be discussed more below, that professional development for paraprofessionals does impact teacher and administrator perceptions of paraprofessional effectiveness. However, it is also clear that more professional development is necessary to continue improving the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of special education students.

With increased mandates from the Pennsylvania Department of Education to provide special education students with more inclusion opportunities, many schools utilize paraprofessionals to help support learning support and emotional support students. This research study sought to provide more effective and impactful professional development to special education paraprofessionals in order to improve their ability to support the academic, social, and emotional needs of students.

One potential benefit from this study is a more complete understanding of the professional development that is necessary for paraprofessionals to be effective in their roles. Given that many paraprofessionals do not have any type of advanced education, they may enter their position with little knowledge of education trends and special education best practices. As a result, paraprofessionals may engage in a trial and error approach to helping students be successful in their academic, social, and emotional lives. Developing a further understanding of the professional development needs of

paraprofessionals enables paraprofessionals to be more effective in their positions, thus helping the students to whom they are assigned be more successful as well.

This study also has the potential benefit of helping other districts plan professional development and refrain from unnecessary professional development for paraprofessionals. One goal of this study was to make recommendations for what types of professional development are essential for paraprofessionals. These recommendations will hopefully carry over to other districts as well, enabling those district to immediately begin to plan a professional development program without wasting time or money on ineffective professional development programs.

Conclusions

Based on the data collected in this research study, the researcher is able to return to the research questions in order to provide answers.

Question 1: What professional development topics for paraprofessionals are perceived as beneficial to effectively address the academic, emotional, and social needs of learning support students?

The data suggest that the paraprofessionals, teachers, and administrators identified several important professional development topics for learning support students. First, all groups identified the need for paraprofessionals to understand components of the IEP and the IEP process in order to address the academic, emotional, or social needs of learning support students. Making accommodations and modifications for students also appeared consistently among all three groups as an academic professional development topic that would benefit paraprofessionals. Likewise, all three participant groups indicated that paraprofessionals needed specific academic strategies such as those covered during the

professional development process in order to be effective at addressing the academic needs of learning support students.

The professional development topics related to the social growth of learning support students were narrower. Paraprofessionals did not indicate the need for any social professional development topic for learning support students, but the researcher noted during the midyear observations that several of the social professional development topics that were covered were utilized by the paraprofessionals when working with both learning support and emotional support students. Teachers identified professional development related to the use of praise as an important topic to improve the social growth of learning support students. And, administrators noted the need for professional development related to the collecting of social data as a beneficial topic for paraprofessionals.

Like the social professional development category, the emotional professional development topics for learning support students was limited. Only paraprofessionals themselves indicated that non-verbal and para-verbal strategies was an emotional professional development topic that would benefit learning support students. Teacher participants and administrator participants did not indicate the need for professional development related to the emotional needs of learning support students.

Question 2: What professional development topics for paraprofessionals are perceived as beneficial to effectively address the academic, emotional, and social needs of emotional support students?

First and foremost, the data suggest that paraprofessionals must first understand the differences between learning support and emotional support students in order to

effectively address the academic, emotional, and social needs of either population of students. A reoccurring theme in both the teacher and administrator questionnaires and interviews was the perception that paraprofessionals did not approach learning support students differently than they approached emotional support students. That is, paraprofessionals did not change their approach when working with a learning support student compared to working with an emotional support students. As such, the paraprofessionals often employed strategies that were not effective with emotional support students resulting in lower ratings on their ability to effectively address the growth of students.

Participants identified that the most pressing academic professional development topic for paraprofessionals when working with emotional support students was understanding accommodations and modifications. Along with that, paraprofessionals must understand different types of accommodations and modifications to use them effectively with emotional support students. It was also noted that it is important for paraprofessionals to understand how accommodations and modifications for a learning support student differ from accommodations and modifications for an emotional support student. Teacher participants indicated the need for paraprofessionals to understand their role in supporting the academic growth of emotional support students, and administrators identified the need for paraprofessionals to have professional development related to data collection and inclusion strategies.

There were significantly more professional development topics related to social growth that were identified as beneficial for emotional support students than there were for learning support students. Participants identified the use of social stories, praise, and

role play as beneficial topics to improve the social growth of emotional support students. While paraprofessionals identified the need for data collection related to social growth as important when working with emotional support students, administrators indicated that professional development related to social data collection was important for both emotional support and learning support students.

All participant groups identified the need for paraprofessionals to understand the types of emotional disturbances in order for them to effectively address the emotional needs of emotional support students. Likewise, specific strategies to work with emotional support students to improve their emotional growth was identified as a beneficial professional development topic.

Question 3: Is there a difference in the perception of paraprofessionals' professional development needs between paraprofessionals, teachers, and administrators?

Perceptual differences do exist between the professional development needs of paraprofessionals, teachers, and administrators. Particularly at the beginning of the study, the perceptions between each group were very different. Paraprofessionals themselves indicated only a few professional development topics that were necessary to support the academic, social, and emotional growth of learning support and emotional support students. Teacher and administrator participants indicated more professional development topics in each of these areas. These perceptions still exhibited differences at the end of the study among the three participant groups but there was more consistency in participant responses on the midyear questionnaire and interview than at the beginning. The lack of professional development suggestions by paraprofessionals at the beginning of the study may be explained through an understanding that paraprofessionals may not

have known what they did not know. In other words, paraprofessionals were unable to provide many specific suggestions for professional development topics because they were unaware of what professional topics would benefit them. Likewise, teacher and administrator suggestions of professional development topics were certainly influenced by what they observed the paraprofessional do, which likely was not a complete picture of the paraprofessionals' performance. Teachers had a narrow view of the work paraprofessionals did with students because much of their attention was focused on the students with whom they were working rather than on the students with whom the paraprofessional was working. Administrators' perceptions were equally, if not more limited than teachers, due to the fact that they spent less time with paraprofessionals than teachers did.

There was more consistency in professional development needs at the end of the study than at the beginning. This is likely due to the fact that paraprofessionals were more explicit about talking about the strategies they were using with learning support and emotional support students after having received professional development than they were at the beginning of the year. Because of this, the researcher believes that teachers were more likely to suggest similar professional development topics as paraprofessionals because teachers and paraprofessionals had discussed these topics previously.

Question 4: Do the perceptions of the effectiveness of paraprofessionals by paraprofessionals, teachers, and administrators change after paraprofessionals receive targeted professional development?

There are several instances where perceptions of the effectiveness of paraprofessionals by paraprofessionals, teachers, and administrators did change after the

paraprofessionals received targeted professional development. Middle/high school paraprofessionals had no change in their perception related to their effectiveness in supporting students' academic growth from the beginning of the study to the end. Elementary paraprofessionals' perception went down at the end of the study compared to the beginning. However, teacher and administrator perceptions both improved by the end of the study when asked about the effectiveness of paraprofessionals in supporting the academic growth of students.

Paraprofessionals, teachers, and administrators all recorded improved effectiveness ratings when asked to rate the paraprofessionals' ability to support the social growth of students at the end of the study. Similarly, all three respondent groups saw improved paraprofessional ratings when asked to rate the paraprofessionals' ability to support the emotional growth of students at the end of the study.

Overall, the researcher did feel the study was effective and that effectiveness is supported by the improvement of the participants' ratings. There were more ratings of effective at the conclusion of the study than at the beginning, suggesting that the professional development plan that was implemented was effective.

The data also suggest that more research should be done to explore the differences in how middle/high school paraprofessionals support the academic, social, and emotional growth of learning support and emotional support students compared to how elementary paraprofessionals do so. Differences in building procedures, classroom dynamics, and special education programming at the elementary school and middle/high school were not addressed in this research study, though those factors may impact the ability of

paraprofessionals to effectively support the growth of learning support and emotional support students.

Application to district

This research study has several applications to the research district. First, it points to the need for targeted professional development for paraprofessionals to continue in future school years. As was referenced by several participants in the end-of-year interviews, the professional development topics that were discussed during this research study must be continually reinforced in future professional development trainings. In particular, the 2019-2020 school year, which is when this research study was conducted, was impacted by the closure of schools due to the Covid-19 pandemic. As a result, paraprofessionals were not engaged in directly working with students for almost one-fourth of the school year as a result of the closure. They lost the opportunity to continue to practice the strategies that were addressed during the professional development plan and will likely need refreshers on these topics at the start of the 2020-2021 school year.

There must also be opportunity for paraprofessionals and teachers to jointly engage in professional development related to how paraprofessionals can be support the academic, social, and emotional growth of learning support and emotional support students. As was the case in the past, and during this research study, the professional development for paraprofessionals is often separate from the professional development of teachers. In order to effectively improve the ability of paraprofessionals to support students, particularly in the regular education classroom, it will be necessary for paraprofessionals and teachers to engage in professional development together. Not only will this ensure that paraprofessionals and teachers share a common understanding of the

strategies that were covered as part of the professional development program, but it will enable paraprofessionals and teachers to engage in dialogue about specific students in the classroom and how best to support their individual needs.

This study also raises several important questions regarding whether or not simply adding paraprofessionals to the district is enough to support the academic, social, and emotional growth of special education students. As was discussed earlier, the research district has added several paraprofessional positions in the last few years in order to address the Commonwealth of Pennsylvania's emphasis on inclusive education for all students. While the need for some paraprofessional support cannot be denied, the district must examine whether simply adding paraprofessional support is enough to ensure student success.

Moving forward, the district must consider a process to survey and assess paraprofessionals when hired in order to determine their professional development needs. The research district generally waits to provide professional development until after the individual has been hired and started working. In order to ensure the effectiveness of paraprofessionals, the district should consider an initial professional development program for new paraprofessionals that will provide some general skills that will be essential to the paraprofessional. Given that paraprofessionals in the district do not need to have a college degree or background in education, this initial professional development program will be essential to ensuring that new hires have a basic set of skills that will enable them to do their job more effectively.

Along with this, the district should consider an orientation program for all new paraprofessional hires. Currently, the research district does not hold any type of formal

orientation for new paraprofessional hires, and it does not put them through any type of mentorship program when they are hired. It is assumed that the paraprofessional will work with the classroom teachers to whom they are assigned in order to acclimate to the district. Moving forward, the district should consider an orientation program and mentorship program for paraprofessionals just as it does with new teachers.

Another implication for the district is the consideration of adding common planning time for teachers and paraprofessionals. As the researcher observed during the beginning-of-year and midyear observations, many paraprofessionals were told their daily tasks at the beginning of the period, leaving little time for the paraprofessional to become familiar with the required tasks or materials. The addition of common planning time for teachers and paraprofessionals would allow greater dialogue between both staff members and would increase the paraprofessional's ability to prepare for the tasks that were assigned. It will provide the paraprofessional the opportunity to become familiar with the content that is to be covered during the class period and to consider which strategies may be most effective when working with students. This common planning time will also enable the paraprofessional and teacher to discuss individual students' strengths and weaknesses and cooperatively plan how to best approach the student to ensure maximum success.

The focus on paraprofessional growth should not solely be placed on the paraprofessionals themselves. Instead, it is imperative for the district to provide professional development for regular and special education teachers on how to effectively manage and utilize paraprofessionals in the classroom setting. There may be an assumption that teachers know how to effectively manage paraprofessionals, but it is

likely that even recent graduates from teaching programs had little training in the use of paraprofessionals in the classroom. If paraprofessionals are going to be effective in their role, the classroom teacher, whether regular education or special education, must receive professional development on how to work effectively with the paraprofessionals assigned to their classroom. This professional development should be ongoing and may be tailored to the individual needs of the classroom setting. A paraprofessional assigned to work with special education kindergarten students in an elementary special education classroom will need different skills than a paraprofessional assigned to work with high school special education students in an inclusive biology course, for instance. As such, the professional development offered to classroom teachers should take into account the context of their classroom and the specific roles that paraprofessionals will be expected to complete in that classroom.

This research study also points to the need to provide paraprofessionals with more information about a student's IEP. Several paraprofessionals shared with the researcher that they had not seen an IEP before and had little knowledge of the accommodations and modifications that were mandated for the students with whom they work. If paraprofessionals are going to be effective in their roles, they must be informed of the specific IEP requirements for each student and permitted time to review and understand not only the student's unique educational, social, or emotional needs that are outlined in that IEP, but also the specific accommodations and modifications that must be afforded to that student.

Finally, this study points to the need for a formal evaluation process for paraprofessionals. Given the discrepancy between how the paraprofessionals rated

themselves and how teachers and administrators rated the paraprofessionals in this study, an evaluation process for the paraprofessionals would enable dialogue with paraprofessionals about their performance and how it is viewed by teachers and administrators. An evaluation process did not exist at the start of this study, and paraprofessionals were the only staff members who worked directly with students who did not have a formal evaluation process. Much like the teacher evaluation process, the district should consider an evaluation process that enables conversation between the supervisor and the paraprofessional and that allows feedback from the classroom teachers on the paraprofessional's performance.

Fiscal implications

There are several fiscal implications to this research study. First, the district must continue to explore whether or not the paraprofessionals currently employed in the district result in academic, social, or emotional improvement in students. If further study supports the idea that paraprofessionals do help students improve academically, socially, or emotionally, then the district should feel confident that the financial investment in these positions is justified. However, if future study does not support the idea that paraprofessionals help students improve academically, socially, or emotionally, the district must consider whether its financial investment would be more effectively spent elsewhere. Ultimately, this decision may need to take into account the individual paraprofessional themselves, rather than attempting to make a generalization about the effectiveness of the paraprofessional. As was noted in Chapter IV, the researcher observed one paraprofessional complete a puzzle during the class period while the regular education teacher taught a whole-group lesson. Certainly, this paraprofessional had little

impact on the educational growth of students during that period. While this may be an isolated incident, it does point to the need for the district to consider whether or not paraprofessionals could be better used elsewhere during the day or if there should be an alternate location for them to report to if their assistance is not needed during the class period.

The researcher also believes that it may be necessary to provide additional targeted professional development for paraprofessionals which may require the district budget funds for this professional development. While this research study was able to provide the professional development at no cost to the district, the district may consider bringing in outside speakers and trainers to continue to build on the professional development plan that was started as part of this study.

Finally, paraprofessionals in the district are paid hourly rates. If the district continues to provide professional development to paraprofessionals every scheduled professional development day, the district must budget for the additional salary cost that will be associated with having the paraprofessionals attend. Currently, paraprofessionals are only contractually obligated to attend two of the scheduled professional development days. If a paraprofessional professional development schedule is developed that mimics the teacher professional development schedule, the district will need to allocate more money towards paraprofessional salaries than it has in the past.

Future Directions for Research

This research study provided the researcher with valuable data that will impact the district's future paraprofessional professional development plans. The researcher intends to utilize a similar questionnaire as found in Appendices J and K to start each school year

in order to provide additional data to help improve the district's paraprofessional professional development plan. The researcher also believes it is necessary to continue to explore the effectiveness of paraprofessionals and proposes the following suggested research topics.

Suggested future research topics

First, this study focused on how targeted professional development for paraprofessionals impacted the perception of paraprofessionals, teachers, and administrators. A logical extension of this study would be to explore whether or not professional development for teachers and administrators on the role of the paraprofessional or how to effectively work with a paraprofessional in the classroom would also impact their perceptions of the paraprofessionals' effectiveness.

Second, as noted above, research must be conducted to determine the actual impact the paraprofessional has on the academic, social, and emotional growth of learning support and emotional support students. While this study focused on perceptions of that effectiveness, future research should focus on collecting quantifiable data which either supports or rejects the notion that paraprofessionals have a positive impact on the growth of special education students.

Third, more research should be conducted to determine whether or not paraprofessionals are equally effective when working with elementary students, middle school students, and high school students. As noted in some of the teacher interviews as part of this study, paraprofessionals may struggle with advanced content knowledge and be unable to help special education students with content questions in the middle or high school settings. Exploring whether or not the impact of paraprofessional support can be

measured at all levels of K-12 education can provide districts with an understanding of where best to utilize paraprofessional support.

Conclusion

This research study supports the notion that targeted professional development does impact the perceptions of paraprofessionals, teachers, and administrators toward the effectiveness of paraprofessionals in supporting the academic, social, and emotional growth of students. While this study was specific to the research district, other districts may benefit from the data collected and the questionnaires and semi-structured interview questions in order to improve or implement their own paraprofessional professional development plan. While there are many more research questions that should be explored before determining the effectiveness of paraprofessionals, this study does contribute to the body of literature related to the effectiveness of paraprofessionals when working with special education students.

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APPENDICES

Appendix A

Institutional Review Board Approval Email

Re: IRB Approval w/ Stipulation (18-071)

InstReviewBoard <instreviewboard@calu.edu>

Tue 8/6/2019 10:07 AM

To: ODO9382 - O'DONNELL, SCOTT L <ODO9382@calu.edu>

Scott,

Your study is officially approved and you may begin data collection. Thank you.

Alexa Ponick
Institutional Review Board - Graduate Assistant
California University of Pennsylvania

From: ODO9382 - O'DONNELL, SCOTT L <ODO9382@calu.edu>

Sent: Tuesday, August 6, 2019 1:19 AM

To: InstReviewBoard <instreviewboard@calu.edu>

Cc: Wolf, Mary <wolf@calu.edu>

Subject: Re: IRB Approval w/ Stipulation (18-071)

Good morning,

Attached, please find my revised IRB application with the stipulations fixed for your records.

Thank you!

From: InstReviewBoard <instreviewboard@calu.edu>

Sent: Monday, August 5, 2019 9:54 PM

To: ODO9382 - O'DONNELL, SCOTT L <ODO9382@calu.edu>

Cc: Wolf, Mary <wolf@calu.edu>

Subject: IRB Approval w/ Stipulation (18-071)

Dear Scott,

Your study has been conditionally approved by the IRB. Once the revisions are made, resubmitted, and received by the IRB you may immediately begin data collection. Please see the attached form for further information. Thank you.

Alexa Ponick
Institutional Review Board - Graduate Assistant
California University of Pennsylvania

Appendix B

Institutional Review Board Approval

**Institutional Review Board
California University of Pennsylvania
Morgan Hall, Room 310
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.**

Dear Scott,

Please consider this email as official notification that your proposal titled "Perceptions of Special Education Paraprofessionals' Effectiveness in Supporting the Academic, Social, and Emotional Needs of Special Education Students and Recommendations for Paraprofessional Professional Development Topics" (Proposal #18-071) has been approved by the California University of Pennsylvania Institutional Review Board as amended with the following stipulation:

Throughout the document the research states that the information will be kept anonymous, and then switches over to use of the term confidential. So I think the author will have to collect names to sync up data from focus groups, surveys, etc and that totally anonymous data collection isn't really possible with audio recordings, etc. So the PI should go back through and remove anonymous and state that research records will be kept confidential. Then this study can be approved, it looks very thorough and interesting!

Once you have completed the above request you may immediately begin data collection. You do not need to wait for further IRB approval. At your earliest convenience, you must forward a copy of the changes for the Board's records.

The effective date of the approval is 8/5/19 and the expiration date is 8/4/20. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

- (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
- (2) Any events that affect the safety or well-being of subjects
- (3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
- (4) To continue your research beyond the approval expiration date of 8/4/20 you must file additional information to be considered for continuing review. Please contact instreviewboard@cup.edu. Please notify the Board when data collection is complete.

Regards,
Melissa Sovak, Ph.D.
Chair, Institutional Review Board

Appendix C

Beginning of Year/Midyear Questionnaire for Paraprofessionals Disclosure

I am conducting a study to investigate the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of learning support and emotional support students and whether those paraprofessionals have been provided with the necessary professional development to adequately support the academic, social, and emotional needs of learning support and emotional support students.

In this study, you will be asked to answer questions regarding your perceptions of paraprofessional effectiveness in supporting the academic, social, and emotional needs of learning support and emotional support students. You will also be asked about your perceptions of the professional development that paraprofessionals have been provided in the past, and what areas of professional development you believe are necessary to improve the effectiveness of paraprofessionals to support the academic, social, and emotional needs of learning support and emotional support students.

I will also collect information to describe you such as your primary building location, years in your current position, highest educational level achieved, and the type of classroom in which you work.

You have been selected to participate in this study due to your role as a paraprofessional in the Union Area School District.

You will be asked to participate in a survey that will take approximately 10 to 15 minutes to complete. The survey is distributed and collected via Google Forms. Participants are also asked to engage in selected response and open-ended questions. There is no potential harm to those surveyed as the exploratory research data will be kept confidential.

The potential benefits to you from being in this study are varied and provide both short and long term assistance to the district. One such possible benefit is the improvement of the professional development program for paraprofessionals.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the research study in a way that will not identify you. I do plan to present the results of the study as a published study and potentially in journals or periodicals.

You do not have to be in this study. If you don't want to participate, please do not complete the survey. If you do agree, you can stop participating at any time. If you wish to withdraw just tell me. Otherwise, by clicking continue, you are giving your consent to participate in this questionnaire.

Appendix C (cont'd.)

Beginning of Year/Midyear Questionnaire for Paraprofessionals Disclosure

If you have questions about this research project please contact Mr. Scott O'Donnell at 724-658-4501 or California University of PA Assistant Professor, Dr. Wolf at wolf@calu.edu.

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/05/19 and expires 08/04/20.

By clicking continue, you agree to participate in this questionnaire.

Appendix D

Beginning of Year/Midyear Questionnaire for Teachers Disclosure

I am conducting a study to investigate the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of learning support and emotional support students and whether those paraprofessionals have been provided with the necessary professional development to adequately support the academic, social, and emotional needs of learning support and emotional support students.

In this study, you will be asked to answer questions regarding your perceptions of paraprofessional effectiveness in supporting the academic, social, and emotional needs of learning support and emotional support students. You will also be asked about your perceptions of the professional development that paraprofessionals have been provided in the past, and what areas of professional development you believe are necessary to improve the effectiveness of paraprofessionals to support the academic, social, and emotional needs of learning support and emotional support students.

I will also collect information to describe you such as your primary building location, years in your current position, and the type of classroom in which you work.

You have been selected to participate in this study due to your role as a teacher who works with paraprofessionals in the Union Area School District.

You will be asked to participate in a survey that will take approximately 10 to 15 minutes to complete. The survey is distributed and collected via Google Forms. Participants are also asked to engage in selected response and open-ended questions. There is no potential harm to those surveyed as the exploratory research data will be kept confidential.

The potential benefits to you from being in this study are varied and provide both short and long term assistance to the district. One such possible benefit is the improvement of the professional development program for paraprofessionals.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the research study in a way that will not identify you. I do plan to present the results of the study as a published study and potentially in journals or periodicals.

You do not have to be in this study. If you don't want to participate, please do not complete the survey. If you do agree, you can stop participating at any time. If you wish to withdraw just tell me. Otherwise, by clicking continue, you are giving your consent to participate in this questionnaire.

Appendix D, continued

Beginning of Year/Midyear Questionnaire for Teachers Disclosure

If you have questions about this research project please contact Mr. Scott O'Donnell at 724-658-4501 or California University of PA Assistant Professor, Dr. Wolf at wolf@calu.edu.

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/05/19 and expires 08/04/20.

By clicking continue, you agree to participate in this questionnaire.

Appendix E

Beginning of Year/Midyear Questionnaire for Administrators Disclosure

I am conducting a study to investigate the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of learning support and emotional support students and whether those paraprofessionals have been provided with the necessary professional development to adequately support the academic, social, and emotional needs of learning support and emotional support students.

In this study, you will be asked to answer questions regarding your perceptions of paraprofessional effectiveness in supporting the academic, social, and emotional needs of learning support and emotional support students. You will also be asked about your perceptions of the professional development that paraprofessionals have been provided in the past, and what areas of professional development you believe are necessary to improve the effectiveness of paraprofessionals to support the academic, social, and emotional needs of learning support and emotional support students.

You have been selected to participate in this study due to your role as an administrator in the Union Area School District.

You will be asked to participate in a survey that will take approximately 10 to 15 minutes to complete. The survey is distributed and collected via Google Forms. Participants are also asked to engage in selected response and open-ended questions. There is no potential harm to those surveyed as the exploratory research data will be kept confidential.

The potential benefits to you from being in this study are varied and provide both short and long term assistance to the district. One such possible benefit is the improvement of the professional development program for paraprofessionals.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the research study in a way that will not identify you. I do plan to present the results of the study as a published study and potentially in journals or periodicals.

You do not have to be in this study. If you don't want to participate, please do not complete the survey. If you do agree, you can stop participating at any time. If you wish to withdraw just tell me. Otherwise, by clicking continue, you are giving your consent to participate in this questionnaire.

Appendix E (cont'd.)

Beginning of Year/Midyear Questionnaire for Administrators Disclosure

If you have questions about this research project please contact Mr. Scott O'Donnell at 724-658-4501 or California University of PA Assistant Professor, Dr. Wolf at wolf@calu.edu.

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/05/19 and expires 08/04/20.

By clicking continue, you agree to participate in this questionnaire.

Appendix F**Semi-Structured Interview for Paraprofessionals – Beginning of Year/Midyear Disclosure**

I am conducting a study to investigate the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of learning support and emotional support students and whether those paraprofessionals have been provided with the necessary professional development to adequately support the academic, social, and emotional needs of learning support and emotional support students.

In this study, you will be asked to answer questions regarding your perceptions of paraprofessional effectiveness in supporting the academic, social, and emotional needs of learning support and emotional support students. You will also be asked about your perceptions of the professional development that paraprofessionals have been provided in the past, and what areas of professional development you believe are necessary to improve the effectiveness of paraprofessionals to support the academic, social, and emotional needs of learning support and emotional support students.

You have been selected to participate in this study due to your role as a paraprofessional.

You will be asked a series of questions in this interview related to my research topic. If all participants agree, the interview will be electronically recorded for my records. If any participant does not want to be recorded, detailed notes of the interview will be kept instead. Each of you will be assigned a respondent number for the purpose of this interview and future interviews. This respondent number will in no way provide personally identifying information. Instead, it will enable me to compare your responses from this interview to responses to future interviews. There is no potential harm to those surveyed as the exploratory research data will be kept confidential.

The potential benefits to you from being in this study are varied and provide both short and long term assistance to the district. One such possible benefit is the improvement of the professional development program for paraprofessionals.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the research study in a way that will not identify you. I do plan to present the results of the study as a published study and potentially in journals or periodicals.

You do not have to be in this study. If you don't want to participate, please let me know now. If you do agree, you can stop participating at any time. If you wish to withdraw just tell me.

Appendix F (cont'd.)

Semi-Structured Interview for Paraprofessionals – Beginning of Year/Midyear Disclosure

If you have questions about this research project please contact Mr. Scott O'Donnell at 724-658-4501 or California University of PA Assistant Professor, Dr. Wolf at wolf@calu.edu.

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/05/19 and expires 08/04/20.

By signing below, you agree to participate in this interview for the purpose of this research study.

Signature

Printed Name

Date

Appendix G

Semi-Structured Interview for Teachers– Beginning of Year/Midyear Disclosure

I am conducting a study to investigate the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of learning support and emotional support students and whether those paraprofessionals have been provided with the necessary professional development to adequately support the academic, social, and emotional needs of learning support and emotional support students.

In this study, you will be asked to answer questions regarding your perceptions of paraprofessional effectiveness in supporting the academic, social, and emotional needs of learning support and emotional support students. You will also be asked about your perceptions of the professional development that paraprofessionals have been provided in the past, and what areas of professional development you believe are necessary to improve the effectiveness of paraprofessionals to support the academic, social, and emotional needs of learning support and emotional support students.

You have been selected to participate in this study due to your role as a teacher who works with paraprofessionals in the Union Area School District.

You will be asked a series of questions in this interview related to my research topic. If you agree, the interview will be electronically recorded for my records. If you do not wish to be recorded, detailed notes of the interview will be kept instead. Each of you will be assigned a respondent number for the purpose of this interview and future interviews. This respondent number will in no way provide personally identifying information. Instead, it will enable me to compare your responses from this interview to responses to future interviews. There is no potential harm to those surveyed as the exploratory research data will be kept confidential.

The potential benefits to you from being in this study are varied and provide both short and long term assistance to the district. One such possible benefit is the improvement of the professional development program for paraprofessionals.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the research study in a way that will not identify you. I do plan to present the results of the study as a published study and potentially in journals or periodicals.

You do not have to be in this study. If you don't want to participate, please let me know now. If you do agree, you can stop participating at any time. If you wish to withdraw just tell me.

Appendix G (cont'd.)

Semi-Structured Interview for Teachers– Beginning of Year/Midyear Disclosure

If you have questions about this research project please contact Mr. Scott O'Donnell at 724-658-4501 or California University of PA Assistant Professor, Dr. Wolf at wolf@calu.edu.

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/05/19 and expires 08/04/20.

By signing below, you agree to participate in this interview for the purpose of this research study.

Signature

Printed Name

Date

Appendix H

Semi-Structured Interview for Administrators– Beginning of Year/Midyear Disclosure

I am conducting a study to investigate the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of learning support and emotional support students and whether those paraprofessionals have been provided with the necessary professional development to adequately support the academic, social, and emotional needs of learning support and emotional support students.

In this study, you will be asked to answer questions regarding your perceptions of paraprofessional effectiveness in supporting the academic, social, and emotional needs of learning support and emotional support students. You will also be asked about your perceptions of the professional development that paraprofessionals have been provided in the past, and what areas of professional development you believe are necessary to improve the effectiveness of paraprofessionals to support the academic, social, and emotional needs of learning support and emotional support students.

You have been selected to participate in this study due to your role as an administrator in the Union Area School District.

You will be asked a series of questions in this interview related to my research topic. If you agree, the interview will be electronically recorded for my records. If you do not wish to be recorded, detailed notes of the interview will be kept instead. Each of you will be assigned a respondent number for the purpose of this interview and future interviews. This respondent number will in no way provide personally identifying information. Instead, it will enable me to compare your responses from this interview to responses to future interviews. There is no potential harm to those surveyed as the exploratory research data will be kept confidential.

The potential benefits to you from being in this study are varied and provide both short and long term assistance to the district. One such possible benefit is the improvement of the professional development program for paraprofessionals.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the research study in a way that will not identify you. I do plan to present the results of the study as a published study and potentially in journals or periodicals.

You do not have to be in this study. If you don't want to participate, please let me know now. If you do agree, you can stop participating at any time. If you wish to withdraw just tell me.

Appendix H (cont'd.)

Semi-Structured Interview for Administrators– Beginning of Year/Midyear Disclosure

If you have questions about this research project please contact Mr. Scott O'Donnell at 724-658-4501 or California University of PA Assistant Professor, Dr. Wolf at wolf@calu.edu.

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/05/19 and expires 08/04/20.

By signing below, you agree to participate in this interview for the purpose of this research study.

Signature

Printed Name

Date

Appendix I

Classroom Observation Data Collection Tool Disclosure

I am conducting a study to investigate the effectiveness of paraprofessionals in supporting the academic, social, and emotional needs of learning support and emotional support students and whether those paraprofessionals have been provided with the necessary professional development to adequately support the academic, social, and emotional needs of learning support and emotional support students.

In this study, classroom observations will be conducted that are designed to track the academic, social, and emotional strategies you use with students. A tally sheet and observer notes will be kept during the observation that track the type of strategy use, the category of strategy used, and whether that strategy resulted in the desired outcome. No identifying information about you will be collected as part of the study. No information about students will be collected at any point in the study.

You have been selected to participate in this study due to your role as a paraprofessional in the Union Area School District.

There is no potential harm to those surveyed as the exploratory research data will be kept confidential. The potential benefits to you from being in this study are varied and provide both short and long term assistance to the district. One such possible benefit is the improvement of the professional development program for paraprofessionals.

Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the research study in a way that will not identify you. I do plan to present the results of the study as a published study and potentially in journals or periodicals.

You do not have to be in this study. If you don't want to participate, please let me know now. If you do agree, you can stop participating at any time. If you wish to withdraw just tell me. If you have questions about this research project please contact Mr. Scott O'Donnell at 724-658-4501 or California University of PA Assistant Professor, Dr. Wolf at wolf@calu.edu.

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 08/05/19 and expires 08/04/20.

By signing below, you agree to participate in this observation for the purpose of this research study.

Signature

Printed Name

Date

Appendix J

Beginning of Year/Midyear Questionnaire for Paraprofessionals

1. Please select the building(s) you are assigned to work in (select all that apply)
 - A. Elementary
 - B. Middle School
 - C. High School

2. Please select your primary role (select one)
 - A. Learning Support Paraprofessional
 - B. Emotional Support Paraprofessional

3. Please indicate the number in years (rounded to the nearest number) you have worked in the role you selected in #2:
 - A. 0-2 years
 - B. 3-5 years
 - C. 6-8 years
 - D. 9-11 years
 - E. 12-13 years
 - F. 14-16 years
 - G. 17-19 years
 - H. 20-22 years
 - I. 23-25 years
 - J. 26 or more years

4. In thinking about your performance working in the classroom setting, how would you rate your overall effectiveness in helping the students you are assigned to work with improve academically? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

5. In thinking about your performance working in the classroom setting, how would you rate your overall effectiveness in helping the students you are assigned to work with improve socially? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

Appendix J (cont'd.)

Beginning of Year/Midyear Questionnaire for Paraprofessionals

6. In thinking about your performance working in the classroom setting, how would you rate your overall effectiveness in helping the students you are assigned to work with improve emotionally? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

7. How do you think classroom teachers would generally rate your overall effectiveness in helping the students you are assigned to work with improve academically? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

8. What factors made you answer Question #6 as you did? (free text response)

9. In thinking about the professional development you have received over the last year (for beginning of year survey)/over this year (for midyear survey), how would you rate the helpfulness of that professional development in improving your job performance? (Select one)
 - A. Very helpful in improving my job performance
 - B. Somewhat helpful in improving my job performance
 - C. Neither helpful or unhelpful in improving my job performance
 - D. Somewhat unhelpful in improving my job performance
 - E. Very unhelpful in improving my job performance

10. What professional development topics would you like to participate in this school year in order to improve your ability to help learning support students improve academically? How about emotional support students? If none, please type none. If unsure, please type unsure. (free text response)

11. What professional development topics would you like to participate in this school year in order to improve your ability to help learning support students improve socially? How about emotional support students? If none, please type none. If unsure, please type unsure. (free text response)

Appendix J (cont'd.)

Beginning of Year/Midyear Questionnaire for Paraprofessionals

12. What professional development topics would you like to participate in this school year in order to improve your ability to help learning support students improve emotionally? How about emotional support students? If none, please type none. If unsure, please type unsure. (free text response)
13. What strategies do you utilize to help improve the academic growth of students with whom you are assigned to work in the classroom setting? If none, please type none. If unsure, please type unsure. (free text response)
14. What strategies do you utilize to help improve the social growth of students with whom you are assigned to work in the classroom setting? If none, please type none. If unsure, please type unsure. (free text response)
15. What strategies do you utilize to help improve the emotional growth of students with whom you are assigned to work in the classroom setting? If none, please type none. If unsure, please type unsure. (free text response)
16. What is the highest level of education you have received?
 - A. High School Diploma
 - B. Some College
 - C. Associate's Degree
 - D. Bachelor's Degree

Appendix K

Beginning of Year/Midyear Questionnaire for Teachers

1. Please select the building(s) you are assigned to work in (select all that apply)
 - A. Elementary
 - B. Middle School
 - C. High School

2. Please select your primary role (select one)
 - A. Regular Education Teacher
 - B. Special Education Teacher

3. Please indicate the number in years (rounded to the nearest number) you have worked in the role you selected in #2:
 - A. 0-2 years
 - B. 3-5 years
 - C. 6-8 years
 - D. 9-11 years
 - E. 12-13 years
 - F. 14-16 years
 - G. 17-19 years
 - H. 20-22 years
 - I. 23-25 years
 - J. 26 or more years

4. In thinking about the overall performance of the paraprofessional(s) working in your classroom, how would you rate his/her/their effectiveness in helping the students you are assigned to work with improve academically? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

5. In thinking about the overall performance of the paraprofessional(s) working in your classroom, how would you rate his/her/their effectiveness in helping the students they are assigned to work with improve socially? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

Appendix K (cont'd.)

Beginning of Year/Midyear Questionnaire for Teachers

6. In thinking about the overall performance of the paraprofessional(s) working in your classroom, how would you rate his/her/their effectiveness in helping the students they are assigned to work with improve emotionally? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

7. How do you think the paraprofessional(s) would generally rate his/her/their overall effectiveness in helping the students he/she/they are assigned to work with improve academically? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

8. What factors made you answer Question #6 as you did? (free text response)

9. In thinking about the professional development the paraprofessional(s) has/have received over the last year (for beginning of year survey)/over this year (for midyear survey), how would you rate the helpfulness of that professional development in improving the paraprofessional's job performance? (Select one)
 - A. Very helpful in improving job performance
 - B. Somewhat helpful in improving job performance
 - C. Neither helpful or unhelpful in improving job performance
 - D. Somewhat unhelpful in improving job performance
 - E. Very unhelpful in improving job performance

10. What professional development topics would you like the paraprofessionals to participate in this school year in order to improve their ability to help learning students improve academically? How about emotional support students? If none, please type none. If unsure, please type unsure. (free text response)

11. What professional development topics would you like the paraprofessionals to participate in this school year in order to improve their ability to help learning support students improve socially? How about emotional support students? If none, please type none. If unsure, please type unsure. (free text response)

Appendix K (cont'd.)

Beginning of Year/Midyear Questionnaire for Teachers

12. What professional development topics would you like the paraprofessionals to participate in this school year in order to improve their ability to help learning support students improve emotionally? How about emotional support students? If none, please type none. If unsure, please type unsure. (free text response)
13. What strategies do you see paraprofessionals utilize to help improve the academic growth of students with whom they are assigned to work in the classroom setting? If none, please type none. If unsure, please type unsure. (free text response)
14. What strategies do you see paraprofessionals utilize to help improve the social growth of students with whom they are assigned to work in the classroom setting? If none, please type none. If unsure, please type unsure. (free text response)
15. What strategies do you see paraprofessionals utilize to help improve the emotional growth of students with whom they are assigned to work in the classroom setting? If none, please type none. If unsure, please type unsure. (free text response)

Appendix L

Semi-Structured Interview for Paraprofessionals – Beginning of Year

Please Note: Additional clarifying questions or questions to solicit more information about a participant's answer may be asked depending on the participant's response. The clarifying questions or requests for more information will remain within the scope of this research study.

Opening: Thank you for taking some time with me to talk about the questionnaire that you completed and sharing your thoughts on the professional development needs for the paraprofessionals. My goal in this research study is to determine whether or not you as paraprofessionals have been given all the necessary professional development to effectively carry out your jobs and help students improve academically, socially, and emotionally. Your honest answers to these questions are certainly appreciated and will help me answer my research questions. At no time will I ever provide identifying information in my research study.

1. Please share with me your thoughts on the professional development you received last school year. What did you find to be the most beneficial from that professional development?
 - 1a. What made it the most beneficial?
2. What did you find to be the least beneficial from the professional development you received last school year?
 - 2a. What made it the most least beneficial?
3. Do you feel that professional development for paraprofessionals is given much attention in this district?
 - 3a. Can you explain why you think that?
4. What specific professional development areas do you feel you would benefit from having to help improve your ability to help your students improve academically?
5. What specific professional development areas do you feel you would benefit from having to help improve your ability to help your students improve socially?
6. What specific professional development areas do you feel you would benefit from having to help improve your ability to help your students improve emotionally?
7. Are you given the opportunity to provide feedback or suggestions with regard to your professional development areas?
8. Do you have a preference for the mode of delivery for your professional development such as in-person, webinars, IU trainings, PaTTAN Trainings, online courses?

Appendix L (cont'd.)

Semi-Structured Interview for Paraprofessionals – Beginning of Year

- 8a. Why do you prefer that mode of delivery?
9. Think back to when you started your job as a paraprofessional. Were you given any training or professional development prior to beginning work?
10. Do you think that you've been given the training, tools, or resources to effectively help students improve academically? Why or why not?
11. Do you think that you've been given the training, tools, or resources to effectively help students improve socially? Why or why not?
12. Do you think that you've been given the training, tools, or resources to effectively help students improve emotionally? Why or why not?
13. What strategies do you think are most effective to help students improve academically?
14. What strategies do you think are most effective to help students improve socially?
15. What strategies do you think are most effective to help students improve emotionally?

Appendix M

Semi-Structured Interview for Teachers/Administrators– Beginning of Year

Please Note: Additional clarifying questions or questions to solicit more information about a participant's answer may be asked depending on the participant's response. The clarifying questions or requests for more information will remain within the scope of this research study.

Opening: Thank you for taking some time with me to talk about the questionnaire that you completed and sharing your thoughts on the professional development needs for the paraprofessionals. My goal in this research study is to determine whether or not the paraprofessionals who work in your classrooms have been given all the necessary professional development to effectively carry out their jobs and help students improve academically, socially, and emotionally. Your honest answers to these questions are certainly appreciated and will help me answer my research questions. At no time will I ever provide identifying information in my research study.

1. Please tell me how you rated the effectiveness of the paraprofessionals in your classroom and why you selected that rating.
 - 1a. What would make the paraprofessional more effective in your opinion?
2. What would say are the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' academic skills?
3. What would say are the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' social skills?
4. What would say are the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' emotional skills?
5. Do you think the paraprofessionals have the necessary professional develop to effectively work with students to improve the students' academic skills?
6. Do you think the paraprofessionals have the necessary professional develop to effectively work with students to improve the students' social skills?
7. Do you think the paraprofessionals have the necessary professional develop to effectively work with students to improve the students' emotional skills?
8. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's academic skills?

Appendix M (cont'd.)

Semi-Structured Interview for Teachers/Administrators– Beginning of Year

9. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's social skills?
10. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's emotional skills?

Appendix N

Beginning of Year/Midyear Questionnaire for Administrators

1. Please select the building(s) you are assigned to work in (select all that apply)
 - A. Elementary
 - B. Middle School
 - C. High School

2. Please indicate the number in years (rounded to the nearest number) you have worked in the role you selected in #2:
 - A. 0-2 years
 - B. 3-5 years
 - C. 6-8 years
 - D. 9-11 years
 - E. 12-13 years
 - F. 14-16 years
 - G. 17-19 years
 - H. 20-22 years
 - I. 23-25 years
 - J. 26 or more years

3. In thinking about the overall performance of the paraprofessional(s) working in your building(s), how would you rate his/her/their effectiveness in helping the students you are assigned to work with improve academically? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

4. In thinking about the overall performance of the paraprofessional(s) working in your building(s), how would you rate his/her/their effectiveness in helping the students you are assigned to work with improve socially? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

Appendix N (cont'd.)

Beginning of Year/Midyear Questionnaire for Administrators

5. In thinking about the overall performance of the paraprofessional(s) working in your building(s), how would you rate his/her/their effectiveness in helping the students you are assigned to work with improve emotionally? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

6. How do you think the paraprofessional(s) would generally rate his/her/their overall effectiveness in helping the students he/she/they are assigned to work with improve academically? (Select one)
 - A. Highly effective
 - B. Somewhat effective
 - C. Somewhat ineffective
 - D. Highly ineffective

7. What factors made you answer Question #6 as you did? (free text response)

8. In thinking about the professional development the paraprofessional(s) has/have received over the last year (for beginning of year survey)/over this year (for midyear survey), how would you rate the helpfulness of that professional development in improving the paraprofessional's job performance? (Select one)
 - A. Very helpful in improving job performance
 - B. Somewhat helpful in improving job performance
 - C. Neither helpful or unhelpful in improving job performance
 - D. Somewhat unhelpful in improving job performance
 - E. Very unhelpful in improving job performance

9. What professional development topics would you like the paraprofessionals to participate in this school year in order to improve their ability to help LS and ES students improve academically? (free text response)

10. What professional development topics would you like the paraprofessionals to participate in this school year in order to improve their ability to help LS and ES students improve socially? (free text response)

11. What professional development topics would you like the paraprofessionals to participate in this school year in order to improve their ability to help LS and ES students improve emotionally? (free text response)

Appendix N (cont'd.)

Beginning of Year/Midyear Questionnaire for Administrators

12. What strategies do you see paraprofessionals utilize to help improve the academic growth of students with whom they are assigned to work in the classroom setting? (free text response)
13. What strategies do you see paraprofessionals utilize to help improve the social growth of students with whom they are assigned to work in the classroom setting? (free text response)
14. What strategies do you see paraprofessionals utilize to help improve the emotional growth of students with whom they are assigned to work in the classroom setting? (free text response)

Appendix P

Semi-Structured Interview for Paraprofessionals – Midyear

Please Note: Additional clarifying questions or questions to solicit more information about a participant's answer may be asked depending on the participant's response. The clarifying questions or requests for more information will remain within the scope of this research study.

Opening: Thank you for taking some time with me to talk about the questionnaire that you completed and sharing your thoughts on the professional development needs for the paraprofessionals. My goal in this research study is to determine whether or not you as paraprofessionals have been given all the necessary professional development to effectively carry out your jobs and help students improve academically, socially, and emotionally. Your honest answers to these questions are certainly appreciated and will help me answer my research questions. At no time will I ever provide identifying information in my research study.

1. Please share with me your thoughts on the professional development you received this school year so far. What did you find to be the most beneficial from that professional development?
 - 1a. What made it the most beneficial?
2. What did you find to be the least beneficial from the professional development you received this school year?
 - 2a. What made it the most least beneficial?
3. At this time, do you feel that professional development for paraprofessionals is given more, less, or the same amount of attention in this district as it was last year?
 - 3a. Can you explain why you think that?
4. At this point in the school year what specific professional development areas do you feel you would benefit from having to help improve your ability to help your students improve academically?
 - 4a. Have these areas changed from the previous interview?
5. At this point in the school year what specific professional development areas do you feel you would benefit from having to help improve your ability to help your students improve socially?
 - 5a. Have these areas changed from the previous interview?

Appendix P (cont'd.)

Semi-Structured Interview for Paraprofessionals – Midyear

6. At this point in the school year what specific professional development areas do you feel you would benefit from having to help improve your ability to help your students improve emotionally?
- 6a. Have these areas changed from the previous interview?
7. Do you think that the professional development you've been given this school year has been helpful in improving your ability to help students improve academically? Why or why not?
8. Do you think that the professional development you've been given this school year has been helpful in improving your ability to help students improve socially? Why or why not?
9. Do you think that the professional development you've been given this school year has been helpful to improve your ability to help students improve emotionally? Why or why not?
10. What strategies do you think are most effective to help students improve academically?
11. What strategies do you think are most effective to help students improve socially?
12. What strategies do you think are most effective to help students improve emotionally?

Appendix Q

Semi-Structured Interview for Teachers – Midyear

Please Note: Additional clarifying questions or questions to solicit more information about a participant's answer may be asked depending on the participant's response. The clarifying questions or requests for more information will remain within the scope of this research study.

Opening: Thank you for taking some time with me to talk about the questionnaire that you completed and sharing your thoughts on the professional development needs for the paraprofessionals. My goal in this research study is to determine whether or not the paraprofessionals who work in your classrooms have been given all the necessary professional development to effectively carry out their jobs and help students improve academically, socially, and emotionally. Your honest answers to these questions are certainly appreciated and will help me answer my research questions. At no time will I ever provide identifying information in my research study.

1. Please tell me how you rated the effectiveness of the paraprofessionals in your classroom at the Midyear and why you selected that rating.
 - 1a. What would make the paraprofessional more effective in your opinion?
 - 1b. If the rating improved, what changes have you seen that have caused you to improve your rating?
2. Are there any changes to the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' academic skills?
3. Are there any changes to the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' social skills?
4. Are there any changes to the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' emotional skills?
5. Do you think the professional development that the paraprofessionals have received this year has improved their ability to work with students to improve the students' academic skills?
6. Do you think the professional development that the paraprofessionals have received this year has improved their ability to work with students to improve the students' social skills?
7. Do you think the professional development that the paraprofessionals have received this year has improved their ability to work with students to improve the students' emotional skills?

Appendix Q (cont'd)

Semi-Structured Interview for Teachers – Midyear

8. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's academic skills?
9. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's social skills?
10. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's emotional skills?

Appendix R

Semi-Structured Interview for Administrators– Midyear

Please Note: Additional clarifying questions or questions to solicit more information about a participant's answer may be asked depending on the participant's response. The clarifying questions or requests for more information will remain within the scope of this research study.

Opening: Thank you for taking some time with me to talk about the questionnaire that you completed and sharing your thoughts on the professional development needs for the paraprofessionals. My goal in this research study is to determine whether or not the paraprofessionals who work in your classrooms have been given all the necessary professional development to effectively carry out their jobs and help students improve academically, socially, and emotionally. Your honest answers to these questions are certainly appreciated and will help me answer my research questions. At no time will I ever provide identifying information in my research study.

1. Please tell me how you rated the effectiveness of the paraprofessionals in your building(s) at the Midyear and why you selected that rating.
 - 1a. What would make the paraprofessional more effective in your opinion?
 - 1b. If the rating improved, what changes have you seen that have caused you to improve your rating?
2. Are there any changes to the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' academic skills?
3. Are there any changes to the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' social skills?
4. Are there any changes to the biggest strengths and weaknesses you see when paraprofessionals work with students to improve the students' emotional skills?
5. Do you think the professional development that the paraprofessionals have received this year has improved their ability to work with students to improve the students' academic skills?
6. Do you think the professional development that the paraprofessionals have received this year has improved their ability to work with students to improve the students' social skills?
7. Do you think the professional development that the paraprofessionals have received this year has improved their ability to work with students to improve the students' emotional skills?

Appendix R (cont'd)

Semi-Structured Interview for Administrators– Midyear

8. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's academic skills?
9. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's social skills?
10. What professional development topics do you think are necessary for paraprofessionals in order to help improve their ability to work with students to improve the student's emotional skills?