IDENTIFYING TRAINING NEEDS OF EDUCATIONAL PARAPROFESSIONALS

by

CHRISTINE M. TAYLOR

A DISSERTATION

Presented to the Department of Educational Leadership
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Education

June 2008

University of Oregon Graduate School

Confirmation of Approval and Acceptance of Dissertation prepared by:

Christine Taylor

Title:

"Identifying Training Needs of Educational Paraprofessionals"

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Education degree in the Department of Educational Leadership by:

Diane Dunlap, Chairperson, Educational Leadership
Philip McCullum, Member, Educational Leadership
Kathleen Scalise, Member, Educational Leadership
Jean Stockard, Outside Member, Planning Public Policy & Mgmt

and Richard Linton, Vice President for Research and Graduate Studies/Dean of the Graduate School for the University of Oregon.

June 14, 2008

Original approval signatures are on file with the Graduate School and the University of Oregon Libraries.

An Abstract of the Dissertation of

Christine M. Taylor for the degree of Doctor of Education

in the Department of Educational Leadership to be taken June 2008

Title: IDENTIFYING TRAINING NEEDS OF EDUCATIONAL PARAPROFESSIONALS

Approved: _____
Dr. Diane Dunlap

Federal and state educational initiatives have required a change in the roles and responsibilities expected of paraprofessionals working within schools. The purpose of this research study was to identify and analyze the roles, responsibilities and related training needs of educational paraprofessionals who work with special education students in a general education environment. A survey instrument, the Paraeducator Inclusion Inventory (PII), was completed by 76 paraprofessionals who worked with special education students at least 10% of their work day. The survey assessed the five different categories of tasks (academic instruction, behavior/classroom management, parent contact, medical/healthcare issues, other) to which paraeducators are often assigned. The importance, frequency, and level of difficulty to acquire skills were addressed using a 5-point Likert scale. In addition, the PII was completed by 14 school administrators who supervised the educational paraprofessionals. Lastly, five

semistructured interviews were conducted with representative paraprofessionals who demonstrated on their completed PII that they had distinctive knowledge of the responsibilities and roles required of paraprofessionals. All surveys were conducted during the spring of 2007 in a Northwest public school district that serves students prekindergarten through 12th grade. This study found that there continues to be confusion regarding the roles and responsibilities of educational paraprofessionals. The study also found a strong need for specific and timely training of paraprofessionals in the areas of academic instruction, behavior management and supervision of students.

CURRICULUM VITAE

NAME OF AUTHOR: Christine M. Taylor

PLACE OF BIRTH: Burbank, California

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon
Lewis and Clark College
California State University, Los Angeles
Brigham Young University

DEGREES AWARDED:

Doctor of Education in Educational Leadership, 2008, University of Oregon
Master of Arts in Education, 1996, California State University, Los Angeles
Bachelor of Science in Elementary Education, 1990, Brigham Young University

AREAS OF SPECIAL INTEREST:

Curriculum and Instruction
Educational Leadership
Special Education

PROFESSIONAL EXPERIENCE:

Instructional Coordinator, West Linn-Wilsonville School District, West Linn, Oregon, 1998-present

Curriculum Specialist, Burbank Unified School District, Burbank, California, 1997-1998

Literacy Resource Teacher, Burbank Unified School District, Burbank, California, 1997-1998

Classroom Teacher, Burbank Unified School District, Burbank, California, 1991-1997

ACKNOWLEDGMENTS

I wish to express sincere appreciation to my advisor, Dr. Diane Dunlap, who had such great insight into the entire dissertation process. Her encouragement and support were indispensable. To my committee—Dr. Phil McCullum, Dr. Kathleen Scalise, and Dr. Jean Stockard—thank you for understanding and supporting my desire to conduct research that I was passionate about. My sincere appreciation to Dr. Roger Woehl, and Dr. Jane Stickney, whose vision and dedication to collaborate with the University of Oregon allowed me to fulfill a dream.

Acknowledgment of my good friend and colleague Kathy Ludwig is in order. We went through the entire doctoral program and dissertation process together. What a journey it was!

Finally, I would like to thank the dedicated educational paraprofessionals who work so diligently with our young children. The work they do has enduring effects.

DEDICATION

It is important for me to dedicate this dissertation to my supportive husband, Jeff, who was always confident that I would finish this academic marathon, especially when I was not so confident. To my incredible children—Megan, Matthew and Abby: Unfortunately, you could never really complain about the homework you were assigned, because you knew I always had more! On a serious note, you always remind me what is important in life.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

CHAPTER I

INTRODUCTION

General education and special education have historically been viewed as two separate programmatic parts of education that work alongside one another but seldom together. Due primarily to societal factors, support services through general education have morphed since their early beginnings. In 1965, in an effort to provide equal opportunities for all students, the Elementary and Secondary Education Act required the United States Congress to invest billions of dollars in "poor schools." This act is often referred to as Title I. In the mid-1960s, the Head Start program began for low-income children from birth to age 5. In 1966 the Child Nutrition Act required the schools to provide assistance to "nutritionally needy" children, and currently it serves over 9.4 million students daily through the National School Breakfast Program and over 30 million students daily through the National School Lunch Program. Additional services for these underprivileged children often required additional support personnel (paraprofessionals) to assist teachers in facilitating these initiatives.

In 1967 the United States felt the affects of a teacher shortage as the oldest "baby boomers" began having children and sending them to school, dramatically increasing the general education student population in public schools. The Education Professions Development Act of 1967 introduced the idea of career development through career ladder programs for instructional aides. This, they hoped, would be a

successful way to add to the teaching ranks as the beginning wave of baby boomers' children entered school. Historical national events—e.g., the civil rights and women's rights movements—added to the surge of educational paraprofessionals. Cultural minority women were recruited not only to help bridge the culture and language gap between home and school, but also to provide historically undereducated and poor families another financial opportunity as well as a possible future career for women.

Another strain on education emerged in the early 1980s. *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983) shocked American society as it exposed the needs and weaknesses of public education. Recommendations from this report included specific efforts in the following areas: teaching and learning; curriculum content and expectations of students; teacher preparation, recruitment, and retention; and school leadership. This report was a substantial milestone in American education and can be described as the impetus for numerous research studies and "investigations."

At the same time general education was undergoing these reforms and initiatives, sparked by societal changes and burgeoning research, special education was experiencing its own changes.

The Education for All Handicapped Children's Act of 1975 (P.L. 94-142), now renewed as the Individuals With Disabilities Education Act (IDEA), was the genesis of recent widespread public school reform that began to force the integration of general education and special education programs wherever and whenever possible (U.S.

Department of Education, Office of Special Education and Rehabilitative Services [OSERS], 2007). This law guarantees students with disabilities a "free and appropriate education" in the "least restrictive environment" (Education for All Handicapped Children's Act, 1975). How this has been accomplished in individual schools has varied. However, after the advent of PL 94-142, more students with disabilities began to attend their neighborhood public schools as opposed to a separate school specifically designed to educate only students with disabilities. In 1989-1990, it was found that there had been a 23% increase since the 1976-1977 school year of students with disabilities being served under IDEA (Fuchs & Fuchs, 1994). Working within both general education and special education during this dynamic time was a large, growing group of individuals who were assigned to support students needing additional assistance, wherever that may be: the regular education classroom, the cafeteria, the gym class, the resource room, etc. These educational paraprofessionals worked with special education students in general education settings and were expected to "seamlessly" support these students who require instruction in the special and general educational worlds.

From a different front came another federal initiative to bring general and special education programs together. In the late 1980s, the Regular Education Initiative (REI) was sponsored by Madeleine Will, who was then the National Assistant Secretary for the Office of Special Education and Rehabilitative Services (Will, 1986). Under this added plan, special and general education were to work together so that special education students would have the needed supports available to be more fully included

in general education classrooms. In order to educate most students with mild to moderate disabilities in the general education classroom, many policy writers, politicians and educators began to argue that public schools would need to be restructured (Fuchs & Fuchs, 1994). The No Child Left Behind Act of 2001 (NCLB), called for even more stringent standards and higher accountability levels for all groups of students, teachers and paraprofessionals. Thus, restructuring extended into the curriculum as a direct result of schools' need to meet learning performance requirements. If schools failed to meet these requirements, they risked placement in the "program improvement" category and the loss of federal funding. This act clearly brought general and special education together to accomplish its goals. Hiring of additional educational paraprofessionals was required to keep up with the needs of the special education students within the general education classroom.

The rank of paraprofessionals working in schools continues to expand. In 2002, the American Federation of Teachers presented a report from the Paraprofessionals and School-Related Personnel Division that found there were approximately 1.2 million teaching assistants, mostly working in elementary or secondary schools. Their mean annual earnings amounted to a mere $18,680, about one half to one third of a teacher's wage. Because of their low earning level, many of these individuals would have qualified for food stamps and other welfare programs (Blalock, 1991).

Three years later, in 2005, the National Education Association reported that there were nearly 2.9 million education support professionals working in public schools:

77% working at the K-12 level and 23% in higher education. The average age of an educational paraprofessional was 43. Seventy-five percent were female, while minorities comprised 30%. The majority of educational paraprofessionals worked part-time (by their own choice) and made less than $25,000 a year. Seventy-five percent of paraprofessionals worked in the community in which they lived, often adding cultural and language diversity to the school staff (American Federation of Teachers [AFT], 2002).

The National Education Association reported that, when asked, paraeducators identified student achievement and the following four objectives as most important to them in their daily work: recognition of the vital role they play, respect for their professionalism, job security, and equitable pay.

The process of attracting, hiring, and retaining this growing cadre of educational paraprofessionals is not always an easy task. Lack (or inaccuracy) of a job description, low wages, minimal or inconvenient hours, minimal or little orientation and training opportunities, few opportunities for career advancement, and little recognition and/or respect for the work they do are cited reasons of paraprofessionals who either choose not to accept an offered position or who enter and then leave the field (Giangreco, Edelman, & Broer, 2001; Morehouse & Alright, 1991; Passaro, Pickett, Latham, & HongBo, 1994).

Because of the dramatic increase of students designated for special education and the many changes required to integrate them throughout the school setting, the roles

and responsibilities for paraprofessionals have changed. Salient adjustments have been necessary to meet the needs of individual students and their school as a whole. The changes in roles and responsibilities have required a different set of competencies that, in turn, have probably raised new and distinct training needs.

Groups such as the American Federation of Teachers, the Council for Exceptional Children, the National Joint Committee of Learning Disabilities, Minnesota Standards, and the National Resources Center for Paraeducators have been working with states to develop standards to support the latest expected competencies. These groups have offered training programs, developed college credit programs, and lobbied legislators for additional support for educational paraprofessionals (Beale, 2001). Nonetheless, there is still great confusion regarding the roles, responsibilities and training needs of educational paraprofessionals.

Purpose of the Study

The purpose of this research study is to identify and analyze the roles, responsibilities and related training needs of educational paraprofessionals who work with special education students in a general education environment.

Definitions and Demographics of Educational Paraprofessionals

In order to analyze the literature on educational paraprofessionals, we need to arrive at a common definition of "educational paraprofessional" and understand the

common characteristics and work-related responsibilities of this quickly growing work force.

Throughout the educational literature the terms "paraprofessional" and "paraeducator" are used synonymously. These two terms are used most often in scholarly and research literature; however, other terms—e.g., "teacher assistant," "teaching assistant," "teacher aide," and "instructional assistant"—are also used within school settings and among practitioners. According to the National Education Association's (NEA, 2003) *Paraeducator Handbook*, the prefix *para* derives from ancient Greek and means "alongside of" or "akin to"; for many years, it has been used to designate those who work with, and assist, licensed professionals in fields such as medicine (paramedic) and law (paralegal). The handbook lists 30 different job titles for paraeducators that have been used in school settings and in scholarly and research literature.

The National Education Association (NEA, 2003) defines paraprofessionals in two ways: (a) a person whose position is either instructional in nature or who delivers direct services to students and/or their parents; and (b) a person who serves in a position for which a teacher or another professional has ultimate responsibility for the design, implementation, and evaluation of instructional programs and student progress.

Current Utilization of Educational Paraprofessionals

Today's educational paraprofessionals are often required to perform a myriad of tasks. The number of students with high-intensity needs—e.g., emotional/behavioral disorders, autism, and multiple disabilities or syndromes—is increasing. Paraeducators are hired to support these students as they access the general education curriculum. In order to support the individual student, the work of the paraprofessional often includes tasks such as instructing individuals and small groups; assisting students with personal needs (lifting, feeding, toileting); helping students to understand and/or complete assignments; operating assistive technology; supporting students as they transition between activities or classrooms; reading to students; listening to students; answering questions; monitoring and documenting behavior; communicating with parents; etc.

As noted, the number and variety of tasks required of these educational paraprofessionals is growing and expanding. In fact, these requirements have grown so fast that, according to French and Chopra (1999), many teachers, families, and paraprofessionals suggest that paraprofessionals are really "teachers," as opposed to just assistants, because they not only assist the teacher in supporting students, but they also instruct students. If this is true, it means a significant change in the role distinctions for school personnel.

This research is important to many stakeholders. As stated earlier, the reliance on paraprofessionals has burgeoned due to the growing number of special education students enrolled in neighborhood schools. The U.S. Department of Education, National

Center for Education Statistics (NCES, 2006b, 2006c), reports that from the 1976-1977 school year to the 2003-2004 school year there was almost a 100% increase in special education children (ages 3-21) who were being served in public schools (3.69 million to 6.63 million).

More paraprofessionals are needed not simply because the number of special education students has increased. There are other contributing factors. The number of students with a home language other than English is also increasing. Nationally, the number of English language learners (ELL) enrolled in public schools increased from 2.1 million students (1993-1994 school year) to over 3 million students (1999-2000 school year), according to the National Center for Education Statistics (NCES, 2006a). During this 6-year period, ELL students increased from 5% of the student population to over 7% (NCES, 2006a). The U.S. Department of Education (NCES, 2006c) reported that in the 2003-2004 school year, 3.8 million students (11% of all students) were provided with English Language Learner support. Another contributing factor to the increased reliance on paraprofessionals stems from the rising number of students whose families are economically disadvantaged. The U.S. Department of Education (NCES, 2003) reported that school-age students coming from "poor families" rose from 16.1% in 1976 to 16.7% in 2001. It is also interesting to note that during those 25 years, the percentage of "poor families" has fluctuated to a low of 14.7% to 20.8% (NCES, 2003).

The continuing shortage of special education teachers, as reported by French and Pickett (1997), has added to the increased need for paraprofessionals. All of the above-reported demographic changes in the student population have altered the need for more educational paraprofessionals. But the solution is not just a case of adding more hired assistant help for schools. These dramatic changes (ELL, special education, and poverty needs) necessitate a more complex level of competencies and skills from educational paraprofessionals. Additionally, paraprofessionals themselves need to understand the requirements of the job they are applying for so they can be confident of their ability to perform the assignments asked of them. Teachers and parents need to understand what paraprofessionals are expected (and not expected) to do. School administrators need to be informed about federal and state requirements prior to hiring an educational paraprofessional so that they are following policy. In addition, administrators need to be knowledgeable about the specific responsibilities that will be required of paraprofessionals once hired; therefore, an accurate job description must be available. Another reason school administrators must be aware of what is required of educational paraprofessionals is to maximize training efforts. Knowing what is required and expected of each paraprofessional allows the paraprofessional, the teachers and the administrator/supervisor to make informed decisions during the hiring process, during the course of work, and for professional development. However, a common understanding of a paraprofessional's role has been elusive (Blalock, 1991; Chung, 2006; Downing, Ryndak & Clark, 2000; Giangreco, Edelman, Luiselli, & MacFarland,

1997; Lamont & Hill, 1991; Marks, Schrader, & Levine, 1999). There is little published research on the training needs of educational paraprofessionals. Though federal and state legislative mandates require educational paraprofessionals to be "well trained," the mandates do not succinctly describe what types of training should be offered and what it means to be "well trained" (Chung, 2006; Giangreco, Broer, & Edelman, 2002; Griffin-Shirley & Matlock, 2004; Stallings, 2000). For these reasons, this study investigates the roles and responsibilities of paraprofessionals relative to paraprofessionals' support for classroom teachers and special education students in an inclusion model. The findings of this study will not only increase the body of knowledge in this area, but they can also be used as a foundation for the development of solid professional development training opportunities for these integral school staff members.

The literature review that follows in Chapter II provides an overview of several areas pertinent to this research. The chapter begins with more details regarding the historical changes in the roles, responsibilities, and policies relevant to paraprofessionals. Empirical studies in this area are reported and critiqued. The chapter then continues with the role that the movement of school restructuring has initiated, with emphasis on the change in service models for special education students. This information is supported with empirical research that analyzes academic and social progress gained from students in the various models of service. Emphasis here is on the roles, responsibilities, and competencies required of educational paraprofessionals. Chapter III contains the study methodology and limitations of the study design. Chapter

IV is a report on the results of the data. Chapter V contains the data analysis as it pertains to each of the three main research questions. The final chapter, Chapter VI, contains the conclusion and recommendations for changes in policy and practice. This chapter also addresses the study's limitations and offers suggestions for future research.

CHAPTER II

REVIEW OF THE LITERATURE

Since the mid-1960s, a number of significant historical and legislative events have affected the roles and responsibilities of educational paraprofessionals. At the beginning of this decade, paraprofessionals who worked in public schools were assigned mostly clerical roles. For example, *Secretaries for Teachers* (Turney, 1962) advocated for teachers to have paraprofessional assistance to do clerical tasks such as taking attendance, handling paperwork and money, correcting papers and preparing teaching materials developed by the teacher.

During the 1970s, more and more schools began employing paraprofessionals to take over some of the direct supervisory tasks. Playground, hall, lunchroom and bus-loading zone duties were added to the clerical responsibilities of paraprofessionals, freeing up needed planning and teaching time for teachers. This additional time was especially helpful for teachers as federal government programs (Head Start, ISEA, and others) aimed at supporting diverse learners were enacted, introducing additional accountability requirements on classroom teachers.

The pattern of federal mandates that led to increasing the number of paraprofessionals in schools continued through the 1980s and 1990s. In order for some special education students to participate successfully in a general education classroom,

one-on-one or small-group support from a paraprofessional was necessary. *School Implementation of Standards-Based Reform: Follow-Up Public School Survey on Educational Reform*, a 1999 report prepared for the U.S. Department of Education, reflected that in the 1997-1998 school year about two thirds of all Title I schools used paraprofessionals funded by Title I. The report further found that while only 10% of the paraprofessionals who worked in schools with the highest poverty levels held bachelor degrees, or higher, 25% of the paraprofessionals working in the lowest poverty schools held bachelor degrees, or higher (Christie, 2005). Paraprofessionals working in high poverty schools were less formally educated than paraprofessionals working in schools with little poverty.

Passed in 2002, another landmark education bill attempted to address the preparation of paraprofessionals. The Elementary Secondary Education Act (more commonly known as No Child Left Behind) required paraprofessionals to meet certain educational requirements or obtain state-approved certification. Completion of an associate degree or 2 years of full-time study at an accredited college were required. Depending upon the individual state's definition of "full-time study," a college's full year may mean 12 hours per semester (requiring a total of 48 hours), or it may mean 15 hours a semester (requiring a total of 60 credit hours). Via state or local assessment, paraprofessionals already hired and working as paraprofessionals needed to demonstrate specific knowledge of reading, writing, math and reading readiness as well as an ability to assist in the instruction of these core academic areas. Educational paraprofessionals

hired after January 8, 2002, must have met the newer requirements that demonstrated they were "highly effective" prior to hiring if they were to work in a school program that received Title I funding.

NCLB not only mandates a specific level of preservice education for paraprofessionals, but it also defines the type of work that can be assigned to a paraprofessional, requires that Title I funds be used to assist individuals in meeting the requirements, and stipulates that professional development opportunities must be made available to paraprofessionals. However, it does not specify what the professional development opportunities must entail.

Prior to January 2002, when NCLB went into effect, requirements, training, and evaluation of paraprofessionals were uncommon throughout the United States. Dramatic changes were required for most states and districts to meet the requirements of NCLB. Even though NCLB is a federal law, implementation of the law was still the responsibility of individual states and local agencies. In the spring of 2003, approximately 1½ years after the signing of NCLB, the American Federation of Teachers (2002) surveyed all 50 states and found that only 9 states had put into place (or at least were attempting to put into place) adequate training for educational paraprofessionals. By 2006, this same institute found that 33 states had standards and requirements (certification, experience, and training) above and beyond what is outlined in NCLB (American Federation of Teachers, 2006).

Many new responsibilities and mandatory assessment requirements were steadily added to U.S. classrooms over the last 40 years, and the use of paraprofessionals to support students, teachers and classrooms in meeting the increasing demands has also grown steadily. Yet, little is known about the specific roles expected of paraprofessionals. At the same time, even less is known about the specific training needed for paraprofessionals to be successful. The intent of this literature review is to present and critique what empirically based research findings exist regarding the utilization of educational paraprofessionals (their roles and responsibilities) and their training needs to support students and schools.

Utilization of Paraprofessionals Within the Four Special Education Service Models

Because roles of paraprofessionals in the classroom have been steadily evolving in practice, prior to the completion of empirically based research on roles of paraprofessionals, it is necessary to turn to the broader practice frameworks that have influenced the changing roles for paraprofessionals. Students who require special education services can be generally described as learning in one of four service delivery models: pull-out (resource room) model, full inclusion in a general education classroom (with or without support from a paraprofessional), self-contained special education classroom, or some combination of the three. The choice of the primary service model to be used is dictated by the goals detailed on the student's Individualized Education Plan (IEP; United States Department of Education, Office of Special Education and

Rehabilitative Services [OSERS], 2007). While it is somewhat easy to outline the three basic models, it is important to remember that combinations of these models occur frequently and differ greatly between districts.

Pull-Out (Resource Room) Model

In the pull-out (resource room) service model, students are only removed from their general education classrooms to receive instruction in specific IEP goal areas in a resource room or separate setting.

Oftentimes, paraprofessionals are assigned to assist in the resource room. The specific tasks required of the paraprofessional greatly depend upon the school's culture/history (i.e., its past practices when serving special education students) and the particular resource room special educator. Some of the tasks assigned to paraprofessionals working in a resource room include reviewing previously taught material, clarifying procedural activities, teaching small groups (or individual students) by following the lesson plans of the certified teacher, designing curriculum and lesson plans that they implement themselves, and performing clerical tasks such as preparing teaching materials (French, 1998, 2001, 2003; Giangreco, 2003; Marks et al., 1999; Pickett, Vasa, & Steckelberg, 1993).

Full-Inclusion Model

In the full-inclusion model, special education students receive all of their instruction in the general education classroom with their grade-level peers. More fully, the National Study of Inclusive Education conducted by City University of New York (CUNY, 1995) defines inclusion as

> the provision of services to students with disabilities, including those with severe impairments, in neighborhood school, age-appropriate general education classes, with the necessary support services and supplementary aids (the child and teacher) both to assure the child's success—academic, behavioral, and social—and to prepare the child to participate as a full and contributing member of society. (p. 3)

This model requires a heavily collaborative approach between the special education teacher, general education classroom teacher and, many times, one or more paraprofessionals (CUNY, 1995; Deno, Foegen, Robinson, & Espin, 1996; Halvorsen & Neary, 2001; Marston, 1996). In addition, other factors are necessary for inclusion to be successful: visionary leadership, collaboration, refocused use of assessments, supports for staff and students, funding, effective parental involvement, curricula adaptation and adoption of effective instructional practices (Lipsky & Gartner, 1996). Many of these factors over-rely on the paraeducator's ability to manage the academic and behavioral needs of students. Clarke's (2001) qualitative research study concluded that the role of the paraprofessional has expanded markedly from a clerical position to one where paraprofessionals "are called upon to instruct—to do work previously reserved for teachers." Pickett (1997) echoed this sentiment when she remarked, "Paraeducators are

increasingly expected to work at higher levels of independence and to participate in all phases of the instructional process" (p. 12).

As stated, an inclusive model often requires a paraprofessional to make independent decisions while the general education teacher is teaching the whole group. A qualitative study conducted by Marks et al. (1999) found evidence to support this statement. Twenty paraprofessionals working in schools with kindergartners through eighth-grade students reported that they were expected to assume high levels of responsibility for "managing the academic and behavioral needs for special education students in inclusive settings" (p. 315). However, it should be mentioned that a limitation reported by the researchers was that the paraprofessionals who were interviewed were employed by an outside agency and it was possible that they were felt to be the "experts" by the classroom teachers and thus were expected to carry more responsibility for the disabled students.

Another study that offered similar findings was conducted by Giangreco et al. (1997). They found that instructional assistants were in close proximity to students on an ongoing basis, had difficulties with taking on too much ownership and responsibility of the included student, and found themselves limited in their ability to deliver competent instruction.

While there is very little research documenting the academic gains made by special education students, Madge, Affleck, and Lowenbraun (1990) conducted a study that looked at the social status of elementary students with learning disabilities served

by an integrated (full-inclusion) model. They used a peer-rating scale and found that, while special education students in both the full-inclusion model and the pull-out resource room model had significantly lower social status on average than the non-special-education students, the children who attended the full-inclusion classroom had a "better opportunity to blend successfully in the classroom than the children who received some of their instruction in a resource room" (p. 439). It was suggested that one reason why the students had a better opportunity to "blend" into the classroom was because there was a paraprofessional alongside the special education student, encouraging and modeling how to be a part of the class. It is interesting to note that this study did not gather data regarding the social or academic performance of non-special-education students.

According to Lipsky and Gartner (1996) and Schumm and Vaughn (1995), inclusion models for students with learning disabilities have not been sufficiently effective. A review conducted by Zigmond and Baker (1996) found five case studies where inclusive classrooms were missing key instructional strategies and support—e.g., specific adaptations required, progress monitoring, and necessary individual attention—for learning-disabled students. The responsibility of these tasks was normally handed over to a paraprofessional who was ill-prepared and untrained for the tasks.

As alluded to above, educational paraprofessionals are integral to the implementation of full inclusion in general education classrooms. Nonetheless, very limited research has been conducted with regards to specific training needs of

paraprofessionals working within a full-inclusion model. What research has been conducted has pointed to mixed and limited findings. One study was actually conducted in order to increase the student/teacher engagement and decrease the student/paraprofessional engagement, as the researchers purported that students would benefit from having more direct instruction from the teacher. This study by Devlin (2005) found that after teams of paraprofessionals and teachers were trained in an intervention to boost student interaction and engagement with teachers within a full-inclusion classroom, they found no noticeable change in students.

Another study that left mixed messages was conducted by Zigmond and Baker (1995) at five elementary schools that had implemented a full-inclusion model for learning-disabled students. Interview data and observation notes from 2 days in a primary and intermediate classroom were culled. The instructional strategies used to support the learning-disabled students were determined to be beneficial to all, so they were offered to all students. The instructional strategies were "co-taught" by a paraprofessional, and the researchers claimed (without any quantitative data for support) that the coteaching "brought new educational opportunities to all students in general education" (p. 32). The findings also indicated that the

> students with learning disabilities did not get direct or focused intervention to improve each student's capabilities. The special education we saw was superficial, impromptu, and hardly likely to have lasting impact or to achieve long-term goals. It was seldom preplanned, and it lacked intensity. (p. 32)

There was no report of academic or behavior/social achievement.

Self-Contained Model

Some students who have more severe disabilities receive all, to almost all, of their education in a self-contained classroom with other students who share similar needs of support.

The research available regarding students in a self-contained model is primarily centered around students' social and emotional needs and success. For instance, Wiener and Tardif (2004) conducted a quantitative study that compared the various special education service models as they related to students' "social and emotional functioning." They surveyed students from nine different elementary schools and 61 different classrooms (55 being general education classrooms, 3 inclusion classrooms, and 3 self-contained). The findings reported were that children in the more inclusive placements had more positive social and emotional functioning as measured by the Sociometric Rating Scale. Students in the inclusion classes had "more satisfying relationships with their best school friends, were less lonely, and had fewer problem behaviors than students in the self-contained classroom" (p. 20).

For some severely handicapped or disabled students a self-contained classroom is what is selected as being the most appropriate service delivery model. Paraprofessionals play a significant role in the support and teaching of students in these classrooms; however, I was unable to locate specific research about the work that paraprofessionals do in such a specialized setting. As mentioned earlier, current practice

has shifted to including all special education students in the general education setting. Therefore, the majority of students who may be assigned to a self-contained classroom are also mainstreamed or included in resource rooms and/or general education classrooms.

Combined Service Model

In the combined service model, special education students receive their IEP goal(s) instruction in the general education classroom and in the resource room or in a self-contained program classroom. Similar to the full-inclusion model, this model requires collaboration between teachers and educational paraprofessionals delivering the instruction. As can be imagined, this combined service model is realized with a long continuum of various percentages of time spent by students in the two educational settings (Marston, 1996).

As supervisory and teaching roles and responsibilities continue to expand and change from student to student, from classroom to classroom and from teacher to teacher, this steady change has affected everyone in every classroom. This includes the teacher and the students. It also includes paraprofessionals. The current emphasis on regular standardized assessments, increased measures of accountability for each student, and the increased diversity of learners in an increased variety of classroom settings has required teachers to be both "instructors and educational managers." "As teachers spend more time on these expanded duties, less time is available for direct instruction" (Pickett

et al., 1993, p. 7). Regular education classroom teachers must now have competencies to teach English Language Learners, students with physical and/or mental/emotional disabilities, and gifted students—often simultaneously, within the same classroom. Logically, it follows that if a teacher's role and responsibilities have changed, so must the educational paraprofessional's roles and responsibilities. This sentiment is supported by Lamont and Hill (1991):

> It is rare to find a school system that still considers the primary function of paraprofessionals to be clerical or housekeeping in nature, rather school districts are acknowledging the changing roles of teachers and paraprofessionals. The classroom teacher is expected to be an instructor, an interpreter of data, a program planner, and a manager/supervisor. (p. 2)

Long-time educational researcher French (1999) adds testimony to the shifting roles of both of these groups of workers: "The fact is, is that it takes time to supervise and direct the work of paraeducators. Yet, paraeducators can do many tasks during the school day to support students while freeing teachers' time to think, plan, direct, monitor, and coach the paraeducator" (p. 70).

There have been a few studies of the roles and responsibilities of paraprofessionals. Unfortunately, the roles and responsibilities have changed so dramatically in recent years that it is difficult to know how much prior research in this area can actually guide new research on paraprofessionals. However, I review the primary studies in the following section.

Roles and Responsibilities

The American Federation of Teachers (1998) has defined the role of an instructional paraprofessional as a noncertified "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" (p. 7). Seventeen years earlier, Pickett (1981) proffered a quite similar definition of a paraprofessional:

> A paraprofessional is a person: (1) whose position is either instructional in nature or who delivers direct services to students and/or their parents; and (2) who serves in a position for which a teacher or another professional has ultimate responsibility for the design and implementation of individual education programs and other services. (p. 2)

Paraprofessionals are members of an instructional team where the certified teacher has the ultimate responsibility for the design and implementation of the educational program. The Elementary and Secondary Education Act (ESEA) stipulates that paraprofessionals may perform the following duties:

1. Tutoring outside normal class time.
2. Assisting with classroom management.
3. Assisting in a computer laboratory, library, or media center.
4. Translating.
5. Providing instruction under the direct supervision of a teacher.
6. Conducting parental involvement activities. (Elementary and Secondary Education Act, 1965)

The definition that the American Federation of Teachers (1998) uses for paraprofessional responsibilities is to enrich the learning experience for students by assisting in the classroom and performing both administrative and instructional duties

that complement and support the instructional plan and educational goals for that student. But what exactly does this entail? What are the actual skills required of educational paraprofessionals?

For many years, educational researchers have been trying to determine the skills required of paraprofessionals (Chung, 2006; Frith & Lindsey, 1982; Giangreco et al., 1997; Giangreco et al., 2001; Lamont & Hill, 1991; Pickett, 1981, 1986; Stallings, 2000). In summary, they have found that a great deal of higher level thinking and working skills are required compared to the time when instructional assistants did simple clerical tasks for teachers. They found the following skills and knowledge necessary for assisting in the classroom: content knowledge (reading, writing, mathematical computation and reasoning); thinking skills (creative thinking, decision-making, and problem solving, etc.); interpersonal relations/human speaking (leadership, communication, teamwork, etc.); personal qualities (responsibility, integrity, self-management, etc.); and competencies that required very specific and advanced training (human growth and development, behavior management, laws, etc.). Additionally, they found that at times educational paraprofessionals engage in some tasks that are beyond the roles and responsibilities they thought they were being hired to perform (i.e., their job description does not match what they actually end up doing).

One such study that highlighted the roles and competencies expected of paraprofessionals was conducted by Lamont and Hill (1991). In surveying 35 pairs of paraprofessionals and their supervising teachers, these researchers (a) learned the scope

of the paraprofessionals' responsibilities and (b) uncovered the perceptions of both groups regarding whether specific tasks were truly appropriate for paraprofessionals to perform. Their findings suggest that there are five types of responsibilities: instructional support, diagnostic support, classroom organization, behavior management support, and support provided by a personal care assistant. Lamont and Hill also found that the following tasks were not considered appropriate for paraprofessionals to perform: substituting for the teacher when the teacher was not present, independently developing learning activities, administering standardized assessments, developing learning centers, and performing routine maintenance tasks. However, Lamont and Hill reported that generalization of these findings to a larger population would be difficult due to the limited nature of their sample size.

To whom are educational paraprofessionals responsible? This question became the backbone of a study conducted by French (1998). Eighteen matched pairs of paraprofessionals and their supervisors were surveyed via a "complete the statement" measurement tool and interviewed using an open-ended interview format. French found only one participant (a classroom teacher) who "clearly distinguished between the teacher's role and that of the paraeducator's" when it was reported, "The paraeducator helps the students to meet their goals and objectives that have been written for them. Not necessarily directly involved in writing the goals, but to help carry out the education plan that was written for them" (French, 1998, p. 363). It was also reported that the majority of the other participants responded in some fashion that the

paraeducator either does the same tasks as the teacher or only does clerical work. In the end, it seemed that if the teacher and paraeducator believed that the paraeducator was there to serve the teacher, he or she was found to do more clerical tasks, and if the role was based on the idea that the paraeducator was there to be responsible for the student(s), he or she assumed a more instructional role.

One of the major findings from Chung's (2006) work with paraprofessionals and their supervisors was a "serious disconnect between tasks that paraeducators reported performing and what teachers (supervisors) think paraeducators are doing" (p. 81). Further, she found that paraprofessionals were doing many more tasks than what the teaching supervisors reported them doing. Additionally, Chung found from the interviews that she conducted that the paraprofessionals perceived that their job roles and responsibilities had changed since they were first hired.

Confusion surrounding the roles and responsibilities of paraprofessionals is evident and needs to be remedied (Blalock, 1991; Chung, 2006; French, 1999; Giangreco & Doyle, 2002; Pardee, 1992; Pickett, 1986; Pickett et al., 1993; Stallings, 2000). A meta-analysis of the roles and responsibilities assigned to paraprofessionals working with special education students in a general education setting was conducted by Giangreco et al. (2002). They reported,

> In today's more inclusive schools, a glance into a general education classroom often presents a different image. The student population is more diverse. . . . It has become increasingly more common to find paraprofessionals assigned to support students with and without disabilities in general education classrooms. (pp. 47–48)

Their study goes on to appeal for clarifying "agreed-on roles for paraprofessionals" (p. 63).

Training Needs

Not far behind the call for documented roles and responsibilities for educational paraprofessionals is the call for appropriate and timely training (Carroll, 2001; Giangreco et al., 2001; Riggs, 2001; Stallings, 2000). However, required training elements are not delineated. While NCLB outlines the paraprofessionals' qualifications and duties, and also specifically lists the duties that the paraprofessional may perform, it does not describe what the training should entail.

A study to identify training needs as perceived by paraprofessionals was conducted with approximately 200 educational paraprofessionals serving in grade levels from prekindergarten through high school and in self-contained, resource room and general education classrooms throughout a large district in Connecticut (Riggs, 2001). The survey consisted of 15 topics or content areas that were culled from reviewing previous paraprofessional surveys, input from the Comprehensive System of Personnel Development members, and reviewing district administrators' perceptions of paraprofessional training. The response rate was 90% (surveys were administered during workshops).

The following areas were perceived to be of highest priority for training (beginning with the top priority): knowledge of specific disabilities, behavior

management, communication, learning styles, and understanding inclusion. A second form of data collection occurred during this study when 150 different paraprofessionals at a workshop were asked to indicate the top three topics they would like to see presented at future workshops. From the analysis of this survey, the researcher found the five most frequent responses were information on specific disabilities, behavior management, working with other adults, administrative issues, and inclusion. The third and final portion of the study was open-ended, yet structured, interviews with 20 paraprofessionals who assisted special education students in a general education setting. The interview began with the question, "What would you like to learn in order to make your job easier?" The top four responses were grouped in these categories: (a) knowledge of specific disabilities, (b) information on facilitating inclusion, (c) working with related service providers and other adults, and (d) information on specific classroom behavior and instructional strategies. Considering all three of these data points, Riggs (2001) came to the conclusion that knowledge of specific disabilities, behavior management, working with other adults, and inclusive practices were the most strongly perceived needs for training.

Paraprofessionals need and want training. They are able to articulate and delineate the specific areas in which they need training. Additionally, they are fairly consistent with one another in their perceived needs. How, then, are their needs being met?

The Training Needs vs. the Training That Is Being Offered

The perceived juxtaposition between the status of the training required to carry out the assigned responsibilities successfully and what is currently being offered is cause for concern (Ashbaker, Young, & Morgan, 2001; Moshoyannis, Pickett, & Granick, 1999; Pickett, 1986; Wadsworth & Knight, 1996).

A literature review completed by Ashbaker et al. (2001) found that educational paraprofessionals perceived their own professionalism and confidence increasing with training, adding to the value they brought to the work they do. Additionally, they were highly motivated to receive training when it was readily available to them. Moreover, paraprofessionals reported that depending on the student population paraprofessionals are working with, specific training is required to meet the needs of individual students. However, the training was not always readily available or offered at all. These findings are in accordance with the research of Riggs (2001), who surveyed 32 paraprofessionals from one of Connecticut's largest school districts. Riggs discovered that none of the participants had received any introductory training prior to beginning work. The lack of training is a common theme in the reviewed literature.

Research findings presented by Downing et al. (2000) substantiate this lack of training claim. Surveyed paraprofessionals reported that they had received little to no training when they were first hired. The following criticism was typical of comments made by participating paraprofessionals:

> They were desperate for someone at the time, so I had an interview. I received an explanation of the philosophy, [but then] it was a fly-by-the-seat-of-your-pants type of deal. I had never done this kind of work before. So I came in the first day, was handed a schedule, and was told to go to the first class. That basically was my training. It was trial by fire. (p. 177)

The majority of the surveyed paraprofessionals reported that they trained themselves by reading, observing others, and remembering their school experiences as a child. After being paraprofessionals for several months, the participants responded that they had received in-service sessions ranging from 1 hour to 8.5 days per year. When participants were asked what type of training they needed most the overwhelming majority responded they needed training related to behavioral interventions, specific disabilities, needs of the specific students they worked with, strategies to interact with and teach students, and adaptations of curricula and materials to meet specific students' needs. These skills require high levels of understanding and ability—far from the skills of clerical duties that were once required of the individuals in this profession.

Another survey that explored the training perceptions of paraprofessionals was conducted by Wadsworth and Knight (1996). Informal interviews were conducted with six paraprofessionals who worked in secondary, middle and elementary schools. Perceptions from these individuals further highlighted the differences between what is asked of paraprofessionals and the training they had received. Wadsworth and Knight categorized data gleaned from survey results into five basic suggestions for required practices, with one overarching suggestion: the implementation of preservice training through a centralized interdisciplinary training team. The training should be systematic

and include "on-the-job coaching" as a follow-up. More specific follow-up training would depend on individual student needs.

Adding to Wadsworth and Knight's (1996) work was a study conducted by the Wisconsin Paraprofessional Task Force (Wisconsin Executive Summary, 1997). The study reported that 38% of the 426 Wisconsin school district's employees were represented; however, the study failed to report the total number of individual participants (i.e., paraprofessionals, teachers, and administrators) who were most affected by paraprofessionals' work. Regarding paraprofessional training, one of the main findings was that, compared to paraprofessionals' reports, administrators listed on-the-job training, out-of-district training sessions, and in-services as more useful and more frequently occurring. Paraprofessionals reported that while they would like to attend district in-services (systematic and follow-up), they did not occur frequently.

The roles and training needs of paraprofessionals in New York City schools were researched by Moshoyannis et al. (1999). They conducted three separate studies, all under the umbrella of one project: *The Evolving Roles and Education/Training Needs of Teacher and Paraprofessional Teams in New York City Public Schools: Results on Survey and Focus Group Research*. The studies were funded by the City University of New York Workforce Development Initiative. One of the three studies conducted was most focused on the training and professional development received by paraprofessionals. The survey asked 245 participants, "How did you acquire the skills required to perform these tasks?" Of the 26% of the participants who responded, most

stated that they were taught informally and not systematically, 79% indicated that the majority of the learning they did for their job was done on their own or on the job, and 67% reported that they had been taught by the teacher they were assigned to support and/or their supervisor. Additionally, 40% were taught by other paraprofessionals. Approximately two thirds of the participants reported that they had received formal training from their school or district. Only 32% of participants responded that they had been offered or had attended an in-service training program within the last 2 years. Lastly, only 38% of the individuals who responded to the question ("Are these training opportunities adequate for your needs?") stated that they perceived the training to be adequate (the other choices were "somewhat adequate" and "not adequate"; Moshoyannis et al., 1999, pp. 44-50).

An investigation into the importance of follow-up training was conducted by Love and Levine (1992). They researched the effects stemming from initial training and follow-up training on kindergarten and first-grade educational paraprofessionals. Love and Levine's findings showed that (a) these paraprofessionals had received training in reinforcing reading skills and utilizing motivational strategies and (b) district office administrators judged those paraprofessionals who received this type of training to be more effective at utilizing the new strategies. Moreover, the paraprofessionals who received follow-up sessions were rated as being more effective than the paraprofessionals who received only the initial training. The review of the literature

demonstrates that initial and follow-up training are both beneficial and necessary for educational paraprofessionals.

There is a caution in the literature from such educational researchers as French (2001), Giangreco (2003), Wadsworth and Knight (1996), and many others regarding the "over reliance" on paraprofessionals and the "stepping away" of teachers from students with disabilities. Giangreco (2003) went so far as to term this phenomenon "the training trap":

> Teachers often relinquish instruction of students with disabilities because they assume that paraprofessionals are specially trained to work with such students . . . and unfortunately, once paraprofessionals receive virtually any amount of training—at best, usually equivalent to a single college-level course—many teachers feel even more justified in relinquishing instructional responsibilities to them. (p. 51)

A possible solution to this purported trend might be the "simultaneous training or teaming of paraprofessionals and teachers to promote collaborative working relationships" (Devlin, 2005, p. 48).

A study in a rural Midwestern school district researched the effects of a training model that provided in-service to the classroom teacher and the paraprofessional as a team (Devlin, 2005). The impetus of the study came from a continual shortage of special education teachers and a rise in hiring education paraprofessionals to assist the students in a general education environment. The training format (team approach) studied was hypothesized to be a model for on-the-job training that would increase teacher-student interaction and decrease paraprofessional-student interaction. As mandated by federal and state laws, the model was designed to ensure that

paraprofessionals' primary role included tasks they were hired to do—i.e., provide support in the classroom—and that teachers' primary role was to be the main instructor. A pretest-posttest control group with matched subjects was used for the 5-week intervention (training model). Posttest results confirmed the researcher's hypothesis.

It is clear that paraprofessionals want training. They want training that is provided in multiple contexts (on-the-job coaching, district in-services, and training with the teachers and other paraprofessionals they work alongside). They also want training content (e.g., information regarding specific disabilities, instructional strategies, and behavior management) that is pertinent to the current students with whom they are working.

Training of Teachers Who Supervise Paraprofessionals

The restructuring of schools with more children with special needs has also increased the roles and responsibilities of the classroom teacher. The 1997 amendments to the Individuals with Disabilities Education Act mandate appropriately supervised paraprofessionals to work under the direction of a qualified teacher. The teacher's role now includes the supervision of paraprofessionals and other support staff. Most special education and general education teachers have not had training to supervise another individual.

One study that found a lack of adequate training for the supervisor was conducted by Moshoyannis et al. (1999), as mentioned above. The third and final part of

their large study was conducted to determine the requisite skills and knowledge of supervising teachers. A total of 1,110 teachers responded to questions regarding their abilities to supervise educational paraprofessionals. It was found that only 15% of the respondents had received training on how to supervise support staff and only 14% had been trained on how to evaluate these individuals purposefully.

Another study was conducted throughout the Denver, Colorado, metropolitan schools by French (2001). The research examined the extent to which special education teachers were expected to supervise paraprofessionals. French also tried to determine the training that teachers had received for this fairly new supervisory role. It was found that out of the 321 respondents, 75% indicated they were responsible for supervising paraprofessionals. Among these respondents, the most frequently used method of training was "telling" (almost 90%) and giving feedback (almost 84%). Structured, ongoing training was nonexistent.

Chung (2006) utilized Lamont and Hill's (1991) survey to conduct a case study investigating the work of paraeducators who work with special-needs students. The overarching purpose of Chung's study was to "explore the roles of paraeducators and teachers working in special education . . . and to identify and assess perceived levels of training provided for paraeducators and supervising teachers." A total of 158 special education teachers and 331 paraeducators who supported special-needs students were surveyed. Follow-up interviews were conducted with three teacher-paraeducator pairs (they worked together). Pertinent findings of the study were a "lack of teacher

supervisory skills" and confusion regarding the specific role the supervisor should assume in supervising the paraprofessional.

Giangreco (2003) argues that being able to supervise paraprofessionals appropriately requires certified teachers to have an understanding of their own roles and responsibilities as well as those of the paraprofessionals working with them. Most preservice teaching instruction does not require coursework in supervising others. Adding to the confusion is the aforementioned lack of accurate and specific job descriptions for paraprofessionals.

The research base carries a sentiment that cannot be denied. Giangreco and Broer (2005) summarize it well:

> Of course, improving the training and supervision of paraprofessionals is desirable and appropriate. Not surprisingly, there is general consensus in the literature that schools should hire the most qualified paraprofessionals possible, ensure that their roles are clear and appropriate, train them to carry out those roles, and have their activities be directed and supervised by qualified professionals. However, the limited available research base on paraprofessionals in special education suggests that such rudimentary steps to support the work of paraprofessionals have been the exception rather than the norm in American schools. (p. 11)

The roles and responsibilities of paraprofessionals have shifted dramatically over time due to important historical social changes, intensified legislative policies, an increasingly diversified student population, and support for education models that serve special education students. The little that we know from past research is not enough to assist policymakers, administrators, educators, and paraprofessionals who make

important decisions regarding the roles, responsibilities and training needs of paraprofessionals. For this reason, I am conducting this study.

CHAPTER III

METHODOLOGY

In this chapter, I outline three research questions, the research design, the rationale for the methodology, the sampling procedures followed, the instruments used, and the limitations of the design.

The purpose of this research study was to identify and analyze roles, responsibilities and related training needs of educational paraprofessionals who work with special education students in a general education environment.

Research Questions

Research Question 1

What are the perceptions of educational paraprofessionals and their supervisors regarding the roles and responsibilities required of educational paraprofessionals to support special education students effectively within an inclusive environment?

Research Question 2

What are the perceptions of educational paraprofessionals and their supervisors regarding the roles and responsibilities in which educational paraprofessionals most

frequently engaged in while working with special education students within an inclusive environment?

Research Question 3

What competencies do educational paraprofessionals currently possess and what competencies do they and their supervisors deem lacking to support special education students effectively within an inclusive environment?

Design and Rationale

This was a mixed-methods case study. Multiple methods were used to collect data. I used open- and closed-ended questioning with statistical and text analysis within the Paraeducator Inclusion Inventory (PII; Stallings, 2000) for both participant groups (paraprofessionals and their supervisors). Additionally, I conducted semistructured interviews with five paraprofessionals. Due to the nature of the semistructured interviews, I began with three predetermined questions and then posed follow-up questions as new questions emerged during the interview. Lastly, I completed a text analysis of the transcribed interviews.

A case-study design was chosen because this type of research allows the researcher to conduct an "in-depth study of instances of a phenomenon in its natural context and from the perspective of the participants involved in the phenomenon" (Gall, Gall, & Borg, 2003, p. 435). A case study design is appropriate when the researcher is

trying to understand current or contemporary events that demonstrate changing needs (Yin, 1994). Stevenson (2004) demonstrated his agreement with Yin by arguing that case studies are designed to create opportunities to describe what has already taken place, or is currently taking place. Stevenson also proposed that case studies may be a catalyst for important changes that need to occur to meet existing needs. As the review of the literature demonstrates, the roles, responsibilities, and training requirements of paraprofessionals have changed, and are continuing to change due to changes in federal and state legislation. For this reason, adjustments may need to be made in the training opportunities available to paraprofessionals. A case-study design creates much needed insight into the current practice of paraprofessionals.

A case-study design should be used when one is "trying to develop an understanding of a complex phenomenon as experienced by its participants" (Gall et al., 2003, p. 438). The research questions the current study poses are ones that only the participants themselves and their supervisors can answer because they have to do with perceptions of the roles and responsibilities required of paraprofessionals.

One possible outcome of conducting a case study is the gathering and analysis of multiple data points. Bringing forth multiple data sets and analyzing for convergence or disparity is a way to triangulate the data and create a more holistic picture of the phenomenon under question. Many researchers who conduct qualitative studies use a process of presenting "thick description" to bring forward constructs embedded within the phenomenon (Gall et al., 2003). Additional information was gathered via

purposefully selected interviews with five paraprofessionals, who completed the PII with great depth and detail. These interviews were an important element of this study due to their potential for obtaining additional data that might support and/or help explain embedded constructs. Additional data, in the form of interviews, help to bring together or triangulate the qualitative and quantitative data, providing needed context regarding the current practice of educational paraprofessionals.

Participants and Study Context

The paraprofessionals who participated in this study were employees of the West Linn-Wilsonville public school district and worked in primary (K-5th grade) schools. The district comprises over 42 square miles in the south metropolitan area of Portland, Oregon. The cities of West Linn and Wilsonville and a rural area of Clackamas County are within the district boundaries. The district is located at the south end of the greater Portland, Oregon, area.

As of September 11, 2006, the West Linn-Wilsonville School District reported that there were 3,595 students enrolled in kindergarten through 5th grade throughout the seven primary schools, 1,890 students enrolled in 6th through 8th grade at the three middle schools, and 2,628 students enrolled in 9th through 12th grade at the three high schools.

The district maintains a diverse special education service program model that, according to the district's Special Services Director, has changed drastically throughout

the years to meet the increasingly diverse student needs (K. Welch, personal communication, November 16, 2006). Table 1 outlines the number of special education students as of December 1, 2006, being serviced in district schools (as opposed to day-treatment schools, home instruction, and therapeutic schools). Special education students enrolled in general education classrooms (within an inclusion model) are represented in Table 1, with the exception that some of the students in Life Learning program classes are not included in general education classes.

TABLE 1. Special Education Students Enrolled in Programs

Alternative Instruction Methods (AIM-Behavior)	Applied Academics	Life Learning	Resource Room	Speech/ Articulation
47	92	39	601	114

Paraprofessionals included in the study were individuals who worked in a primary (K-5th grade) school at least 10% of their day with special education students. In the district where this study took place, special education students participate in one or more of the following special education programs: AIM, Applied Academics, Life Learning, Resource Room, or a general education classroom within an inclusion model. All of the paraprofessionals were hired under one of the following titles: IA K3 (kindergarten through third grade); IA 4/5 (fourth and fifth grade); IA RR (Resource Room); IA Media, IA Alternative Education (AIM or Applied Academics); IA Life Learning; or IA III Title I. "IA" stands for Instructional Assistant, which is this district's term for an educational paraprofessional. These designated titles are used primarily for

financial accounting purposes. It is important to note that this district does not formally delineate their instructional assistants as either "special education IAs" or "general education IAs." The district's expectation is that all IAs need to be prepared to work with all students, regardless of a student's support needs.

As of November 2006, there were 131 females and 12 males ($n = 143$) working as educational paraprofessionals with preschool through 12th-grade students across the school district.

The district is known for its high commitment to professional development and financially supports the endeavors of educational paraprofessionals to continue their own education (K. Welch, personal communication, November 16, 2006; see, also, West Linn-Wilsonville School District, 2006). During 2006, there was a 32% increase in dollars spent for additional education for paraprofessionals. The large majority of this education occurred outside of district-sponsored classes or involved training from one of the many local community colleges.

An impressive 99% of the all educational paraprofessionals were considered "highly qualified" under the guidelines of NCLB, even though only approximately one fifth of the paraprofessionals were working in schools that were supported by Title I funds. Many of the paraprofessionals are fairly new to the school district, with 47% of them being hired since 2004 (West Linn-Wilsonville School District, 2006).

The administrators (seven building principals, one assistant principal, and six instructional coordinators) were selected because they are the individuals who supervise

all the paraprofessionals participating in the study. Additionally, these administrators were selected because they had comprehensive knowledge of the roles, responsibilities, and training needs of the paraprofessionals and because they oversaw the special education programs within their school.

Measurement Tools

The Paraeducator Inclusion Inventory (PII), developed by Stallings (2000) was used to survey all paraprofessionals and their supervisors in the study (see Appendix A). Stallings originally developed the PII as part of "The Identification of Paraprofessional Training Needs Within the Context of Inclusive Education," a study she conducted for her doctoral degree. Her study sample consisted of 118 paraeducators and 20 supervisory teachers from the same school district. The PII uses the format of a highly structured job-analysis procedure developed by Bemis, Belenky, and Soder (1983). Stallings (2000) reported that, prior to her work, there were no previous studies located that had used a job-analysis procedure to develop a survey for paraprofessionals.

The development of the survey required many steps. Taped interviews of experienced teaching assistants were conducted by using an introductory script, interview questions, and a procedural checklist to obtain a baseline of roles and responsibilities. Task statements were then created and organized by categories (task and skill content), resulting in 45 items that were sorted into five categories ("academic instruction," "behavior/classroom management," "parent contact," "medical healthcare

issues," and "other"). A response reliability check was built into the survey by randomly repeating one question within each of the five inventory categories of the survey. This reliability check was implemented to statistically determine if the participants were responding consistently during their survey. However, Stallings (2000) only reports that "consistency indices based upon the repeated items were later calculated" (p. 95). Actual results were not reported.

Validity of responses was addressed in three distinctive ways. First, a "bogus" question (a question that asked about an activity that was obviously inappropriate for a paraeducator to complete—e.g., "make final decisions about grade retention for students with disabilities") was embedded in each of the five categories. These five "bogus" questions were determined by consensus among three paraprofessionals and three expert special education researchers. Second, a probe into the level of task coverage of the paraeducator was incorporated into the PII in order to determine what percentage of their job activities involve supporting special education students and what percentage of their total job activities were represented by the PII's items. Third, mean ratings on all items of Part 1 of the PII were calculated, checking on levels of agreement on all items inventoried between supervisors, paraprofessionals, and classroom teachers.

A pilot test of the PII was conducted with a group of 15 students enrolled in a university undergraduate psychology class. In addition, school district administrators and a subject matter expert reviewed the questionnaire and made edits and adjustments prior to administration.

The final version of the PII included three separate parts. The first section of each questionnaire has 45 identical items divided into the following categories: "academic instruction," "behavior/classroom management," "parent contact," "medical/healthcare issues," and "other." Depending on the version that a respondent for Stallings' (2000) study randomly received, they were asked to rate all 45 items based on one of the following criteria: "task importance to overall job performance" ("importance"), "frequency of task performed" ("frequency"), or "difficulty for a newly hired instructional assistant to learn to perform these tasks in a competent manner" ("difficulty"). Randomly assigning each participant to answer only 45 questions on the first part of the survey was incorporated into Stallings' (2000) methodology due to time efficiency. However, to increase the amount of data captured for this study, I requested that each participating paraprofessional respond to two of the three scales (either "importance" and "frequency," "importance" and "difficulty to learn," or "frequency" and "difficulty to learn"). All 45 items used a 1-5 Likert rating system.

The second half of the questionnaire was identical for all of the respondents. Respondents were asked to respond to questions regarding (a) the task-coverage procedure, (b) the top five skills needed by paraeducators in working with special needs students, (c) the training needs of paraprofessionals when working with exceptional children, and (d) the background information of inventory respondents (Stallings, 2000).

Procedures

For this study, administration of the PII occurred in early to mid-spring of 2007. Prior to survey administration, an introductory letter from the researcher (see Appendix B) was sent to all primary school building administrators explaining the rational, importance, and progress of the study as well as the need for and importance of data collection. Building supervisors were asked to respond with a date and time for the researcher to join a school meeting to introduce the study and administer the surveys. At each school meeting, the researcher introduced the study with an emphasis on (a) the importance of engaging in school-based research and (b) the process of completing the survey. During this briefing of the participants (both paraprofessionals and supervisors), the researcher highlighted the survey's primary benefit: the information gained from the analysis of the data would result in more accurate information for district personnel regarding the roles and responsibilities that are being required of paraprofessionals. Moreover, it was explained that understanding the roles and responsibilities required of paraprofessionals will contribute to more accurate job descriptions and thus aide in hiring qualified individuals.

It was also shared that the data collected and analyzed will assist school district administration in better understanding the training needs of paraprofessionals. Further, participants were told that it is assumed that students directly benefit from instructional support from individuals who are more fully trained. Lastly, participants were insured that their responses would remain anonymous and that completing the survey was

entirely optional. A time for questions and answers was allowed prior to reviewing the consent forms (see Appendix C) and survey administration.

Participants in attendance at the school meeting were asked to complete the PII individually on a computer, accessing the questionnaire via SurveyMonkey, a web-based program. For the sake of efficiency and saving paraprofessional participants time, and to glean sufficient data from the paraprofessionals, three versions of the PII were randomly assigned to the paraprofessional participants. One third of the participants received survey questions regarding "importance" and "frequency." One third of the participants received survey questions regarding "importance" and "difficulty." The final third of the participants received survey questions regarding "difficulty" and "frequency." Thus, each paraprofessional who took the survey actually took two thirds of the entire survey.

During the time the participants took the survey, they were encouraged to ask clarifying questions of the researcher. The researcher checked to make sure all participants were comfortable with the technical aspects of responding to the survey on-line. Treats in the form of granola/candy bars and gum were provided to the participants as a token of appreciation. Due to meeting time constraints, some participants completed the survey on their own time, at a later date.

Participants who were not in attendance at the school meeting received a packet of materials outlining the general components of the research, the consent form (see Appendix C), information on how to access the survey through SurveyMonkey, and the

researcher's contact information if additional questions or concerns arose. A small thank you in the form of a candy bar was sent in the packet as a token of appreciation. The packets were left at the school site in the individual paraprofessional's mailbox.

All participants who did not complete the survey within a week or two were E-mailed a reminder request that included the survey's web link. In the end, 76 paraprofessionals and 14 supervisors responded by completing the survey.

After the paraprofessionals completed the PII, I analyzed the survey responses and identified five paraprofessionals who seemed to demonstrate a particularly distinctive knowledge of the responsibilities and roles required of paraprofessionals. These individual paraprofessionals were invited to participate in semistructured interviews that I conducted when school resumed in the early fall of 2007 (see Appendix D).

The interview questions were based on emerging themes from analysis of the data generated by the PII (see Appendix E). These questions allowed me to delve deeper into areas reported to be challenging or confusing to paraprofessionals. One of the interview's initial questions probed into the knowledge base regarding the IEP process and specific goals for the students receiving tutelage from the paraprofessionals. The second initial interview question addressed the knowledge and skills required for selecting, obtaining and modifying curriculum materials. The final interview question, a follow-up to Part 3 of the PII, asked about training needs.

Supervisors

The supervisors of the paraprofessionals were asked to complete (from their perspective as a supervisor) Part 1 of the PII ("task importance to overall job performance," "frequency of task performed," and "difficulty for a newly hired instructional assistant to perform these tasks in a competent manner"). Filling out all of Part 1 of the PII required a longer amount of time for the supervisors than it did for the paraprofessionals. However, it was important to get all of the information from each of the supervisors because there were only 14 primary school supervisors in the district. By inviting the supervisors to take the entire survey, I was trying to equalize the amount of data points between the two respondent groups. Comparing more similar amounts of data would maximize the potential for obtaining more statistically reliable data. However, this added a higher dependency level among the supervisors' responses.

Supervisors were also asked to complete Part 2 and Part 3. Part 4 of the PII was revised to capture background information pertinent to a supervisor of paraprofessionals, including questions related to grade levels taught, years of experience as a classroom teacher, and years of experience as a supervisor of paraprofessionals.

Analysis Conducted

Demographic Information

Chapter IV reports gathered demographic information (gender, ethnicity, age, years of experience as a paraprofessional, and highest education level). It also details similar demographic information based on data collected from the supervisors, including information regarding the years of experience that supervising paraprofessionals reported.

Survey Information

Returned PII surveys were subjected to reliability and validity analysis according to the accepted PII protocol. Surveys were deemed invalid when it was evident that participants either did not respond consistently (to at least four out of the five repeated questions) or who selected at least four out of the five bogus items. These thresholds were selected because they are the same thresholds that Stallings (2000) used in her original work with the PII. Chapter IV reports the results obtained from reliability and validity analysis of PII surveys.

First, a descriptive analysis (means and standard deviations) was conducted for each of the five categories as a whole, as well as *t* tests to determine significant differences between the two respondent groups. Stallings (2000) did not do this analysis, but I added this analysis because attempting to meaningfully interpret only

single indicators (tasks) is not a very strong method to determine overall significance. These results are reported in Chapter IV.

Second, a descriptive analysis (means and standard deviations) was conducted for all 45 questions within the categories of academic instruction, behavior/classroom management, parent contact, medical/healthcare issues, and other. This analysis was specific to the three distinct areas ("importance," "frequency," and "difficulty to learn") of Part I of the PII survey. Chapter IV reports the results gleaned from this descriptive analysis.

Analyzing the data more closely, I considered each item's mean difference between paraprofessionals and supervisors. The criterion adopted for indicating significant difference between these two respondent groups was a mean difference of .75 or higher. This level was set based on Stallings' (2000) PII analysis. The second criterion adopted for considering significant difference was an analysis of mean differences within entire categories ("academic instruction," "behavior/classroom management," "parent contact," "medical/healthcare issues," and "other") and within domains (importance, frequency and difficulty to learn) between the paraprofessionals' responses and the supervisors' responses. *T* tests were conducted and a $p \leq .05$ level was applied. Results of this analysis are reported in Chapter IV.

Additional information regarding the roles and responsibilities required of paraprofessionals was obtained by doing a "mean item ranking" of the 40 different tasks (the five repeated tasks were removed). Item mean responses were ranked within the

three inventory scale domains of task importance, frequency and difficulty to learn, as reported by paraprofessionals and supervisors (separately).

Open-ended questions from Part 2 of the PII were subjected to both qualitative and quantitative analysis. Part 2 asks the following question: "Which, if any, of your job activities related to students with disabilities did we *not* include on this questionnaire?" Data from this question was analyzed using the same coding system that Stallings (2000) implemented (see Appendix F).

Part 3 of the PII surveys the top five skills paraprofessionals believe they need in order to work effectively with students. Stallings (2000) divided the responses into seven categories (behavioral/emotional management, teaching methods/instructional modifications, personal attributes, knowledge of disabilities, communication skills/case collaboration, inclusion, and other). I have used the same coding system that Stallings (2000) used for the PII and present these same categories, including descriptions thereof, and sample responses from the raw data (see Appendix F).

The last question of Part 3 solicits comments or suggestions for the training needs of educational paraprofessionals. Raw data were analyzed and grouped into six general categories based loosely on Stallings' (2000) coding system. Chapter IV reports the results obtained from this analysis, including descriptions of the categories and sample responses from the raw data.

Interview Information

After conducting interviews with the five paraprofessionals, I analyzed the transcripts by hand and highlighted passages or comments that were descriptive. Concurrently, I noted emerging themes based on the same categories used by Stallings' (2000) coding system.

Limitations of the Design

This mixed-methods case study on the roles, responsibilities and training needs of educational paraprofessionals has limitations inherent in its design. The first design limitation is that this is a single case study design where all of the paraprofessionals and supervisors work for the same medium-sized, suburban school district. The school district in which this study took place is not necessarily representative of the majority of school districts across the state or nation. The school district is one of the top academically performing school districts in its state. Additionally, when compared to other school districts in the state, it ranks near the very top on these measures: (a) socioeconomic status among district families and (b) money designated for staff development and educational opportunities for its employees (administrators, certified classroom teachers, and educational paraprofessionals).

Another limitation to the research design is that the paraprofessionals' and supervisors' data was self-reported without direct observation to corroborate actual behaviors. This may have resulted in responses that are more representative of how the

participating paraprofessionals or supervisors thought they should respond, based on school and district culture, as opposed to what is actually occurring. The five semistructured interviews were a way to help uncover any disparities.

Due to time and financial constraints, this research study was designed for and conducted by only one researcher, who was responsible for all data collection, analyses, and interpretation of results. An additional researcher or two working on this study would have allowed an additional level of validity and reliability, as collection and analysis could have been verified.

CHAPTER IV

RESULTS

The purpose of this research study was to identify and analyze the roles, responsibilities and related training needs of educational paraprofessionals who work with special education students in a general education environment within one medium-sized school district. Educational paraprofessionals and their supervisors responded to a survey that requested demographic information as well as information regarding the work that paraprofessionals do with students, school staff members and the parent community.

In this chapter, I use quantitative and qualitative methods to analyze and report on the demographic information, survey responses, and information gathered from the paraprofessional interviews.

Original and Refined Samples

Following the design and analysis of the original study that used the PII (Stallings, 2000), I wanted to ensure reliable and valid data sets by determining if there was a need to remove surveys that lacked validity and/or reliability. The following criterion for response reliability and validity was used: If a participant responded to four out of the five "bogus" questions (i.e., tasks that were obviously not in any

paraprofessional's job description—e.g., "interpret special education student end-of-grade test results to district administrators"), the survey would be removed. No participant endorsed four or more "bogus" questions. However, when an analysis of reliability was completed, it was discovered that three paraprofessionals responded inconsistently four or more times on repeated questions throughout the survey. These three paraprofessional surveys were taken out of the data set and the remaining surveys were considered the "paraprofessional refined sample" ($N = 73$). This "paraprofessional refined sample" will be used for all subsequent analysis and reporting and will be titled "paraprofessional sample."

The same criterion for response reliability and validity (endorsement of four out of five "bogus" questions and/or responding inconsistently four or more times on repeated questions) was used on the participating supervisors' surveys; however, no supervisor's survey needed to be excluded from the study. Therefore, in all subsequent analysis and reporting of the data from the supervisors, the term "supervisor sample" will be used ($N = 14$).

Participation of Paraprofessionals and Supervisors

Out of the 101 educational paraprofessionals who work in the seven primary schools throughout this district, there was a response rate of 76 paraprofessionals (76%). However, after reliability and validity checks as outlined earlier, 73 paraprofessionals (73%) met the criteria (see Table 2). After analyzing the data, I selected the following

TABLE 2. Participation of Paraprofessionals

Paraprofessionals	*n*	%
Total number of paraprofessionals	101	100
Paraprofessionals completing survey	76	76
Paraprofessionals completing survey (meeting reliability and validity criteria)	73	73

participants for interviews: five paraprofessionals who had completed the PII with great depth and detail, especially in the areas of instructing students, training needs and training options or suggestions. Additionally, a theme that emerged through the survey of these five participants was a lack of knowledge or experience regarding the task of "reviewing IEP reports," even though each of the five participants spent a large majority of his or her time working instructionally and behaviorally with students who had IEPs. I wanted to understand more about this apparent phenomenon. All five of the initially selected paraprofessionals agreed to be interviewed.

There were 15 total primary school supervisors in the district; however, I was one and obviously did not participate because I was the researcher. The remaining 14 primary school supervisors (100%) completed a survey.

Demographic Information

In this section, I describe the demographic data of the paraprofessionals and supervisors, including gender, ethnicity, age, years of experience as a teacher or

supervisor, highest level of education (paraprofessionals), and number of years as a supervisor of paraprofessionals (supervisors).

Description of Responding Paraprofessionals

Gender

In regard to gender, 71 out of the 73 paraprofessionals were female (97%), as shown in Table 3. This reflects the national trend of having a great majority of female educational paraprofessionals working in primary schools.

TABLE 3. Gender of Paraprofessionals

Gender	*n*	%
Female	62	85
Male	1	1
Did not report	10	14
Total	73	100

Ethnicity

The large majority of paraprofessionals who responded to this question reported that they are Caucasian (90% of the 63 respondents), as referred to in Table 4. This finding supports the national data presented in the literature review; these data show that individuals working in schools are predominantly the same ethnicity as the majority student population they serve.

TABLE 4. Ethnicity of Paraprofessionals

Ethnicity	*n*	%
African American	0	0
Caucasian	56	77
Asian	1	1
Hispanic	3	4
Other	2	3
Did not report	11	15
Total	73	100

Age

As reported in Table 5, the mean age of paraprofessionals was 45.51 years old (63 paraprofessionals responding). There was a range of paraprofessional ages reported. The youngest paraprofessional reported was 23 years of age and the oldest reported was 64 years age; with a mean age of 46 years (*SD* = 9.13). The majority of these respondents (51%) reported that they were between 41 and 50 years old.

Years of Experience as a Paraprofessional

The mean number of years of experience as a paraprofessional was 7 (*SD* = 6.53), with the range being less than 1 year of paraprofessional experience (these respondents were in their first year of being a paraprofessional) to 30 years of

TABLE 5. Age of Paraprofessionals

Age	*N*	%
22-30	7	10
31-40	5	7
41-50	32	44
51-66	17	23
Did not report	12	16
Total	73	100
Mean age	46	

paraprofessional experience. The largest group of paraprofessionals was in the "0.5-3 years of experience" range, amounting to 41% of the respondents. These data are summarized in Table 6.

TABLE 6. Years of Experience as a Paraprofessional

Years of experience	*n*	%
1 to 3	26	36
4 to 10	12	16
11 to 20	12	16
21 to 32	6	8
Did not report	17	23
Mean years of experience	7	
Modal years of experience	1	

Educational Experience

A total of 64 paraprofessionals responded to the question regarding their highest level of education. Six (9%) paraprofessionals responded that they had either a high school diploma or GED. Twenty (31%) paraprofessionals indicated that they had some college experience. Almost half (30 paraprofessionals, or 47%) reported that they had a 4-year college degree. Seven (11%) indicated that they had some graduate school experience, and one (2%) had a graduate degree. See Table 7 for a summary of these data.

TABLE 7. Educational Experience of Paraprofessionals

Educational experience	*N*	%
High school or GED	6	8
Some college	18	25
4-year college degree	30	41
Some graduate school	7	10
Graduate degree	1	1
Other	5	7
Did not report	6	8
Total	73	100

In summary, the typical educational paraprofessional participant in this survey was female, Caucasian, between 41 and 50 years old, with 0.5 to 3 years of paraprofessional experience, and highly educated with a 4-year college degree.

However, it should be noted that the second largest group of respondents reported that while they were also female and Caucasian, they were in the 51-66 age range with 21-32 years of paraprofessional experience.

Description of Supervisor Respondents

Gender

Eleven out of the 14 supervisors (79%) reported that they were female and 3 supervisors (21%) reported that they were male (see Table 8).

TABLE 8. Gender of Supervisors

Gender	*n*	%
Female	11	79
Male	3	21
Did not report	0	0
Total	14	100

Ethnicity

All of the 14 supervisors (100%) reported that they are Caucasian.

Age

The mean age of supervisors was 45 years ($SD = 9.66$), with the oldest supervisor being 60 and the youngest being 33 (range of 27 years). It is interesting to

note that, when grouped into age ranges, all but one respondent was either in the 31-40 or 51-66 range. The one person who reported being in the 41-50 age range was someone whose age would typically place that individual in the middle of his or her career. Refer to Table 9 for a summary of these data.

TABLE 9. Age of Supervisors

Age	*n*	%
22-30	0	0
31-40	7	50
41-50	1	7
51-66	6	43
Did not report	0	0
Total	14	100
Mean age	44	
Low age	33	
High age	60	

Years of Experience Supervising Paraprofessionals

Nine of the 14 supervisors (64%) reported on the number of years they have been a supervisor of educational paraprofessionals; see Table 10 for a summary. The mean was 9.7 years ($SD = 9.37$), with the fewest number of years being under 1 year and the longest amount of time being 27 years.

TABLE 10. Years of Experience as a Supervisor

Years of experience	*n*	%
1 to 3	4	29
4 to 10	1	7
11 to 20	3	21
21 to 32	1	7
Did not report	5	36
Total	14	100
Mean years of experience	10	
Low years of experience	1	
High years of experience	27	

In summary, the typical supervisor reported that he or she is Caucasian, either 31-40 or 51-66 years old, with either less than 4 years of experience or between 11 and 20 years of experience as a supervisor of paraprofessionals.

Paraprofessional and Supervisor Survey Information

In this next section, I report and analyze the data from the PII survey to which the paraprofessionals and supervisors responded. It is important to remember that the paraprofessional survey data were obtained from the refined sample (see Chapter III, Methodology, for steps taken to determine the refined sample). The survey consisted of four separate parts. The first three parts of the Paraeducator Inclusion Inventory taken by paraprofessionals and supervisors were identical, and those results are reported in the

next section. The fourth part of the questionnaire surveyed demographic information, and I have already reported and analyzed that information at the beginning of this chapter.

The first part of each PII questionnaire had 45 identical items, divided into the following categories: "academic instruction," "behavior/classroom management," "parent contact," "medical/healthcare issues," and "other." Depending on the version that paraprofessional respondents received randomly, they were asked to rate all 45 items based on two of the three following criteria: "task importance to overall job performance" ("importance"), "frequency of task performed" ("frequency"), or "difficulty for a newly hired instructional assistant to learn to perform these tasks in a competent manner" ("difficulty"). Supervisors received all of the questions (i.e., three out of the three domains). All items in this first part of the PII used a Likert scale with a 1-5 rating system.

The second part of the questionnaire asked participants to respond to questions regarding task-coverage procedures.

The third part of the questionnaire asked participants to respond to questions regarding (a) the top five skills needed by paraprofessionals in working with special needs students, and (b) training needs of paraprofessionals when working with exceptional children.

The purpose of using the PII was to gather information regarding the specific tasks that paraprofessionals engage in while working with primary school students.

More specifically, the questionnaire was used to determine the paraprofessionals' and supervisors' perceptions of the importance of specific tasks, how often a task is performed, and how difficult it would be to learn the new task. Understanding the perceptions around a paraprofessional's roles would assist in understanding training needs. Sampling both paraprofessionals and supervisors allows for comparisons to be made between the two groups.

Part I of the PII: Importance, Frequency and Difficulty

In order to begin analyzing the survey data collected from the PII regarding the perceptions of paraprofessionals and supervisors, I needed to remove the five repeated tasks that were embedded in the "other" category. Those five repeated tasks were only on the survey to help determine participants' response validity. It must be noted that from this point forward, all analysis was done without those five repeated tasks.

The initial analysis conducted was to determine the mean, standard deviation, and significant difference between the two participant groups for each of the five whole categories, along each domain (importance, frequency and difficulty). The results indicated that every category, in all domains, displayed a significant difference ($p \leq 0.05$) except for Behavior/Classroom Management and Parent Contact within the "frequency" domain. See Table 11 for details.

Analyzing the data more closely, I considered each item's mean difference between paraprofessionals and supervisors. The criterion adopted for indicating

TABLE 11. *T* Tests and Significant Differences: Paraprofessionals and Supervisors

Inventory category	Importance Scale				Frequency Scale				Difficulty Scale			
	Para	Sup	*t* test	*p*	Para	Sup	*t* test	*p*	Para	Sup	*t* test	*p*
Academic instruction												
M	2.35	2.09	2.40	0.01*	2.22	1.92	2.78	0.00*	2.80	1.80	8.97	0.00*
SD	1.24	1.36			1.25	1.30			1.32	0.99		
Behavior/classroom management												
M	2.39	1.97	2.75	0.00*	2.11	1.90	1.49	0.07	2.74	1.73	6.49	0.00*
SD	1.29	1.41			1.21	1.41			1.40	1.04		
Parent contact												
M	1.85	1.32	3.55	0.00*	1.30	1.20	1.16	0.12	2.47	1.26	5.92	0.00*
SD	1.09	0.77			0.59	0.58			1.52	0.69		
Medical/healthcare issues												
M	1.87	1.32	4.69	0.00*	1.65	1.15	5.04	0.00*	1.97	1.18	6.08	0.00*
SD	1.10	0.83			0.93	0.57			1.27	0.54		
Other												
M	2.15	2.85	2.85	0.00*	2.25	1.70	2.75	0.00*	2.62	1.46	6.17	0.00*
SD	1.11				1.36	1.32			1.33	0.83		

Note. See Appendix A for exact wording.

*$p \leq 0.05$.

significant difference between these two respondent groups was a mean difference of .75 or higher. This level was set based on Stallings' (2000) PII analysis. After mean differences were ascertained, 47 total items were considered significantly different. In the "importance domain," 11 items had a .75 or higher mean difference between paraprofessionals and supervisors. Seven tasks within the "frequency domain" showed a significant mean difference. In the "difficulty domain," 29 out of the possible 40 items (73%) differed significantly. It is interesting to note that 45 out of these 47 items (96%) were rated higher (i.e., more important, more frequent, more difficult to learn) by the supervisors than by the paraprofessionals. When each task was analyzed it was found that four tasks had mean differences at the specified criteria (.75 or higher) across all three domains (importance, frequency, and difficulty). These tasks were the following: "administer modified tests," "assist with mobility needs," "assist ancillary teachers," and "operate adaptive devices." It was also found that when ranked on the "importance" scale or "frequency" scale, none of the tasks within the "Behavior/Classroom Management" category were determined to have a mean difference of .75 or higher. Paraprofessionals and supervisors ranked these items fairly consistently. Tables 12 and 13, as well as Figures 1, 2, and 3 present these summarized data.

The second criterion adopted for considering significant difference was a *t* test analysis of mean differences between the two participant groups (paraprofessionals and supervisors). Each task was compared across all three domains: importance, frequency and difficulty. *T* tests were conducted and a $p \leq 0.05$ level criteria was applied. This

TABLE 12. Item Means and Standard Deviations for Paraprofessionals

Inventory items	Importance Scale			Frequency Scale			Difficulty Scale		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Academic instruction									
Provide large-group instruction	47	2.26*	1.27	46	2.00*	1.21			
Provide small-group instruction				46	2.65*	1.51	39	2.03*	0.91
Provide individualized instruction							39	2.42*	1.03
Select/obtain materials							39	2.29*	1.18
Implement modifications	47	2.58*	1.50						
Monitor contracts/progress									
Facilitate/monitor peer tutors	47	1.29*	0.63						
Administer modified tests	47	1.69*	1.16	46	1.30*	0.51	39	1.58*	0.79
Administer general tests									
Interpret end of grade test to district							39	1.08*	0.49
Review IEPs							39	1.45*	0.95
Monitor IEP progress							39	1.87*	1.12
Plan with teachers, Tas							39	1.97*	1.05

TABLE 12. (Continued)

Inventory items	Importance Scale			Frequency Scale			Difficulty Scale		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Behavior/Classroom Management									
Monitor/intervene with misbehavior							39	2.23*	0.93
Facilitate social/emotional development							39	2.34*	1.05
Facilitate life skills development							39	1.21*	0.61
Provide staff development training							39	1.08*	0.35
Provide counseling/mediation							39	1.64*	1.25
Provide one-on-one behavioral assistance							39	2.13*	1.00
Assist with record keeping							39	1.56*	0.91
Use physical restraint holds							39	1.71*	1.23
Parent Contact									
Assist with daily/weekly communications							39	1.26*	0.72
Help teacher prepare conference	47	2.17*	1.07				39	1.79*	0.91
Participate in IEP meetings							39	1.14*	0.59
Participate in progress monitoring	47	1.00*	0.00				39	1.05*	0.32
Conduct parent/administration meetings							39	1.08*	0.49

TABLE 12. (Continued)

Inventory items	Importance Scale			Frequency Scale			Difficulty Scale		
	N	*M*	*SD*	*N*	*M*	*SD*	*n*	*M*	*SD*
Medical/Healthcare Issues									
Monitor necessary aids/equipment									
Cue students to obtain medications				46	1.31*	0.73			
Administer medication							39	1.14*	0.35
Accompany student to physician									
Assist with mobility needs	47	1.43*	0.88	46	1.31*	0.76	39	1.21*	0.41
Intervene with seizures	47	1.34*	0.92				39	1.26*	0.86
Assist with toileting needs	47	1.36*	0.85				39	1.18*	0.56
Change/suction trachea tube									
Change feeding tube									
Other									
Facilitate communication									
Help supervise students							39	2.08*	0.97
Assist ancillary teachers	47	1.79*	1.23	46	1.57*	1.13	39	1.59*	0.82
Operate adaptive devices	47	1.30*	0.91	46	1.24*	0.87	39	1.21*	0.74
Make grade retention decision							39	1.00*	0.00

Note. See Appendix A for exact wording of each inventory item.

* = .75 or higher mean difference between paraprofessionals and supervisors.

TABLE 13. Item Means and Standard Deviations for Supervisors

Inventory items	Importance Scale			Frequency Scale			Difficulty Scale		
	n	*M*	*SD*	*N*	*M*	*SD*	*n*	*M*	*SD*
Academic instruction									
Provide large-group instruction	14	1.50*	0.52	14	1.21*	0.58			
Provide small-group instruction				14	3.43*	0.94	14	3.69*	0.75
Provide individualized instruction							14	3.62*	0.77
Select/obtain materials							14	3.54*	1.39
Implement modifications	14	3.57*	1.28						
Monitor contracts/progress									
Facilitate/monitor peer tutors	14	2.21*	0.89				14	2.62*	1.04
Administer modified tests	14	2.86*	0.95	14	2.14*	0.77			
Administer general tests									
Interpret end of grade test to district							14	2.15*	1.82
Review IEPs							14	2.50*	1.45
Monitor IEP progress							14	2.69*	1.32
Plan with teachers, Tas							14	2.85*	0.99

TABLE 13. (Continued)

Inventory items	Importance Scale			Frequency Scale			Difficulty Scale		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Behavior/Classroom Management									
Monitor/intervene with misbehavior							14	3.50*	0.80
Facilitate social/emotional development							14	3.67*	0.65
Facilitate life skills development							14	2.08*	1.24
Provide staff development training							14	2.00*	1.81
Provide counseling/mediation							14	2.50*	1.68
Provide one-on-one behavioral assistance							14	3.08*	1.00
Assist with record keeping							14	2.33*	1.15
Use physical restraint holds							14	2.75*	1.71
Parent Contact									
Assist with daily/weekly communications							14	2.33*	1.44
Help teacher prepare conference	14	3.08*	1.00				14	3.17*	0.94
Participate in IEP meetings							14	2.33*	1.67
Participate in progress monitoring	14	1.75*	1.06				14	2.17*	1.47
Conduct parent/administration meetings							14	2.33*	1.97

TABLE 13. (Continued)

Inventory items	Importance Scale			Frequency Scale			Difficulty Scale		
	n	*M*	*SD*	*N*	*M*	*SD*	*n*	*M*	*SD*
Medical/Healthcare Issues									
Monitor necessary aids/equipment									
Cue students to obtain medications				14	2.09*	0.94			
Administer medication							14	2.18*	1.33
Accompany student to physician									
Assist with mobility needs	14	2.36*	1.12	14	2.18*	0.98	14	2.36*	1.12
Intervene with seizures	14	2.36*	1.21				14	2.82*	1.66
Assist with toileting needs	14	2.36*	1.43				14	2.36*	1.50
Change/suction trachea tube									
Change feeding tube									
Other									
Facilitate communication									
Help supervise students							14	3.18*	0.75
Assist ancillary teachers	14	2.73*	1.01	14	2.55*	1.04	14	2.91*	1.04
Operate adaptive devices	14	2.09*	0.83	14	2.18*	1.17	14	3.18*	1.25
Make grade retention decision							14	1.91*	1.64

Note. See Appendix A for exact wording of each inventory item.

* = .75 or higher mean difference between paraprofessionals and supervisors.

analysis illustrated that 19 tasks in the "importance" domain were significantly different, with a p value of less than or equal to 0.05. In the "frequency" domain, 14 tasks were reported. The "difficulty" domain showed the largest number of tasks (40 out of 45, or 89%) that were rated significantly different at the $p \leq 0.05$ confidence level. These data are summarized in Table 14.

When the two criteria for significant difference (mean differences of .75 or higher and a $p \leq 0.05$ level) are applied together, the result is a much more stringent method of determining levels of significance. After completion of this analysis, it was found that 11 tasks in the "importance domain," 7 tasks in the "frequency domain," and 28 in the "difficulty domain" met both criteria concurrently.

When each task was analyzed it was found that 10 tasks had mean differences at the specified criteria ($p < 0.05$) across all three domains (importance, frequency, and difficulty). These tasks were the following: "provide small group instruction," "implement modifications," "facilitate/monitor peer tutors," "administer modified tests," "help teacher to prep for parent conferences," "cue students to obtain medication," "assist with mobility needs," "intervene with seizures," "assist ancillary teachers," and "operate adaptive devices."

Item Mean Rankings

Supplementary information regarding the roles and responsibilities required of paraprofessionals came from the mean item ranking of the 40 different tasks. Item mean

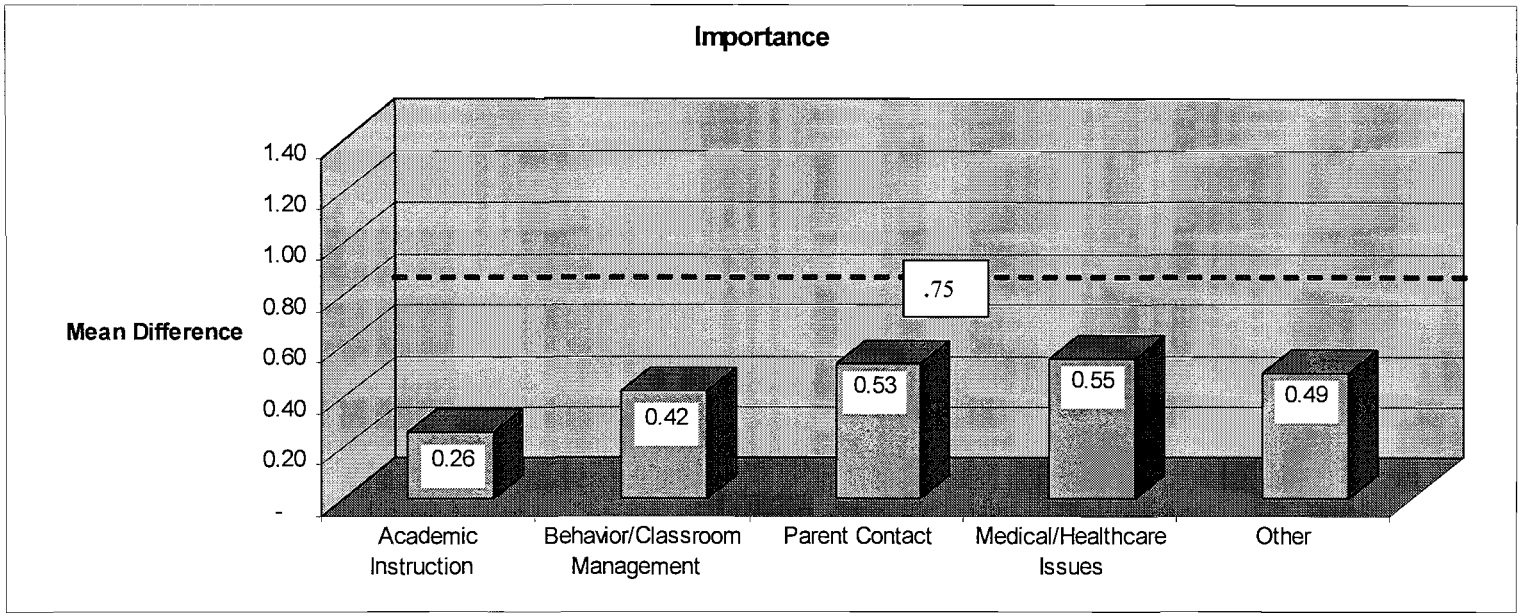

FIGURE 1. Whole category mean differences between paraprofessionals and supervisors: importance.

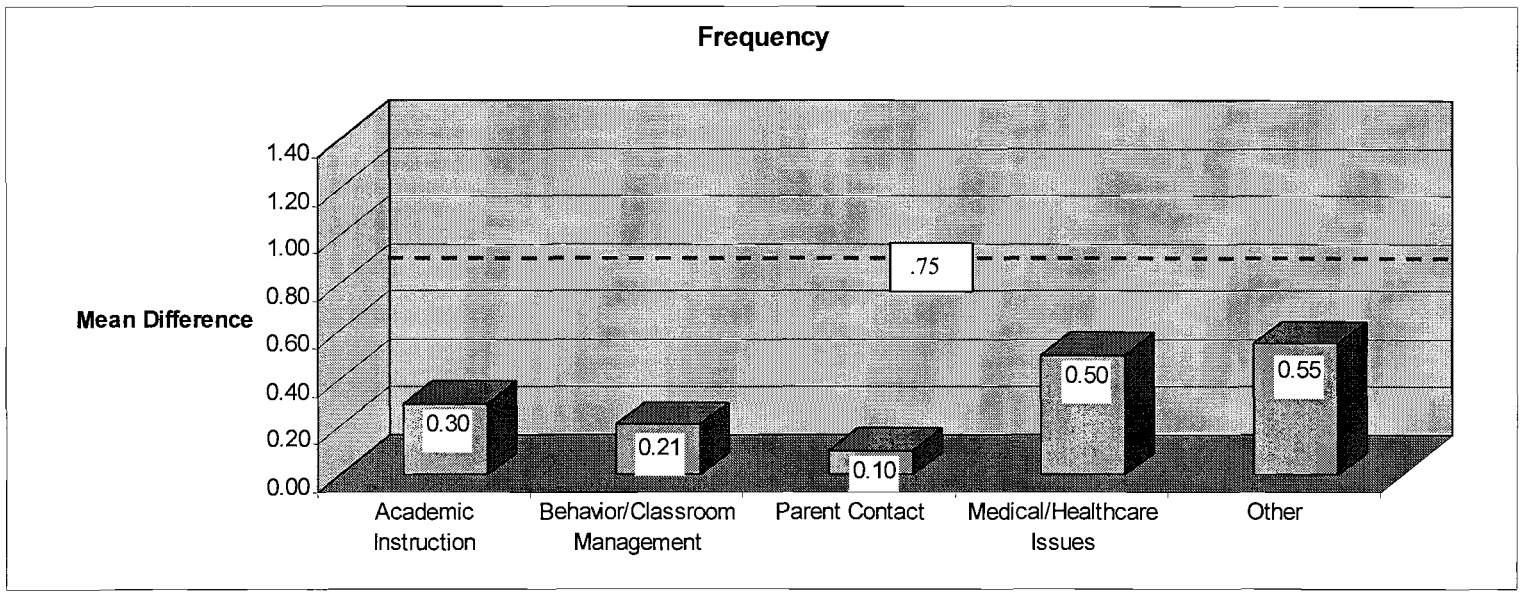

FIGURE 2. Whole category mean differences between paraprofessionals and supervisors: frequency.

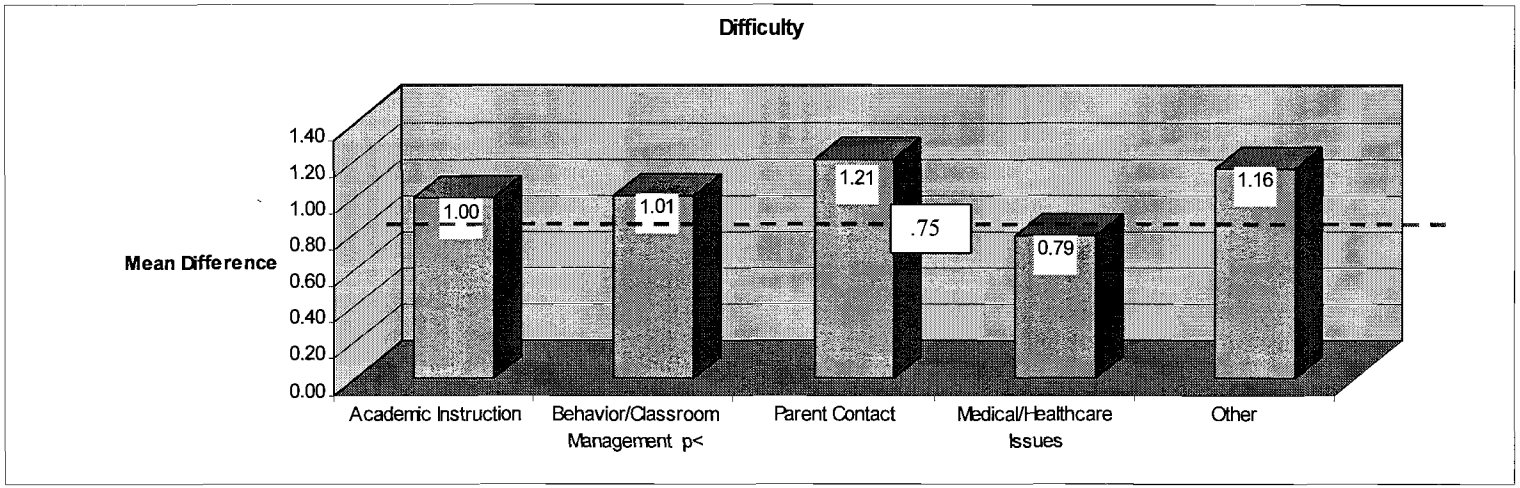

FIGURE 3. Whole category mean differences between paraprofessionals and supervisors: difficulty.

TABLE 14. *T* Tests and Significant Differences by Tasks: Paraprofessionals and Supervisors

Inventory category	Importance Scale				Frequency Scale				Difficulty Scale			
	Para *M*	Sup *M*	*t* test	*p*	Para *M*	Sup *M*	*t* test	*p*	Para *M*	Sup *M*	*t* test	*p*
Academic instruction												
Provide large-group instruction	2.26	1.50	-3.26	0.00*	2.00	1.21	-3.33	0.00*				
Provide small-group instruction	2.76	3.50	1.91	0.03*	2.65	3.43	2.32	0.01*	2.03	3.69	6.51	0.00*
Provide individualized instruction									2.42	3.62	4.41	0.00*
Select/obtain materials	2.33	1.86	-1.64	0.05*					2.29	3.54	2.90	0.00*
Implement modifications	2.58	3.57	2.43	0.01*	2.53	3.50	2.54	0.01*	2.13	3.23	2.92	0.00*
Monitor contracts/progress									1.81	2.46	1.70	0.05*
Facilitate/monitor peer tutors	1.20	2.21	3.61	0.00*	1.41	2.14	2.25	0.02*	1.32	2.62	4.24	0.00*
Administer modified tests	1.69	2.86	3.80	0.00*	1.30	2.14	3.82	0.00*	1.58	2.62	4.17	0.00*
Administer general tests									1.39	2.00	1.90	0.04*
Interpret end of grade test to district									1.08	2.15	2.11	0.03*
Review IEPs									1.45	2.50	2.37	0.02*
Monitor IEP progress									1.87	2.69	2.02	0.03*
Plan with teachers, Tas									1.97	2.85	2.70	0.01*

TABLE 14. (Continued)

Inventory category	Importance Scale				Frequency Scale				Difficulty Scale			
	Para *M*	Sup *M*	*t* test	*p*	Para *M*	Sup *M*	*t* test	*p*	Para *M*	Sup *M*	*t* test	*p*
Behavior/Classroom Management												
Monitor/intervene with misbehavior									2.23	3.50	4.63	0.00*
Facilitate social/emotional development									2.34	3.67	5.23	0.00*
Facilitate life skills development	1.28	1.92	1.92	0.03*					1.21	2.08	2.37	0.02*
Provide staff development training									1.08	2.00	1.76	0.05*
Provide counseling/mediation												
Provide one-on-one behavioral assistance	2.37	3.08	3.08	0.04*					2.13	3.08	2.90	0.00*
Assist with record keeping									1.56	2.33	2.11	0.03*
Use physical restraint holds									1.71	2.75	1.95	0.04*
Parent Contact												
Assist with daily/weekly communications									1.26	2.33	2.48	0.01*
Help teacher prepare conference	2.17	3.08	2.79	0.01*	1.76	2.17	1.69	0.05*	1.79	3.17	4.47	0.00*
Participate in IEP meetings	1.06	1.75	2.24	0.02*					1.14	2.33	2.44	0.02*
Participate in progress monitoring	1.00	1.75	2.46	0.02*					1.05	2.17	2.61	0.01*
Conduct parent/administration meetings									1.08	2.33	2.19	0.03*

TABLE 14. (Continued)

Inventory category	Importance Scale				Frequency Scale				Difficulty Scale			
	Para *M*	Sup *M*	*t* test	*p*	Para *M*	Sup *M*	*t* test	*p*	Para *M*	Sup *M*	*t* test	*p*
Medical/Healthcare Issues												
Monitor necessary aids/equipment									1.26	1.82	2.03	0.03*
Cue students to obtain medications	1.70	2.36	1.73	0.05*	1.31	2.09	2.56	0.01*	1.32	1.73	1.96	0.04*
Administer medication					1.07	1.64	1.83	0.05*	1.14	2.18	2.59	0.01*
Accompany student to physician												
Assist with mobility needs	1.43	2.36	2.60	0.01*	1.31	2.18	2.75	0.01*	1.21	2.36	3.35	0.00*
Intervene with seizures	1.34	2.36	2.64	0.01*	1.02	1.45	2.71	0.01*	1.26	2.82	2.99	0.01*
Assist with toileting needs	1.36	2.36	2.23	0.02*					1.18	2.36	255	0.01*
Change/suction trachea tube												
Change feeding tube												
Other												
Facilitate communication												
Help supervise students					3.17	3.91	1.95	0.03*	2.08	3.18	4.00	0.00*
Assist ancillary teachers	1.79	2.73	2.66	0.01*	1.57	2.55	2.77	0.01*	1.59	2.91	3.87	0.00*
Operate adaptive devices	1.30	2.09	2.80	0.01*	1.24	2.18	2.51	0.01*	1.21	3.18	4.98	0.00*
Make grade retention decision									1.00	1.91	1.84	0.05*

Note. See Appendix A for exact wording of each inventory item. Para = paraprofessionals; Sup = supervisors.

*$p \leq 0.05$.

responses were ranked within the three inventory domains of "task importance," "frequency" and "difficulty to learn," as reported by paraprofessionals and supervisors (separately). Analysis of the tasks that received the top five highest mean rankings from both paraprofessionals and supervisors produced seven different tasks across the three domains, out of a possible 40 different tasks. Four of the tasks were from the "Academic Instruction" category (more specifically, "provide small group instruction," "provide individualized instruction," and "select/obtain materials and implement modifications"). Two of the tasks within the top five mean rankings came from the "Behavior/Classroom Management" category (specifically, "monitor/intervene with misbehavior" and "facilitate social/emotional development"). It is interesting to note that these two tasks, "monitor/intervene with misbehavior" and "facilitate social/emotional development," were in the top five mean rankings in all three domains (importance, frequency and difficulty) and across both participant groups (paraprofessionals and supervisors). The final task receiving means in the top five mean rankings was "help supervise students" from the "Other" category. Table 15 presents the top five item mean rankings of both paraprofessionals and supervisors for all tasks from the PII survey. Tables 16, 17, and 18 present the same data in a comparative format.

Part II of the PII: Task-Coverage Procedure

Part II of the PII asked paraprofessionals to respond to the question, "Which, if any, of your job activities related to students with disabilities did we *not* include on this

TABLE 15. Item Mean Rankings Indicating Top Five Job Activities Within Each Column: Paraprofessionals and Supervisors

Inventory items	Importance Scale		Frequency Scale		Difficulty Scale	
	Parapro-fessionals	Supervisors	Parapro-fessionals	Supervisors	Parapro-fessionals	Supervisors
Academic instruction						
Provide large-group instruction						
Provide small-group instruction	5*	4*	5*	4*	8	1*
Provide individualized instruction	3*	3*	1*	2*	2*	3*
Select/obtain materials	9	1*			4*	4*
Implement modifications	6	3*	6	3*	1*	6
Monitor contracts/progress						
Facilitate/monitor peer tutors						
Administer modified tests						
Administer general tests						
Interpret end of grade test to district						
Review IEPs						
Monitor IEP progress						
Plan with teachers, Tas						

TABLE 15. (Continued)

Inventory items	Importance Scale		Frequency Scale		Difficulty Scale	
	Parapro-fessionals	Supervisors	Parapro-fessionals	Supervisors	Parapro-fessionals	Supervisors
Behavior/Classroom Management						
Monitor/intervene with misbehavior	2*	2*	3*	3*	5*	5*
Facilitate social/emotional development	1*	1*	2*	5*	3*	2*
Facilitate life skills development						
Provide staff development training						
Provide counseling/mediation						
Provide one-on-one behavioral assistance						
Assist with record keeping						
Use physical restraint holds						
Parent Contact						
Assist with daily/weekly communications						
Help teacher prepare conference						
Participate in IEP meetings						
Participate in progress monitoring						
Conduct parent/administration meetings						

TABLE 15. (Continued)

Inventory items	Importance Scale		Frequency Scale		Difficulty Scale	
	Parapro-fessionals	Supervisors	Parapro-fessionals	Supervisors	Parapro-fessionals	Supervisors
Medical/Healthcare Issues						
Monitor necessary aids/equipment						
Cue students to obtain medications						
Administer medication						
Accompany student to physician						
Assist with mobility needs						
Intervene with seizures						
Assist with toileting needs						
Change/suction trachea tube						
Change feeding tube						
Other						
Facilitate communication						
Help supervise students	4*	5*	4*	1*		
Assist ancillary teachers						
Operate adaptive devices						
Make grade retention decision						

Note. See Appendix A for exact wording of each item. Duplicated ranks within each column indicate tied rankings.

* = top five mean ranking.

TABLE 16. Summary of Item Mean Rankings Indicating Top Five Job Activities: Importance

Paraprofessionals			Supervisors		
Rank	Category	Task	Rank	Category	Task
1	Behavior	Facilitate social/emotional development.	1	Academic Behavior	Select/obtain materials. Facilitate social/emotional development.
2	Behavior	Monitor/intervene with misbehavior.	2	Behavior	Monitor, intervene with misbehavior.
3	Academic	Provide individualized instructions.	3	Academic Academic	Provide individualized instruction. Implement modifications.
4	Other	Help supervise students.	4	Academic	Provide small-group instruction.
5	Academic	Provide small-group instruction.	5	Other	Help supervise students.

TABLE 17. Summary of Item Mean Rankings Indicating Top Five Job Activities: Frequency

Paraprofessionals			Supervisors		
Rank	Category	Task	Rank	Category	Task
1	Academic	Provide individualized instruction.	1	Other	Help supervise students.
2	Behavior	Facilitate social/emotional development.	2	Academic	Provide individualized instruction.
3	Behavior	Monitor/intevene with misbehavior.	3	Behavior Academic	Monitor/intervene with misbehavior. Implement modifications.
4	Other	Help supervise students.	4	Academic	Provide small-group instruction.
5	Academic	Provide small-group instruction.	5	Behavior	Facilitate social/emotional development

TABLE 18. Summary of Item Mean Rankings Indicating Top Five Job Activities: Difficulty

Paraprofessionals			Supervisors		
Rank	Category	Task	Rank	Category	Task
1	Academic	Implement modifications.	1	Academic	Provide small-group instruction.
2	Academic	Provide individualized instruction.	2	Behavior	Facilitate social/emotional development.
3	Behavior	Facilitate social/emotional development.	3	Academic	Provide individualized instruction.
4	Academic	Select/obtain materials.	4	Academic	Select/obtain materials.
5	Behavior	Monitor/intervene with misbehavior.	5	Behavior	Monitor/intervene with misbehavior.

questionnaire?" I used the same categories of responses from Stallings' (2000) coding manual for this exact same question. Thirty-six of the 73 paraprofessionals (49%) responded to this question. However, 14 of these participants responded that all of the tasks they perform were covered within the PII. Ten individuals mentioned tasks that were actually already on the PII survey. The remaining comments were "general" or "other" comments. The following is a sample of these responses: "performing student observations," "keeping learning environment organized and clean," "listen to students as a sounding board," "help students feel good about being at school," "I schedule all the meetings between staff and parents of IEP students," "copy and file paperwork of IEP tudents," "make agendas for special education team meetings." In summary, the PII covered the majority of job activities experienced by educational paraprofessionals.

Part III of the Paraeducator Inclusion Inventory: Top Five Skills Needed by Paraprofessionals

Part III of the PII asked paraprofessionals to respond to the question, "Please list the top five skills that teaching assistants need in their work with students with disabilities." Forty-five participants (62%) responded to this question. The responses were organized into eight main categories ("knowledge of disabilities," "teaching methods/instructional modifications," "behavioral/emotional management," "inclusion," "communication skills/case collaboration," "medical/health," "personal attributes," "other"). Each of the main categories (except for "inclusion," "medical/health," and "other") was further divided into subcategories. The main category "personal attributes"

was selected by 40 of the 45 paraprofessionals (89%) who responded. Within this category, "patience" was given as an important personal attribute required of paraprofessionals more often than any other personal attribute ("care and sensitivity" was described by 20% of the respondents, and "flexibility" was described by 18% of the respondents). The main category "behavioral/emotional management" was described the second most often as being in the top five skills required of paraprofessionals with 37 responses (82%). Within this category, "behavior management" was reported by 29 participants (65%) as being a top skill required. The third most commonly reported skill reported as necessary was "teaching methods/instructional modifications," with a response rate of 76%. Within this category, sample responses for this category were "know specialized instruction and be able to teach and modify teaching," and "know how to manage small and large groups of students." The fourth required skill most commonly reported was "knowledge of disabilities," with a 62% response rate. The importance of general knowledge of disabilities (29%) and knowledge of individual's disability (31%) were the most commonly reported skills or attributes. A visual reporting of this data is in Figure 4.

In summary, patience, behavioral/emotional management, teaching methods/instructional modifications, and knowledge of disabilities were reported most often (by at least half of all paraprofessional respondents) as being in the top five skills required of paraprofessionals. Table 19 gives specific sample responses and summarizes these data.

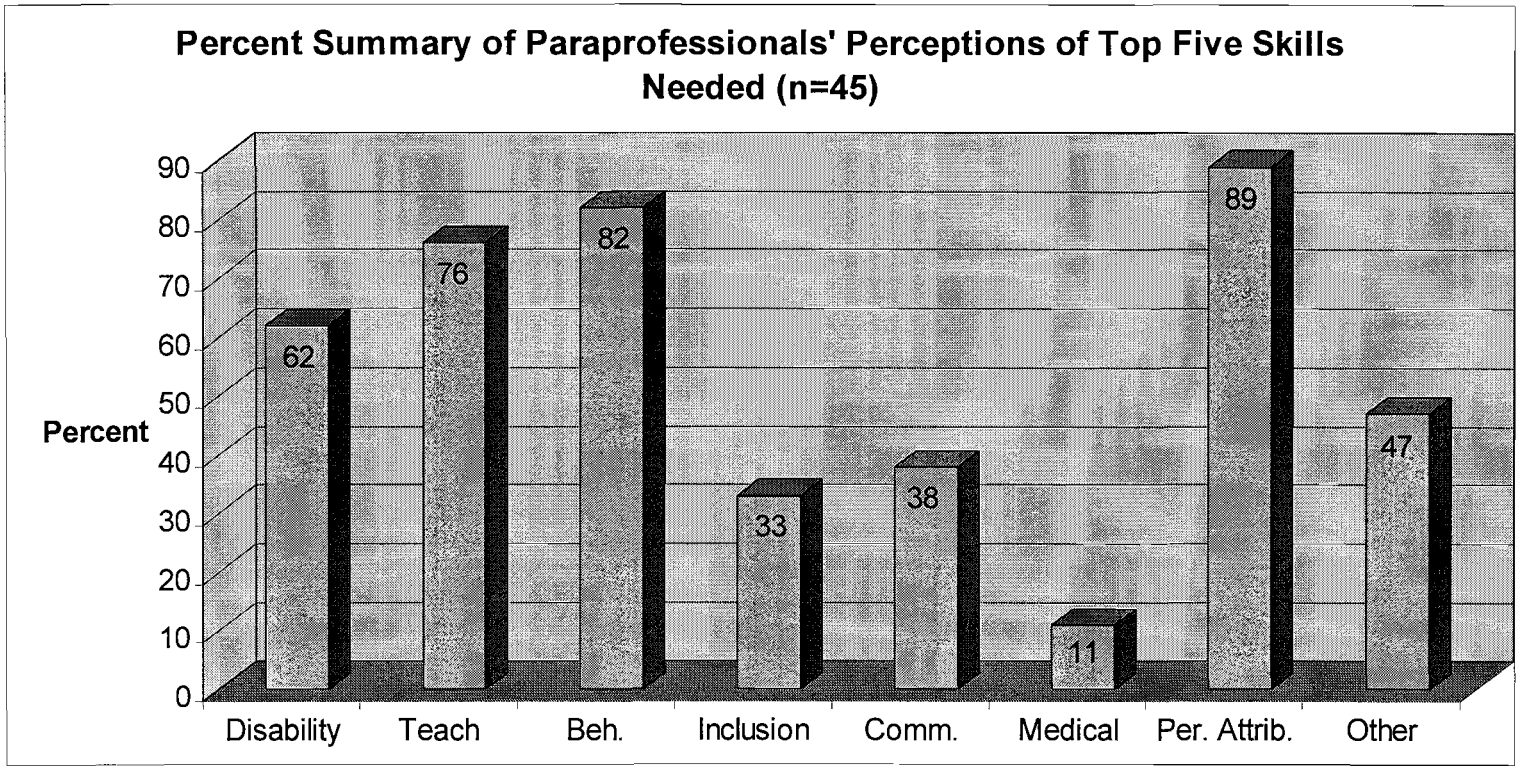

FIGURE 4. Paraprofessionals' perceptions of top five skills needed ($n = 45$).

TABLE 19. Paraprofessional Perceptions of the Top Five Skills Needed by Paraprofessionals ($n = 45$)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Knowledge of disabilities			62
General knowledge of disabilities	General knowledge of learning disabilities (nature or cause of disability).	13	29
Knowledge of individual's disability	Awareness of individual's disabilities and ability to discern the difference between a behavioral issue and a learning disability.	14	31
Child development	Understand the psychosocial and physical development of children.	1	2
Teaching methods/instructional modifications			76
Knowledge to teach skills/instruct	Know specialized instruction and be able to teach and modify teaching.	14	29
Resources	Select appropriate materials.	5	11
Tutoring/individualized instruction	Ability to adjust instruction to meet individual student needs.	7	16
Large- and small-group instruction	Know how to manage small and large groups of students.	5	11
Content knowledge	Learn about the curriculum and content that you are working with.	3	7

TABLE 19. (Continued)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Behavioral/emotional management			82
Behavior management	Ability to consistently provide behavior expectations/ consequences. Supervision of large groups in common areas.	29	64
Emotional support/student motivation and encouragement	Be positive with actions and words.	4	9
Intense behavior	Skills to manage the behavior of violent and aggressive students, to protect themselves and the student.	2	4
Prevention	Proactive (i.e., the ability to prepare beforehand for unexpected scenarios, triggers, etc.).	1	2
Conflict resolution	Facilitate solutions between students who are having disagreements.	1	2
Inclusion			33
Facilitate inclusion	Facilitate inclusion of special education students.	15	33
Communication skills/case collaboration			38
General communication skills	Ability to communicate effectively with staff, students, and parents both verbally and in writing. Know how to ask good questions.	11	24
Communication with child(ren)	Active listening.	2	4
Case coordination	Partnerships (respecting the educational team and its members, fully understanding expectations, working in sync with one another.)	4	9

TABLE 19. (Continued)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Medical/Health			11
Knowledge and ability to respond to health and medical issues	Dealing with medical emergencies calmly.	5	11
Personal attributes			89
Patience	Patience.	23	51
Care/sensitivity	Understanding and dedication to each of the students.	9	20
Flexibility	Flexible to accommodate unexpected situations.	8	18
Other			47
Other comments	Attention to detail, able to think quickly. Make decisions on a moment's notice, supervision capabilities.	21	47

Part III of the Paraeducator Inclusion Inventory: Training Needed by Paraprofessionals

Part III of the PII asked paraprofessionals to respond to the instruction, "Please write any comments or suggestions you would like to make regarding the training needs of teaching assistants who work with students who have disabilities." Thirty-nine participants (53%) responded to this question. The responses were organized into six general categories ("need training," "knowledge of disabilities," "instruction/teaching," "behavior management," "medical/healthcare," and "other"). The largest percentage of paraprofessionals (82%, $n = 32$) responded with general comments within the "need

training" category. Sample responses included suggestions such as "There needs to be mandatory training for all IAs, not just the people who are newly hired," and "We need basic training in just about everything because during the day we do so many different things." The next three most commonly referred to categories of training suggestions are similar to what paraprofessionals reported as being in the top skills needed: "knowledge of disabilities," with 16 participants (41%) responding; "behavior management," with 15 participants (38%) responding; and "instruction/teaching," with 11 participants (28%) responding.

In summary, when respondents considered the main "need training" category and reported very general comments of wanting more training, "knowledge of disabilities," "behavior management," and "instruction/teaching" were described as being areas of desired training (with a range of 11 to 16 respondents for each category). Table 20 gives specific sample responses and summarizes these data. See Figure 5 for a graph of these same data.

Perceptions of Supervisors

In this section, I describe the supervisors' responses with regards to (a) competencies they perceive as being most present in paraprofessionals, and (b) competencies they perceive as being most lacking in paraprofessionals. Summary data and sample responses are included.

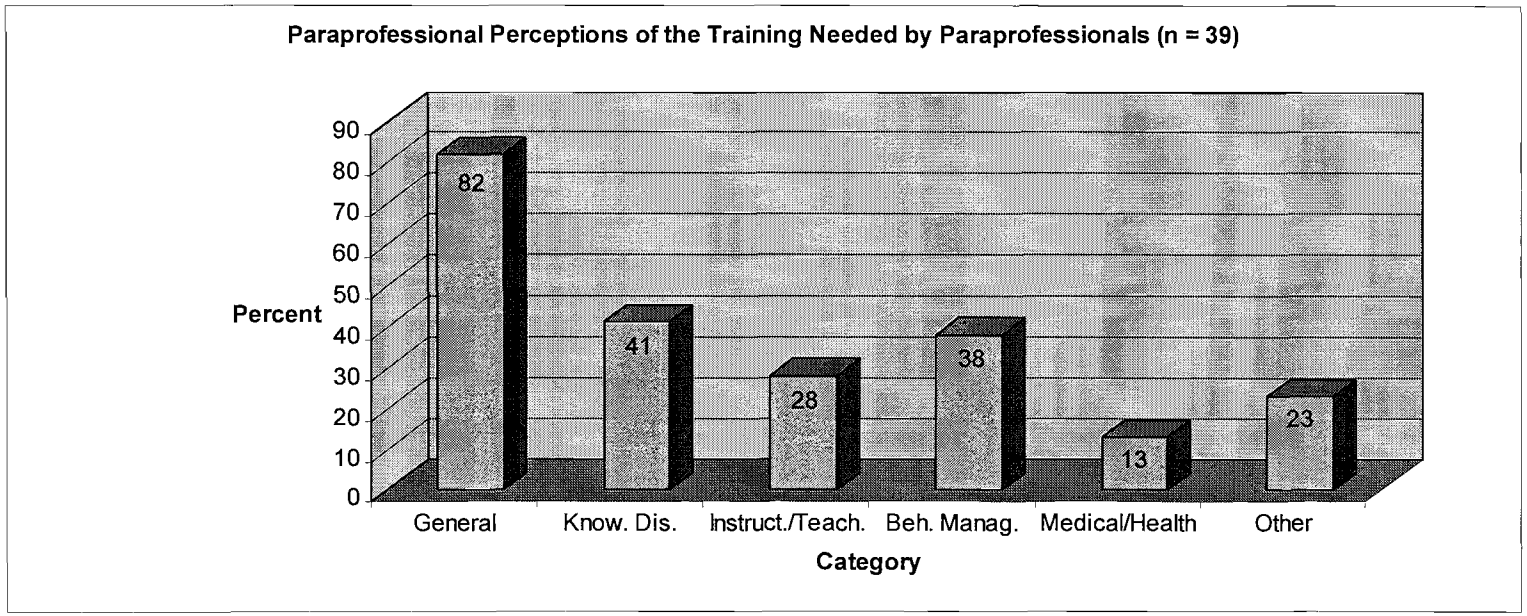

FIGURE 5. Paraprofessional perceptions of the training needed by paraprofessionals ($n = 39$).

TABLE 20. Paraprofessional Perceptions of the Training Needed by Paraprofessionals ($n = 39$)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Need training (general)	Mandatory training for all IAs. All of us need training, not just the new employees. Train us in basic child development.	32	82
Knowledge of disabilities	Understand the various disabilities and how they affect a student.	16	41
Instruction/ teaching	Specific teaching strategies that support students with diverse disabilities, training with the materials that the general education teacher is using.	11	28
Behavior management	Behavior management in large and small group settings (for minimal and escalated behaviors).	15	38
Medical/ healthcare	Also most IAs do recess duty and most injuries occur at recess. All IAs should be Red Cross first aid CPR-trained. Talk with school nurse about medical issues, BE INCLUDED in talks with school nurse about specific students.	5	13
Other	Training with teachers as a team, ongoing training as opposed to one time. Formal training is needed as opposed to learn "on the fly" by another IA.	9	23

Supervisor Perceptions Regarding Competencies Most Present in Paraprofessionals

The supervisors were asked to respond (with regard to educational paraprofessionals) to the open-ended question, "What required competencies do you perceive to be the most present?" Seven of the 14 supervisors (50%) responded. With

such a small response rate, and many different category options, many competency areas received just one or no responses. However, the main categories of "teaching methods/instructional modifications" and "personal attributes" received acknowledgment from all seven responding supervisors. Within "teaching methods/instructional modifications," four supervisors (57%) felt that the ability to instruct in large and small groups was evident in paraprofessionals. Similarly, the same number of supervisors recognized that "care/sensitivity" was evident in paraprofessionals. See Table 21 for summarized data.

Supervisor Perceptions Regarding Competencies
Most Lacking in Paraprofessionals

Part III of the PII asked supervisors of paraprofessionals, "What required competencies do you perceive to be the most lacking?" Only 6 of the 14 supervisors (43%) responded. Using the main categories that emerged from the Top Five Skills needed and Training Needs of paraprofessionals (behavior management, instructional/teaching, and knowledge of disabilities), I analyzed the supervisor responses and found that all of their responses fell into one or more of these three categories. See Table 22 for summarized data and sample responses.

TABLE 21. Supervisor Perceptions on Competencies Most Present in Paraprofessionals ($n = 7$)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Knowledge of disabilities			43
General knowledge of disabilities	General knowledge of learning disabilities (nature or cause of disability).	1	14
Knowledge of individual's disability	Awareness of individual's disabilities and ability to discern the difference between a behavioral issue and a learning disability.	1	14
Child development	Understand the psychosocial and physical development of children.	1	14
Teaching methods/instructional modifications			100
Knowledge to teach skills/instruct.	Know specialized instruction and be able to teach and modify teaching.	1	14
Resources	Select appropriate materials.	0	
Tutoring/individualized instruction	Ability to adjust instruction to meet individual student needs.	1	14
Large- and small-group instruction	Know how to manage small and large groups of students.	4	57
Content knowledge	Learn about the curriculum and content that you are working with.	1	14

TABLE 21. (Continued)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Behavioral/emotional management			29
Behavior management	Ability to consistently provide behavior expectations/ consequences. Supervision of large groups in common areas.	2	29
Emotional support/student motivation and encouragement	Be positive with actions and words.	0	0
Intense behavior	Skills to manage the behavior of violent and aggressive students, to protect themselves and the student.	0	0
Prevention	Proactive (i.e., the ability to prepare beforehand for unexpected scenarios, triggers, etc.).	0	0
Conflict resolution	Facilitate solutions between students who are having disagreements.	0	0
Inclusion			0
Facilitate inclusion	Facilitate inclusion of special education students.	0	0
Communication skills/case collaboration			57
General communication skills	Ability to communicate effectively with staff, students, and parents both verbally and in writing. Know how to ask good questions.	2	29
Communication with child(ren)	Active listening.	1	14
Case coordination	Partnerships (respecting the educational team and its members, fully understanding expectations, working in sync with one another.)	1	14

TABLE 21. (Continued)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Medical/Health			0
Knowledge and ability to respond to health and medical issues	Dealing with medical emergencies calmly.	0	0
Personal attributes			100
Patience	Patience.	1	14
Care/sensitivity	Understanding and dedication to each of the students.	4	57
Flexibility	Flexible to accommodate unexpected situations.	2	29
Other			57
Other comments	Attention to detail, able to think quickly. Make decisions on a moment's notice, supervision capabilities.	4	57

TABLE 22. Supervisor Perceptions on Required Competencies Most Lacking in Paraprofessionals ($n = 6$)

Category	Sample responses	Number of Participants Responding	% of Participants Responding
Behavior management	Our IAs could always use more training in how to handle children with significant behavioral issues. Strategies with students when emotions are high and students' behavior may be unpredictable or erratic.	5	83
Instruction/ teaching	Training in how to help children with reading, writing, and math. Specific training in content/ subject areas. Ability to instruct in small groups.	5	83
Knowledge of disabilities	General knowledge of child development and how that compares to development of students with disabilities. Understanding the different disabilities that students have.	2	33

Paraprofessional Interview Information

In this section, I describe the data gathered from the five paraprofessional interviews that I conducted. I audiotaped and then transcribed each interview. The transcripts were then analyzed by highlighting passages or comments that were descriptive. Concurrently, I noted emerging themes based on the same categories used in Stallings' (2000) coding system (see Appendix F).

The paraprofessionals were interviewed using three overarching questions (see Appendix E). These questions were based on the results of the survey responses collected and were developed to capture additional information regarding the possible training needs that were important for paraprofessionals.

Each interview began with a brief period of informal conversation so that the interviewee felt more comfortable. Then a description of the research project was given verbally. Additionally, the document giving consent to be interviewed (see Appendix D) was handed to the interviewee, and he or she was encouraged to review it before commencement of the interview. All five participants agreed to be interviewed.

Interview Question Set 1: Individualized Education Plan

> Please tell me about your knowledge of the IEP process and what are the components of an IEP? How have you learned about the IEP process and its components? In what ways are you familiar with the actual goals on specific students' IEPs? How have you learned this information?

All five of the paraprofessionals stated they had little knowledge of the IEP process, other than it was a document for students with some form of disability and that the process was lengthy. Three of the paraprofessionals mentioned the importance or emphasis on keeping accurate records due to the fact that students on IEPs have specific goals they are working to meet. One of these paraprofessionals explained it this way: "I know that it is a long process. It is testing and testing and testing. You really need to keep records and accurate work samples . . . it is keeping really good records and accurate records."

Four of the five paraprofessionals specifically said they were initially unaware of the specific IEP goals for the students they supported. Comments such as the following were mentioned regarding familiarity with specific students' actual IEP goals and how this information was learned: "The specialist generally will tell me what we are working on, and then I can always pull the IEP and look at the goals if I need more clarification." "I don't get shown their IEPs, and if an IA works with an IEP student, they should be given a copy of it . . . then I could see what their actual goals were." "I really wasn't told what one of my student's goals was, so I was kind of on my own." "As far as sitting down with the teacher and talking about the goals and specifically what I needed to be teaching . . . I don't do that."

Interview Question Set 2: Curriculum and Modifications

In the survey, you mentioned that you select and/or obtain materials at the appropriate instructional level for students and that at

> times you need to modify the curriculum. How do you go about doing this? What are some of the considerations or decisions you have to make?

Regarding the selection and/or obtainment of instructional materials for students, a theme that emerged in all five interviews was that the paraprofessionals were given specific materials by the teacher or the specialist. However, the paraprofessionals indicated that they had many opportunities to make decisions. Four of the paraprofessionals indicated that usually the teacher or specialist would select multiple types of curricula for a specific student and then leave it up to the paraprofessional to select what they would use, as explained by two paraprofessionals: "The teacher shows me the different math or science books that would be appropriate and then tells me to pick and choose." "Typically, that decision was hers [the teacher's] and then she would have things picked out for me to use."

When asked the follow-up question, "How do you go about modifying the curriculum?," a definite theme of "going with your instincts, or trial and error" was expressed by all five paraprofessionals. One participant explained her ability to modify the curriculum and her instruction:

> With so many years working with students you kind of get a feel for it . . . and I hate to say that, but you do get a feeling. Certain students you learn to read their moods . . . so mostly we do it by ear. After many years I have learned to be able to suggest [a] specific curriculum or strategies.

Another interviewee described how she modified her instruction, but felt unsure of her actions:

> I kinda go with it [the curriculum], but then I kinda branch off and try. I don't know if that is good or bad but if a student needs help in something, I go there, where their deficits are. I always have a back-up plan.

Interview Question Set 3: Training

> In the survey, you mentioned that you would like additional training. Can you elaborate on the content of the training you think would be most helpful? In your opinion, what would be the best way to go about the training (timing, place, from whom, etc.)?

One of the themes that emerged from all five of the interviews was that there had not been enough formal training in working with students with specials needs. Additionally, all of the paraprofessionals felt that "outside of mandatory training on Blood Borne Pathogens or other basic first aid training at the very beginning of each school year, (their) training had occurred as they went along and fulfilled the responsibilities assigned to them." Four of the five paraprofessionals specifically mentioned that the teacher they worked with, or other paraprofessionals who had been hired before them, had provided them all of the specific training they received. Comments such as the following illustrate this perspective: "The specialists I work with sometimes point out articles or books that I should read if I need extra help in certain areas." "I was kinda just thrown in . . . [the teacher] did a good job explaining, but some of it was a lot of learn as you go."

"I learned a lot from my mistakes and colleagues. . . . I ended up picking that up [i.e., understanding on how to work with behaviorally challenged students], but that wasn't anything that I was ever told in any training."

Each of the interviewed paraprofessionals had specific examples of training content they deemed as necessary and/or highly beneficial. For the most part, the suggestions were very specific to the actual work in which they were currently engaged with students or the situations they were in (i.e., working in a behavioral or life learning environment, having new people to work with, etc.). There was consensus among the interviewees that the training they would like would need to be directly tied to the needs of the students they were working with that current year, as articulated by the following paraprofessional: "These training pieces could be self- or team-selected, depending on your needs for the year."

Three paraprofessionals remarked that they had benefited greatly from classes at the collegiate level. They each had taken classes that focused on specific disabilities (mental retardation, autism spectrum disorder, emotional disturbance, specific learning disabilities, etc.). One paraprofessional had recently graduated from the local community college's paraprofessional program that trained paraprofessionals in various instructional and behavioral techniques and strategies. The content of these classes was somewhat like an introductory program for preservice teachers and covered such things as math and reading instruction in small groups, special education laws, the need for confidentiality, multicultural awareness, children's literature, etc. These three paraprofessionals reported that this outside training at the college level reiterated to them the importance of being well trained, as articulated by one paraprofessional:

> I think that going through the IA certification program [at the community college] and sitting in on the classes with fantastic teachers made me

> realize all of the education that a teacher has to go through. . . . I mean it is huge to come in and think that you just read with the student or you just come in and do recess or do cafeteria duty. No, it's serious and we are responsible.

Nonetheless, the paraprofessionals interviewed also reported that while they learned a great deal from their classes, they didn't necessarily know how to implement what they had learned. They often requested training that linked the knowledge they had acquired to the actual day-to-day work they did with students.

The inherent nature of having two adults (teacher and paraprofessional) working with the same group of students organically creates the need for teaming, cooperation, and general understanding regarding who holds specific responsibilities. One paraprofessional suggested that the following questions be addressed when new working relations are created:

> Who is in the team? What is the responsibility to the team? How do we resolve conflict? How do you support each other on the team? How do you work together when you have different working styles? What is your personality and working style?

Along with the need to work well together in a team, it was specifically reported by two of the five paraprofessionals that training should be provided in conjunction with the classroom teacher. They felt that since paraprofessionals should be working under the direction and supervision of a certified teacher or a specialist, training sessions should occur for both the teacher and the paraprofessional together. It was remarked by two paraprofessionals that teachers often receive training during staff meetings or in-service days (when paraprofessionals are not working) and those training sessions

should be opened up to paraprofessionals as well. She felt that paraprofessionals would appreciate and benefit from being invited to attend these training sessions alongside the teachers with whom they work.

One paraprofessional explained that she saw a real difference between responsibilities assigned to groups of paraprofessionals (special education vs. general education paraprofessionals) and that a "one-size-fits-all" approach to training is ineffective:

> The jobs are very, very different and the level of skill and expertise that is required is very different. Until we are able to address the jobs and the groups differently, neither group will feel like they have been provided with adequate training opportunities.

In summary, the paraprofessionals reported that they take their jobs seriously and find the work they do challenging but rewarding. However, they know very little about the IEP process and the specific goals outlined for the students with whom they work. For the most part, the paraprofessionals reported that they were given the basic curriculum to teach but were expected to make modifications on their own or with minimal direction from the certified teacher or specialist. Lastly, the interviewees reported their training needs and suggestions. They would appreciate more formal training (as opposed to training "on the fly" or by another paraprofessional). They also described the close working relationship they needed to have with certified teachers or specialists. Due to the collaboration requirements of their job, they felt they should also be trained (with teachers and specialists) on how to work in a team.

CHAPTER V

DATA ANALYSIS

In this chapter, I analyze the results reported in Chapter IV relative to the three main research questions posed. Comparisons are made to previous research on the roles, responsibilities and training needs of educational paraprofessionals.

As discussed in earlier chapters, the number of paraprofessionals working in primary schools has increased dramatically due to many factors, one being the growing number of students who have been identified as requiring special education services. Paraprofessionals have been hired with limited skills or preparation and are asked to support students who have mild to profound needs in the areas of academics, behavior management, and healthcare. In the district surveyed, the overwhelming majority of the paraprofessionals were hired as general education paraprofessionals who work with students with and without disabilities.

The survey tool used to explore the paraprofessionals' and supervisors' perceptions of their roles, responsibilities and training needs was organized into the following five areas: "academic instruction," "behavior/classroom management," "parent contact," "medical/healthcare issues," and "other." Depending on the version a respondent was randomly selected to receive, they were asked to rate all 40 items based on two of the three following criteria: "task importance to overall job performance"

("importance"), "frequency of task performed" ("frequency"), or "difficulty for a newly hired instructional assistant to learn to perform these tasks in a competent manner" ("difficulty").

The second half of the questionnaire allowed me to delve deeper into the perceptions of paraprofessionals and supervisors regarding the tasks that paraprofessionals engage in, the top five skills needed by paraprofessionals while working with students, specific training needs of paraprofessionals, and the demographic information of the participants.

Lastly, interviews with five of the paraprofessionals added to the depth of understanding in the areas of curriculum strategies/modifications and training needs.

Research Question 1

The first research question posed was, "What are the perceptions of educational paraprofessionals and their supervisors regarding the roles and responsibilities required of educational paraprofessionals to effectively support special education students within an inclusive environment?"

The findings from this study informed Research Question 1 in multiple ways. From the 120 responses to this question, 40 different tasks in each of the three scales (importance, frequency and difficulty) were identified. As reported in Chapter IV, the roles and responsibilities, as perceived by paraprofessionals and supervisors throughout the quantitative and qualitative probes in the PII, were found to be similar in some

domains and scales and dissimilar in others. The dissimilar tasks indicate confusion regarding the roles and responsibilities required of paraprofessionals. Additionally, the task-coverage probe of the PII illustrates that the roles and responsibilities required of paraprofessionals are extensive and spread over many areas of support. Responses regarding training suggestions, and remarks during the paraprofessional interviews, further exposed uncertainty among the paraprofessionals as to what their roles and responsibilities actually were. Lastly, even with some inconsistencies between paraprofessionals and supervisors regarding roles and responsibilities, consistencies emerged when examining the Top Five tasks required.

Inconsistencies that were most prevalent across the PII were evident within the "Academic Instruction" domain. Four tasks within "Academic Instruction" were found to have significant mean differences between the two respondent groups (paraprofessionals and supervisors) and across all scales. In all of these four instances, the supervisor respondent group reported higher means than the paraprofessional respondent group. These tasks were "provide small group instruction," "implement modifications," "facilitate/monitor peer tutor," and "administer modified tests." This indicates that there was a distinct disconnect between the supervisors and paraprofessionals with regards to the frequency, importance and difficulty of these tasks. Additionally, findings within the difficulty scale were surprising. Of the 40 tasks reported, 28 were analyzed and found to be statistically different. There is a large discrepancy between which tasks the supervisors and the paraprofessionals perceive to

be difficult to learn. Each of these 28 tasks had higher means as reported by the supervisors than the paraprofessionals. That is, 70% of the tasks performed were perceived to be more difficult by supervisors than paraprofessionals.

One possible interpretation of the inconsistencies within the "difficulty" scale could indicate that these two stakeholder groups do not see the roles and responsibilities of the paraprofessionals in the same manner. Though not as pronounced, Stallings (2000) also found that tasks rated by difficulty tended to demonstrate more discrepancy than the tasks as they were rated with the "importance" or "frequency" scales.

These data raised several questions. Was there a common understanding of the actual question: "How difficult would it be for a newly hired teaching assistant to learn to perform these tasks in a competent manner"? Are the paraprofessionals overconfident in their newly hired colleagues' ability to learn these tasks? Do the paraprofessionals truly understand the scope of the tasks? Do the supervisors underestimate the abilities of a paraprofessional to complete such a task? Do supervisors perceive these tasks to be too difficult and not in the role/responsibility realm for paraprofessionals? These questions constitute an important area for additional research.

The PII asked paraprofessionals and supervisors to list the top five skills they believed to be most important to possess when working with students, and findings from this section serve to further understanding of the roles and responsibilities perceived as requisite. "Patience" was reported as an important attribute required of paraprofessionals more often than any other attribute or skill, followed by "behavior

management," "teaching methods/instructional modification," "parent contact," and "medical/healthcare issues."

Confusion over paraprofessional roles and responsibilities was also apparent from the remarks made during the paraprofessional interviews. A vivid theme that emerged was in the category "behavior management." Paraprofessionals felt that they were responsible for managing a student's behavior but weren't sure to what extent. This sentiment was directly related to the importance of managing behavior so the student can get to the required academic tasks: "If some days they were having a really hard time behaviorally, we [paraprofessionals] would adjust the curriculum and hope it was O.K. with the teacher." "A lot of it is knowing the students and what their mood is and what they can handle that day. . . . I think that that is my responsibility."

Not all of the results indicated incongruencies. Some consistencies emerged. "Monitor/intervene with misbehavior" and "facilitate social/emotional development" were in the top five mean rankings in all three domains and across both participant groups. As past research has shown, this indicates that both paraprofessionals and supervisors believe these types of behavior and management tasks are important to the roles and responsibilities of paraprofessionals working with students within special education inclusion models (French & Pickett, 1997; Giangreco & Broer, 2005; Pardee, 1992).

Expected roles and responsibilities that emerged from the interviews fell into the "teaching methods/instructional modifications" category. Paraprofessionals reported

that they often have to adjust the curriculum and their instruction on their own, with very little guidance from the classroom teacher or specialists. Some of these decisions are crucial decisions that are mandated to be determined by the classroom teacher (as outlined in NCLB and IDEA). Two paraprofessionals remarked that they were unsure if they should make these decisions or if the classroom teacher should. One remarked that she was often unsure of her role and that she "always had a back-up plan if something wasn't right" and she hoped "the teacher would jump in and tell me what to do."

General comments provided during the interviews further described situations where paraprofessionals were unsure of their role. One paraprofessional pointedly remarked, "What are the responsibilities of the IA and the responsibilities of the teacher and the administrator?" This comment has been echoed by other paraprofessionals in other research projects (Chung, 2006; Giangreco, 2003; Stallings, 2000).

Of the top five domains, "parent contact" and "medical/healthcare issues" received the lowest amount of reporting. Low mean scores (as compared to other domains) in these two domains would be expected because a paraprofessional's position is instructional in nature and falls under the supervision of a certified teacher, who has the ultimate responsibility of the student (NEA, 2003). Parent contact and managing medical or healthcare issues are not significant roles or responsibilities of the overwhelming majority of responding paraprofessionals who are working with students within an inclusive educational setting.

Paraprofessionals were asked to highlight any tasks that the PII did not inquire about; this was done to ensure that paraprofessionals reported the full spectrum of their responsibilities. The results were very similar in that, for the most part, all of the tasks were covered in the PII. The results of that open-ended inquiry were confirmatory of the comprehensive nature of the survey instrument used in this study. However, it should be remembered that there was an extensive list (40 different tasks) that were spread over five domains. Some of the tasks were described in a very general manner—e.g., "supervise students," "instruct large/small groups," "help teachers with behavior management." These types of tasks have numerous subtasks within them. Thus, what may not have been covered were the tasks unique to a school. Indicative of this limitation, some of the reported tasks that were not part of the original survey centered around how the paraprofessional assisted other professional staff in noninstructional ways that related to group dynamics of the special education team.

The lack of specified roles and responsibilities for paraprofessionals is a major finding of this study. Due to paraprofessional and supervisory responses, tasks within the Behavior/Classroom Management and Academic Instruction domains could indicate that the tasks that fell in these domains were areas of confusion when it came to the specific roles and responsibilities of paraprofessionals. And yet, tasks within these areas are historically ones in which "paraeducators tend to assume high levels of responsibility for managing" (Marks et al., 1999, p. 315).

As previously reported in the literature review, the need for accurate job descriptions is nothing new or unique to the participating district (Blalock, 1991; Chung, 2006; French, 1999; Giangreco & Doyle, 2002; Pardee, 1992; Pickett, 1986; Pickett et al., 1993; Stallings, 2000). Laws such as NCLB and IDEA are minimal attempts to outline the roles and responsibilities, but they fall short. In order to mediate this dilemma, Chung (2006) suggests a two-pronged solution. First, both state and local agencies need to define the standards and guidelines that determine the work paraprofessionals should do. Second, the needs of individual schools and children are unique, so attention should also be focused at the school level to determine the specific duties that should be performed.

Research Question 2

Research Question 2 posed, "What are the perceptions of educational paraprofessionals and their supervisors regarding the roles and responsibilities that educational paraprofessionals most frequently engage in while working with special education students within an inclusive environment?"

Paraprofessionals' and supervisors' responses on the PII were highly comparable. Both groups indicated that the following tasks within the "Academic Instruction" domain were in their top five mean rankings: "provide small group instruction" and "provide individualized instruction." Regarding task frequency, "implement modifications" was tied for third (as reported by supervisors), whereas this task was

scored a close sixth by paraprofessionals. Thus, it can be deduced that providing and modifying instruction is a frequently performed task. These findings are expected for a number of reasons: Students who are placed in special education require "specially designed instruction" or they would not need placement in special education; and the specially designed instruction often comes in the form of small-group instruction, individualized instruction, and/or necessary modifications to the instructional method or materials. In general, these students have not been successful in the general education classroom, where much of the instruction has been aimed at the whole group, using general materials.

These findings are highly consistent with previous research (see, e.g., French, 1998) demonstrating that paraprofessionals assigned to resource room programs engaged in instructionally related activities with students for a large majority of their time. Additionally, Stallings (2000) found that paraprofessionals engage in these three instructionally based tasks most frequently, in comparison to the other tasks surveyed. Furthermore, Pardee (1992) found that paraprofessionals who worked with students in special and general education "provided educational services to students with disabilities using small group structures" (p. iv). Interviews conducted for this research project also included sentiments from paraprofessionals that they frequently work with students in small groups or one-on-one teaching situations.

As more is required of teachers to meet the needs of their increasingly diverse students—due to such elements as languages, cultures, socioeconomic status,

disabilities, etc. —researchers have found that teachers must delegate some of the teaching responsibilities to paraprofessionals (Clarke, 2001; French & Pickett, 1997; Giangreco, 2003; Pickett et al., 1993).

The remaining three of the top five mean rankings fell within the behavioral domain (one actually was listed under "other" but is behaviorally based). This was consistent for both reporting supervisors and paraprofessionals. The three tasks were "monitor/intervene with misbehavior," "facilitate social/emotional development," and "help supervise students." These tasks are highly connected, as students with difficulties in their social and emotional development often need support with their behavior and need additional supervision as they navigate the extremely social world of "school" (Downing et al., 2000; Marks et al., 1999). It is very interesting to note that in Stallings' (2000) work, where the PII was originally administered, these same three behavior-related tasks were also reported as frequently performed.

Another way to look at the frequency of tasks performed is to determine if there was a disconnect between the perceptions of the two respondent groups. Thirteen of the 40 tasks (33%) within the "frequency scale" had a significant mean difference as determined by their *t* tests. Of those 13, seven tasks also had a mean difference of .75 or greater. These seven tasks show incongruence between the two respondent groups. These tasks are as follows: "provide large group instruction," "provide small group instruction," "administer modified tests," "cue students to obtain medications," "assist with mobility needs," "assist ancillary teachers," and "operate adaptive devices."

Supervisors perceived that all of these tasks, except one (provide large-group instruction), were more frequently performed than paraprofessionals perceived them to be. I am not sure why there is a disconnect between the perceptions of supervisors and paraprofessionals with relation to the frequency of certain tasks being performed. A hypothesis could be that the disconnect is generated by the absence of a specific job description outlining the roles and responsibilities required of paraprofessionals. Prior research has shown this to be accurate.

In sum, regarding the frequency of specific tasks performed by paraprofessionals, both participant groups perceived tasks within the "academic instruction" domain as performed more frequently than tasks in other domains. Second to "academic instruction," a cluster of tasks within the "behavior/classroom management" domain were also perceived to be performed frequently. These findings are congruent with Stallings' (2000) as well.

Research Question 3

Two primary themes related to competencies emerged when analyzing responses to the question "What competencies do educational paraprofessionals currently possess and what competencies do they and their supervisors deem lacking to effectively support special education students within an inclusive environment?" The themes include (a) teaching methods/instructional modifications, and (b) personal attributes.

The most striking trend that emerged was that the competencies most prevalent and most lacking among paraprofessionals (as perceived and reported by supervisors) were identical. A competency that was selected as being most prevalent in paraprofessionals was "teaching methods/instructional modifications with the ability to instruct in large and small groups." At the same time, more than three fourths of the supervisors reported that this was an area most lacking in paraprofessionals. It seems that when taken together with the frequency, importance and difficulty ratings of tasks that require instructing/teaching large or small groups, both paraprofessionals and supervisors have misunderstandings of the work that is to be done and the manner in which the work should be done.

The paraprofessional interviews revealed that when it came to modifying curriculum and teaching small groups of students, the paraprofessionals felt unprepared and ill-equipped to accomplish these tasks. It was also found that respondents felt behavior management was part of their job, but they were unsure how to do this. Due to these feelings of ill-preparation, the need for training emerged as highly salient.

The area of training needs was not a singular question within this research study. However, the findings suggest important training needs that require attention. When asked to respond within the PII survey, the paraprofessional participants made general comments that show they want more training in "knowledge of disabilities," "behavior management," and "instruction/teaching." It is interesting to note that while these were very general comments, tasks within behavior management and instruction/teaching

domains were found to be very critical. Perhaps these comments were very general because paraprofessionals really are unsure of their roles, responsibilities and the extent to which they should perform their assignments.

When the five interviewed paraprofessionals were asked what kind of training (content and timing) they would like to have, one theme that emerged was that there had not been enough formal training in working with students with specials needs. Comments from the interviews were quite specific as to what the paraprofessionals needed/wanted in the way of training. Their needs were directly tied to the specific students or situations that they were assigned to at the time. These findings indicate that training needs to be specific and timely.

Another theme that emerged is that training needs to occur in preparation for beginning to work as a paraprofessional as to opposed to solely "on-the-job training," which is so typical of current practice (Carroll, 2001; Chung, 2006; Giangreco et al., 2002). Also, training needs to be ongoing as the roles and responsibilities of paraprofessionals shift and change to meet the needs of the student population.

A highlight of this study was the information gleaned regarding the work of a paraprofessional as part of an instructional team. All of the interviewees reported that they work within a team but there has been little to no training on how to work as a team. The perception that the paraprofessionals shared was one of isolation and independence. These sentiments have been echoed in prior research (Carroll, 2001; Giangreco & Broer, 2005; Marks et al., 1999; Riggs, 2001).

Do we have some paraprofessionals who are very adept at teaching large and small groups of students and some who are not or do we have roles and responsibilities that are unclear? Further, do we have supervisors who are unsure of the expectations and abilities of paraprofessionals? As the instructional tasks required of paraprofessionals increase, it is possible that expectations are far outpacing the reality of paraprofessional development (French & Pickett, 1997).

All responding supervisors acknowledged "personal attributes" as a competency most present in paraprofessionals. Supervisors reported the following personal attributes as most prevalent among paraprofessionals: (a) patience, (b) understanding and dedication to each of the students, and (c) flexibility to accommodate unexpected situations. However, of those three examples, "patience" received the least amount of acknowledgment from supervisors compared to the very resounding acknowledgment that paraprofessionals gave this quality. In fact, "patience" topped the list of required qualities, well above instruction and teaching. This makes me wonder if paraprofessionals see themselves in more of a "labor of love" role while the supervisors see paraprofessionals in more of an instructional role. This differing perspective may help explain the strong disparity found within the difficulty ratings. Does this discrepancy explain why participating paraprofessionals often have either very few years of experience or a great many years of experience? Do paraprofessionals get burned out and decide to leave the field because the work is very difficult to learn? And

are these difficulties related more to the challenging personal attributes required than the teaching/instructing expectations?

After examination of the findings from all three research questions, it seems obvious that the next logical step would be to define the roles and responsibilities required of paraprofessionals. This is something that could have been done long ago and has been a finding in many prior research studies (Chung, 2006; Clarke, 2001; Giangreco et al., 2001; Moshoyannis et al., 1999; Stallings, 2000). The findings strongly suggest that job descriptions should not only define the task but also the level or standard to which the task should be accomplished. This is in accordance with prior research as well as the findings of the present study (Chung, 2006; French, 2001; Giangreco et al., 2001; Hawkins, 2004; Stallings, 2000).

Secondly, there is a need to train paraprofessionals. This finding in the current study also mirrors findings from prior research studies (Chung, 2006; Giangreco et al., 2001; Moshoyannis et al., 1999; Stallings, 2000).

We should not be surprised by these findings, as they are in agreement with what has already been found in earlier studies. Academic instruction, behavior management and supervision of students are areas most critical to the current roles and responsibilities assigned to paraprofessionals working with special education students in an inclusionary model. Detailed job descriptions, along with specific and timely training, are requirements we can no longer ignore.

The next chapter will discuss implications for future policy and practice pertinent to specified roles, responsibilities, and training needs of paraprofessionals. Further, limitations of the study will be discussed and suggestions for further research will be presented.

CHAPTER VI

CONCLUSIONS

Brief Summary of the Research Problem

The research problem to be addressed in this study was to identify and analyze roles, responsibilities and related training needs of educational paraprofessionals who work with special education students in a general education environment. In order to do this, I investigated the perceptions of educational paraprofessionals and their supervisors regarding the roles and responsibilities required of paraprofessionals, the tasks that were most frequently engaged in by paraprofessionals, and the competencies present or lacking.

Implications

The findings of this replicated study are in alignment with and support past research findings. As the literature review demonstrated, policy changes such as the ones embedded in NCLB and IDEA legislation have created the necessity to rely on paraprofessionals in ways that have never been followed before. Tasks that are currently required of paraprofessionals are more challenging and more complex than ever before.

For this reason, we find current policies and practices that do not adequately address the roles, responsibilities and training needs of paraprofessionals.

Recommendations for Changes in Practice and Policy

On the basis of this research study's findings, coupled with other existing research, several recommendations for changes in practice and policy can be offered. The first recommendation would be to delineate the roles of the teacher and educational paraprofessional. In order to do this, federal, state and local policymakers must understand the growing and changing needs of students, as well as the growing and changing tasks required of paraprofessionals. It is only reasonable to believe that since the needs of students are changing (due to special education, English Language Learner programs, socioeconomic diversity, etc.), there must also be new roles emerging for teachers and paraprofessionals. Federal and state policies need to re-examine the standards and guidelines for teachers and paraprofessionals. Standards and guidelines need to be well defined and address the current situation within schools.

The second recommendation based on this study's findings and the findings from prior research is to promote the development of accurate job descriptions. Once federal and state standards and guidelines are well defined, districts and individual schools can take an in-depth look at the individual students they serve and build job descriptions that allow paraprofessionals and teachers to respond effectively and efficiently to the needs of the students. Clear job descriptions are instrumental in the hiring and

interviewing process in order to represent job requirements accurately. The more accurately the requirements and tasks of the position can be described, the easier it will be for administrators to hire the right candidate. Additionally, candidates will have a much clearer idea if they are capable and desirous of the job and its requirements.

Another recommendation is that each district and/or school should determine the training needs of the educational paraprofessionals prior to beginning employment; therefore, general training topics could be covered in training modules that are required for all paraprofessionals. That being said, it is common knowledge that the needs of students change, so it is fair to assume that the work paraprofessionals do with students will also change, presenting new or different training needs. Ongoing training is essential. Once paraprofessionals know what they are expected to do (job description), they are probably the best individuals to inform administrators about their training needs and the most helpful format for training. Training related to the specifics of an individual paraprofessional's work would next be in order. In order to ensure that the training is actually effective, an action research plan should be integrated as well. As reported earlier, findings from this study are congruent with findings from earlier studies (Chung, 2006; Giangreco et al., 2001; Moshoyannis et al., 1999; Stallings, 2000).

One of the main documented concerns of inclusion practices has been the ability of special education students with behavior problems to perform successfully in a general education setting. Many times, paraprofessionals are assigned to assist

individual students with behavior challenges, as also reported in this study. Behavioral goals, with their accompanying level of targeted success rate, accommodations, modifications, consequences, and documentation procedures, are often specifically outlined within a student's IEP. There is a reason for such formalization and specificity: dealing with behavioral challenges is difficult work that requires consistency and fidelity—as the primary goal is to change set behaviors. Few paraprofessionals, let alone certified classroom teachers, have had preservice or ongoing training on how to manage disruptive or challenging student behavior (Giangreco & Broer, 2005; Marks et al., 1999).

Within this training recommendation, there are two additional recommendations. Both of these recommendations center around "human behavior" and the complexities that arise when individuals work together. Classroom teachers who work with paraprofessionals should be trained in supervising or managing others. By law, paraprofessionals are to work under the direct supervision of a certified teacher. College teacher education training programs rarely train classroom teachers to be supervisors; therefore, either teachers should receive in-service instruction on how to fulfill this new role or a similar form of training should be added to teacher education programs. Chung (2006) recommended this training practice as well. An additional recommendation is for both classroom teachers and paraprofessionals to be trained on how to work as a team, as this is the expectation outlined in policies mandated by NCLB and IDEA.

Training takes time and money. Therefore, time and money must be budgeted for training at the district and school levels. The better understanding that supervisors and administrators have of the roles, responsibilities, and training needs of paraprofessionals, the more accurately they will be able to budget the needed amount of time and money for effective training.

These recommendations are not new to the field of education. I am encouraged that my findings will add to the bank of prior research and assist others in understanding this critical dilemma we face in education.

Recommendations for Future Research

The body of research available in the area of roles, responsibilities, and training needs of paraprofessionals is quite limited. There is a need for additional research in this area. Research that expands into middle and high school levels would be important, as much of the research to date, including this current study, has been based solely on paraprofessional roles as they exist at the primary or elementary level.

When there is a distinct division between special education and general education paraprofessionals, it would be helpful to research the differences and commonalities. Dividing these two participant groups would be most helpful for the individuals who work solely with students in special education program classes and inclusionary classes. Regarding the need for better training, perhaps tasks that involve large-group instruction should receive less attention, while tasks that involve

health/medical and behavior management issues should receive more. This type of information would be vital to determining training needs.

As noted in the limitations section, I did not observe paraprofessionals while they were actually engaged in the tasks on which they were reporting. Research that embeds that data would help to corroborate the perceptional data that were gathered. Additionally, interviewing supervisors (as opposed to merely collecting data from a survey) would provide additional pertinent information. During the interview, the researcher could probe more deeply into emerging themes, consistencies and inconsistencies by posing follow-up questions.

An additional recommendation for future research would be to research the specific relationship (teaming) and role delineation between classroom teachers and paraprofessionals. Both Chung (2006) and Stallings (2000) reported on teacher/paraprofessional teams; however, the sample sizes were incredibly small due to various reasons (time, money, number of individuals who agreed to be studied, etc.).

The final two recommendations for future research have to do with the assumed benefits that students gain from receiving paraprofessional support in the school or classroom. The first recommendation would be to investigate the social and academic progress that special education students demonstrate when they receive the support of a paraprofessional. We assume that having an extra adult in a classroom will academically and socially benefit the special education student(s) in the classroom. To what extent does the employment of educational paraprofessionals support learner outcomes? There

has been some research in this area but not enough to support policy or practice decisions. The second recommendation within this area is to investigate whether nondisabled students receive any social or academic benefits from being in a classroom with a paraprofessional who is supporting a disabled student.

Limitations of the Study

All research studies have limitations. The following limitations should be considered when interpreting the results obtained from this study. The greatest limitation was the investigation of only one school district. Moreover, within the school district, only participants from primary schools (kindergarten through fifth grade) were sampled. Generalizing the findings beyond the one school district from which the sample was drawn would not be advised. The school district represented here is a very high-achieving school district in a fairly affluent northwest suburban area. The questions of generalizability could be better answered if this study included more school districts from more diverse communities. Furthermore, the district sampled consistently hires paraprofessionals to work within general education and special education, rarely distinguishing between the two different assignments.

An additional limitation was the possibility of researcher bias. While I obviously did not participate in the study, I am a supervisor of some of the paraprofessionals in the study. The paraprofessionals and supervisors in the study know of my employment and role in the district, which may have factored into the way they responded. As a

safeguard against researcher bias, I implemented the same coding manual (with its explicit definitions) that Stallings (2000) used prior to analyzing the data. Moreover, I audiotaped and transcribed the paraprofessional interviews verbatim.

The data were not collected on a randomized basis. Twenty-five of the 101 paraprofessionals (approximately 25%) chose not to participate. While 100% of the supervisors chose to participate, there were only 14 participants. However, both participant groups (paraprofessionals and supervisors) reported consistently within their group. This may indicate that the sample is more representative of the whole population than might be expected from a nonrandomized sampling.

The length of the PII presented challenges, as each participant may have become fatigued by answering 90 survey questions (45 questions on each of two different domains) on a Likert scale. Only after the 90 survey questions were answered was the respondent asked open-ended questions. The first large set of questions may have compromised participants' ability to answer open-ended questions as thoughtfully as they might have preferred.

Limitations arose within the data. Because of the very inconsistent mean differences between the two participant groups within the "difficulty" domain, I believe there was confusion regarding what was being asked. Generalization of data from this domain to other situations should be done with caution.

Relying mainly on the perception of paraprofessionals and supervisors, with no direct observation, is a limitation of this study. There was a lack of observational data

that could have been used to support and verify the reported work of the paraprofessionals. Additionally, interviewing only five paraprofessionals does not give a broad enough base to support the survey findings—though the interviews did offer more depth in understanding the data gathered from the survey. Perhaps paraprofessionals and supervisors responded in a way that was more indicative of how they think they should have responded. For instance, were paraprofessionals' responses designed to make them look like they were more confident and competent than they really are? Were supervisors' responses designed to hide the possibility that they had not done an adequate job of training paraprofessionals?

Conclusions

Again and again, research has documented that the roles and responsibilities of teachers and paraprofessionals continue to grow and shift to accommodate emerging student needs and changing regulations (French & Pickett, 1997). Clearly defined roles for both teachers and paraprofessionals are needed so schools can maximize the benefits of hiring additional adults to support students. Federal and state policies need to reflect and respond to ongoing changes. School districts need to be proactive in preparing accurate job descriptions so they understand exactly what they will be asking of paraprofessionals. Moreover, the need for training is evident. There needs to be training that occurs prior to a paraprofessional working with students, as well as throughout their employment. A "one size fits all" form of training will not be effective because students

do not fit into any "one size fits all" category. Moreover, it is keenly evident that federal legislation requiring 2 years of college work (unspecified courses) is not enough to adequately prepare individuals to work with students, especially students with complex language, learning, and behavior needs.

In sum, the needs of students are paramount, and no one will argue that improving the training and supervision of paraprofessionals is inappropriate or unnecessary. The findings from past research, in addition to findings from this study, all point to the importance of ensuring that paraprofessionals have clearly delineated roles. In addition, timely and substantial training is required. We do not have the luxury of sitting back and waiting to see what the latest legislative policy "requires" us to do. Our schools are brimming with our future. We cannot let our youngest stakeholders wait any longer for us to take action.

APPENDIX A

PARAEDUCATOR INCLUSION INVENTORY

Paraeducator Inclusion Inventory

Source: Adapted from *The Identification of Paraprofessional Training Needs Within the Context of Inclusive Education* (pp. 202–216), by C. F. Stallings, 2000, unpublished doctoral dissertation, North Carolina State University, Raleigh.

Please rate the following items on a scale from 1 to 5 by circling the appropriate number. Please consider the IMPORTANCE of these tasks to your overall job performance.

Importance to Overall Job Performance

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Academic Instruction					
1. Provide large group academic instruction to students (with and without disabilities) when requested by teacher	1	2	3	4	5
2, Provide small-group instruction to students with disabilities after introduction of topic in large-group setting	1	2	3	4	5
3. Provide individualized instruction, prompting, and/or tutorial services to students with disabilities	1	2	3	4	5
4. Select and/or obtain materials at the appropriate instructional level for students with disabilities	1	2	3	4	5
5. Implement modifications to support instructional needs of students with disabilities (e.g., use of extra time for work completion, manipulatives for science and math, strategies for organization or study skills)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
6. Help monitor special education student contracts or progress reports on a daily or weekly basis (e.g., help observe student progress, record information on report, offer reward or consequence, and/or report information to parent)	1	2	3	4	5
7. Facilitate/monitor peer tutors when they are working with students who have disabilities	1	2	3	4	5
8. Administer modified tests to students with disabilities	1	2	3	4	5
9. Administer tests to classroom of students (with and without disabilities)	1	2	3	4	5
10. Interpret special education student end-of-grade test results to district administrators	1	2	3	4	5
11. Review special education student Individual Educational Programs (IEPs)	1	2	3	4	5
12. Help teacher monitor rate of progress on special education students Individual Educational Programs (IEPs)	1	2	3	4	5
13. Meet with teacher(s) or other assistants to plan how to address special needs of students with disabilities in the classroom (e.g., student difficulties with learning, behavior, or socialization)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Behavior/Classroom Management					
1. Assist teacher(s) with special education student behavior management (e.g., help explain rules and expectations to students, remind students of expectations, intervene when misbehavior occurs)	1	2	3	4	5
2. Assist with social skill and emotional development of students with disabilities (e.g., teach students how to wait their turn, how to deal with anger or embarrassment, how to deal with peer conflicts, and provide ongoing emotional support to students)	1	2	3	4	5
3. Help special education students with life skills development (e.g., how to shop wisely for food and other goods, cook healthy meals, and/or travel safely within one's community)	1	2	3	4	5
4. Provide staff development training to teachers regarding behavioral interventions for students with disabilities	1	2	3	4	5
5. Provide counseling and/or mediation services to students with disabilities	1	2	3	4	5
6. Provide one-on-one assistance to special education student when requested by a teacher or administrator (e.g., take a walk with student to help him/her "cool off," accompany student to phone a parent regarding his/her behavior)	1	2	3	4	5
7. Assist with special education discipline record keeping (e.g., record number of students sent to in-school or out-of-school suspension, write up/document discipline infractions for teacher and/or office reports)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
8. Use physical restraint holds in the event of an emergency or when intervention with an aggressive special education student is necessary	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Parent Contact					
1. Assist with daily and/or weekly communications to parents of students with disabilities (e.g., phone calls about student academic, behavior, or health/medical progress or needs)	1	2	3	4	5
2. Provide comments and suggestions to teacher about special education student progress in preparation for parent-teacher conference	1	2	3	4	5
3. Participate in special education student Individual Educational Program (IEP) meetings with parents and teacher(s)	1	2	3	4	5
4. Participate in progress report meetings with parents of students with disabilities and teacher(s)	1	2	3	4	5
5. Conduct meetings between parents of special education students and district administrators	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Medical/Healthcare Issues					
1. Help make sure that students with disabilities have the necessary aids or equipment they need (e.g., inhalers for students with asthma, walkers for students with mobility needs)	1	2	3	4	5
2. Remind students with disabilities to go to a designated place to receive prescription medication	1	2	3	4	5
3. Administer medication to students with disabilities, and document on appropriate paperwork that medication has been given	1	2	3	4	5
4. Accompany special education student to visits with the student's family doctor	1	2	3	4	5
5. Assist special education students with mobility needs (e.g., those on crutches, with leg braces, or in wheelchairs) in getting around school safely	1	2	3	4	5
6. Intervene with special education student having seizures (e.g., talk to student, call parents or paramedics, explain to children what has happened)	1	2	3	4	5
7. Assist special education students with toileting needs (e.g., change diapers or catheters, help clean up toileting accidents)	1	2	3	4	5
8. Change/suction special education student trachea tube when needed	1	2	3	4	5
9. Change special education student feeding tube when needed	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Other					
1. Facilitate communication between students with disabilities, parents, and/or school staff	1	2	3	4	5
2. Help supervise students with disabilities throughout the day (e.g., during, before and/or after school periods, going to/from classes, during recess/playground time)	1	2	3	4	5
3. Assist ancillary teachers (e.g., art, media, music, PE instructors) in their work with special education students	1	2	3	4	5
4. Operate adaptive devices for special education students (e.g., auditory trainers communication boards)	1	2	3	4	5
5. Select and/or obtain materials at the appropriate instructional level for students with disabilities	1	2	3	4	5
6. Provide one-on -one assistance to a special education student when requested by a teacher or administrator (e.g., take a walk with student to help him/her "cool off," accompany student to phone a parent regarding his/her behavior)	1	2	3	4	5
7. Participate in progress report meetings with parents of students with disabilities and teacher(s)	1	2	3	4	5
8. Assist special education students with toileting needs (e.g., change diapers or catheters, help clean up toileting accidents)	1	2	3	4	5
9. Facilitate communication between students with disabilities, parents, and/or school staff	1	2	3	4	5
10. Make final decisions about grade retention for students with disabilities	1	2	3	4	5

Please rate the following items on a scale from 1 to 5 by circling the appropriate number. Please consider how FREQUENTLY you perform these job activities.

Frequency of Performance

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Academic Instruction					
1. Provide large group academic instruction to students (with and without disabilities) when requested by teacher	1	2	3	4	5
2, Provide small-group instruction to students with disabilities after introduction of topic in large-group setting	1	2	3	4	5
3. Provide individualized instruction, prompting, and/or tutorial services to students with disabilities	1	2	3	4	5
4. Select and/or obtain materials at the appropriate instructional level for students with disabilities	1	2	3	4	5
5. Implement modifications to support instructional needs of students with disabilities (e.g., use of extra time for work completion, manipulatives for science and math, strategies for organization or study skills)	1	2	3	4	5
6. Help monitor special education student contracts or progress reports on a daily or weekly basis (e.g., help observe student progress, record information on report, offer reward or consequence, and/or report information to parent)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
7. Facilitate/monitor peer tutors when they are working with students who have disabilities	1	2	3	4	5
8. Administer modified tests to students with disabilities	1	2	3	4	5
9. Administer tests to classroom of students (with and without disabilities)	1	2	3	4	5
10. Interpret special education student end-of-grade test results to district administrators	1	2	3	4	5
11. Review special education student Individual Educational Programs (IEPs)	1	2	3	4	5
12. Help teacher monitor rate of progress on special education students Individual Educational Programs (IEPs)	1	2	3	4	5
13. Meet with teacher(s) or other assistants to plan how to address special needs of students with disabilities in the classroom (e.g., student difficulties with learning, behavior, or socialization)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Behavior/Classroom Management					
1. Assist teacher(s) with special education student behavior management (e.g., help explain rules and expectations to students, remind students of expectations, intervene when misbehavior occurs)	1	2	3	4	5
2. Assist with social skill and emotional development of students with disabilities (e.g., teach students how to wait their turn, how to deal with anger or embarrassment, how to deal with peer conflicts, and provide ongoing emotional support to students)	1	2	3	4	5
3. Help special education students with life skills development (e.g., how to shop wisely for food and other goods, cook healthy meals, and/or travel safely within one's community)	1	2	3	4	5
4. Provide staff development training to teachers regarding behavioral interventions for students with disabilities	1	2	3	4	5
5. Provide counseling and/or mediation services to students with disabilities	1	2	3	4	5
6. Provide one-on-one assistance to special education student when requested by a teacher or administrator (e.g., take a walk with student to help him/her "cool off," accompany student to phone a parent regarding his/her behavior)	1	2	3	4	5
7. Assist with special education discipline record keeping (e.g., record number of students sent to in-school or out-of-school suspension, write up/document discipline infractions for teacher and/or office reports)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
8. Use physical restraint holds in the event of an emergency or when intervention with an aggressive special education student is necessary	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Parent Contact					
1. Assist with daily and/or weekly communications to parents of students with disabilities (e.g., phone calls about student academic, behavior, or health/medical progress or needs)	1	2	3	4	5
2. Provide comments and suggestions to teacher about special education student progress in preparation for parent-teacher conference	1	2	3	4	5
3. Participate in special education student Individual Educational Program (IEP) meetings with parents and teacher(s)	1	2	3	4	5
4. Participate in progress report meetings with parents of students with disabilities and teacher(s)	1	2	3	4	5
5. Conduct meetings between parents of special education students and district administrators	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Medical/Healthcare Issues					
1. Help make sure that students with disabilities have the necessary aids or equipment they need (e.g., inhalers for students with asthma, walkers for students with mobility needs)	1	2	3	4	5
2. Remind students with disabilities to go to a designated place to receive prescription medication	1	2	3	4	5
3. Administer medication to students with disabilities, and document on appropriate paperwork that medication has been given	1	2	3	4	5
4. Accompany special education student to visits with the student's family doctor	1	2	3	4	5
5. Assist special education students with mobility needs (e.g., those on crutches, with leg braces, or in wheelchairs) in getting around school safely	1	2	3	4	5
6. Intervene with special education student having seizures (e.g., talk to student, call parents or paramedics, explain to children what has happened)	1	2	3	4	5
7. Assist special education students with toileting needs (e.g., change diapers or catheters, help clean up toileting accidents)	1	2	3	4	5
8. Change/suction special education student trachea tube when needed	1	2	3	4	5
9. Change special education student feeding tube when needed	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Other					
1. Facilitate communication between students with disabilities, parents, and/or school staff	1	2	3	4	5
2. Help supervise students with disabilities throughout the day (e.g., during, before and/or after school periods, going to/from classes, during recess/playground time)	1	2	3	4	5
3. Assist ancillary teachers (e.g., art, media, music, PE instructors) in their work with special education students	1	2	3	4	5
4. Operate adaptive devices for special education students (e.g., auditory trainers communication boards)	1	2	3	4	5
5. Select and/or obtain materials at the appropriate instructional level for students with disabilities	1	2	3	4	5
6. Provide one-on -one assistance to a special education student when requested by a teacher or administrator (e.g., take a walk with student to help him/her "cool off," accompany student to phone a parent regarding his/her behavior)	1	2	3	4	5
7. Participate in progress report meetings with parents of students with disabilities and teacher(s)	1	2	3	4	5
8. Assist special education students with toileting needs (e.g., change diapers or catheters, help clean up toileting accidents)	1	2	3	4	5
9. Facilitate communication between students with disabilities, parents, and/or school staff	1	2	3	4	5
10. Make final decisions about grade retention for students with disabilities	1	2	3	4	5

Please rate the following items on a scale from 1 to 5 by circling the appropriate number. Please consider HOW DIFFICULT it would be for a newly hired Teaching Assistant to learn to perform these tasks in a competent manner.

For a New Teaching Assistant, Difficulty to Learn

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Academic Instruction					
1. Provide large group academic instruction to students (with and without disabilities) when requested by teacher	1	2	3	4	5
2, Provide small-group instruction to students with disabilities after introduction of topic in large-group setting	1	2	3	4	5
3. Provide individualized instruction, prompting, and/or tutorial services to students with disabilities	1	2	3	4	5
4. Select and/or obtain materials at the appropriate instructional level for students with disabilities	1	2	3	4	5
5. Implement modifications to support instructional needs of students with disabilities (e.g., use of extra time for work completion, manipulatives for science and math, strategies for organization or study skills)	1	2	3	4	5
6. Help monitor special education student contracts or progress reports on a daily or weekly basis (e.g., help observe student progress, record information on report, offer reward or consequence, and/or report information to parent)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
7. Facilitate/monitor peer tutors when they are working with students who have disabilities	1	2	3	4	5
8. Administer modified tests to students with disabilities	1	2	3	4	5
9. Administer tests to classroom of students (with and without disabilities)	1	2	3	4	5
10. Interpret special education student end-of-grade test results to district administrators	1	2	3	4	5
11. Review special education student Individual Educational Programs (IEPs)	1	2	3	4	5
12. Help teacher monitor rate of progress on special education students Individual Educational Programs (IEPs)	1	2	3	4	5
13. Meet with teacher(s) or other assistants to plan how to address special needs of students with disabilities in the classroom (e.g., student difficulties with learning, behavior, or socialization)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Behavior/Classroom Management					
1. Assist teacher(s) with special education student behavior management (e.g., help explain rules and expectations to students, remind students of expectations, intervene when misbehavior occurs)	1	2	3	4	5
2. Assist with social skill and emotional development of students with disabilities (e.g., teach students how to wait their turn, how to deal with anger or embarrassment, how to deal with peer conflicts, and provide ongoing emotional support to students)	1	2	3	4	5
3. Help special education students with life skills development (e.g., how to shop wisely for food and other goods, cook healthy meals, and/or travel safely within one's community)	1	2	3	4	5
4. Provide staff development training to teachers regarding behavioral interventions for students with disabilities	1	2	3	4	5
5. Provide counseling and/or mediation services to students with disabilities	1	2	3	4	5
6. Provide one-on-one assistance to special education student when requested by a teacher or administrator (e.g., take a walk with student to help him/her "cool off," accompany student to phone a parent regarding his/her behavior)	1	2	3	4	5
7. Assist with special education discipline record keeping (e.g., record number of students sent to in-school or out-of-school suspension, write up/document discipline infractions for teacher and/or office reports)	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
8. Use physical restraint holds in the event of an emergency or when intervention with an aggressive special education student is necessary	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Parent Contact					
1. Assist with daily and/or weekly communications to parents of students with disabilities (e.g., phone calls about student academic, behavior, or health/medical progress or needs)	1	2	3	4	5
2. Provide comments and suggestions to teacher about special education student progress in preparation for parent-teacher conference	1	2	3	4	5
3. Participate in special education student Individual Educational Program (IEP) meetings with parents and teacher(s)	1	2	3	4	5
4. Participate in progress report meetings with parents of students with disabilities and teacher(s)	1	2	3	4	5
5. Conduct meetings between parents of special education students and district administrators	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Medical/Healthcare Issues					
1. Help make sure that students with disabilities have the necessary aids or equipment they need (e.g., inhalers for students with asthma, walkers for students with mobility needs)	1	2	3	4	5
2. Remind students with disabilities to go to a designated place to receive prescription medication	1	2	3	4	5
3. Administer medication to students with disabilities, and document on appropriate paperwork that medication has been given	1	2	3	4	5
4. Accompany special education student to visits with the student's family doctor	1	2	3	4	5
5. Assist special education students with mobility needs (e.g., those on crutches, with leg braces, or in wheelchairs) in getting around school safely	1	2	3	4	5
6. Intervene with special education student having seizures (e.g., talk to student, call parents or paramedics, explain to children what has happened)	1	2	3	4	5
7. Assist special education students with toileting needs (e.g., change diapers or catheters, help clean up toileting accidents)	1	2	3	4	5
8. Change/suction special education student trachea tube when needed	1	2	3	4	5
9. Change special education student feeding tube when needed	1	2	3	4	5

Task	Do not perform the task	Minor part of job	Important part of job	Critical part of job	Extremely critical part of job
Other					
1. Facilitate communication between students with disabilities, parents, and/or school staff	1	2	3	4	5
2. Help supervise students with disabilities throughout the day (e.g., during, before and/or after school periods, going to/from classes, during recess/playground time)	1	2	3	4	5
3. Assist ancillary teachers (e.g., art, media, music, PE instructors) in their work with special education students	1	2	3	4	5
4. Operate adaptive devices for special education students (e.g., auditory trainers communication boards)	1	2	3	4	5
5. Select and/or obtain materials at the appropriate instructional level for students with disabilities	1	2	3	4	5
6. Provide one-on -one assistance to a special education student when requested by a teacher or administrator (e.g., take a walk with student to help him/her "cool off," accompany student to phone a parent regarding his/her behavior)	1	2	3	4	5
7. Participate in progress report meetings with parents of students with disabilities and teacher(s)	1	2	3	4	5
8. Assist special education students with toileting needs (e.g., change diapers or catheters, help clean up toileting accidents)	1	2	3	4	5
9. Facilitate communication between students with disabilities, parents, and/or school staff	1	2	3	4	5
10. Make final decisions about grade retention for students with disabilities	1	2	3	4	5

Part 2

We realize that some of you have other responsibilities in addition to working with students with disabilities in regular education classes. Please answer the following questions to help us better understand your job activities:

1. What percentage of your job involves work with students who have disabilities? (For example, if all of your work responsibilities are involved with students with disabilities, write 100% in the blank. If you work with students with disabilities about one third of the time, write 33% in the blank.)

   _____

2. At this time, please look back over all the job activities you just rated on this inventory and answer the following question: What percentage of your job responsibilities are represented by this questionnaire? (For example, if you believe all of your job activities are represented by this questionnaire, write 100% in the blank. If you believe about one fourth of your job tasks are represented by the inventory, write 25% in the blank.)

   _____

3. Which, if any, of your job activities related to students with disabilities did we NOT include on this questionnaire?

Part 3

1. Please list the top five skills that teaching assistants need in their work with students with disabilities (e.g., Teaching assistants need to know how to tutor an individual student or manage student behavior within a large group instruction situation. (You do not need to rank them.)

   a.

   b.

   c.

   d.

   e.

2. Please write any comments or suggestions you would like to make regarding the training needs of teaching assistants who work with students who have disabilities below:

Part 4

Background Information

1. Are you a regular education _____ or a special education _____ teaching assistant?

2. In which grade level(s) do you work? _____

3. Years of experience as a teaching assistant (including this year) _____

4. Education level: _____High School or GED _____Some College

   _____4-year college degree _____Some Graduate School

   _____ Graduate degree

5. * What is your age? _____

6. * What is your gender and ethnic background? Check all that apply.

(*These questions are being asked so it can be determined if the sample in this study is representative of all teaching assistants in the district.)

_____ Male _____ Female _____ African American _____ Caucasian

_____ Asian _____ Hispanic _____ Other

Thank you for participating as we work together to improve training opportunities for teaching assistants and services for our students!

For Supervisors of Paraprofessionals

Part 4

Background Information

1. What grade levels have you taught? _____

2. How many years were you a classroom teacher? _____

3. How many years has it been since you were a classroom teacher? _____

4. How many years do you have of being a supervisor of educational paraprofessionals? _____

*5. What is your age? _____

*6. What is your gender and ethnic background? Check all that apply.

(* These questions are being asked so it can be determined if the sample in this study is representative of all supervisors of educational paraprofessionals in the district.)

_____ Male _____ Female _____ African American _____ Caucasian

_____ Asian _____ Hispanic _____ Other

Part 5

After contemplating the various roles and responsibilities that the educational paraprofessionals that you supervise engage in please share the following:

1. What required competencies do you perceive to be the most present?

2. What required competencies do you perceive to be the most lacking?

Thank you for participating as we work together to improve training opportunities for teaching assistants and services for our students!

APPENDIX B

INTRODUCTORY LETTER TO SCHOOL SUPERVISORS

Introductory Letter to School Supervisors

Date:

Dear Colleagues,

As many of you know, I am in the doctoral program at the University of Oregon and am currently working on my dissertation. The title of my dissertation is *Identifying Training Needs of Educational Paraprofessionals.* The purpose of my dissertation research study is to identify and analyze the current roles, responsibilities and related training needs of educational paraprofessionals who work with special education students in a general education environment.

I am asking for your permission to visit your school and attend a meeting with your educational paraprofessionals in order to obtain consent and survey their perceptions of the work and training that paraprofessionals engage in. Additionally, I would like to survey you as a supervisor of paraeducators as to your perceptions of the work educational paraprofessionals do.

The survey instrument that I will be using for you and your paraprofessionals is called the Paraeducator Inclusion Inventory (PII), and was created by Cheryl Stallings, Ph.D., a student from North Carolina State University. This instrument will be used to assess the five different categories of tasks (academic instruction, behavior/classroom management, parent contact, medical/healthcare issues, and other) in which paraeducators are often assigned. The importance, frequency, and difficulty to acquire the needed skills of each task will be surveyed using a Likert scale. I have slightly modified the survey by adding additional demographics-related questions and have made it accessible through a web-based program called SurveyMonkey.

The actual survey is completely voluntary and anonymous. The survey would take approximately 30 minutes to complete online after a 10-minute period of introductions, explanations, etc. I am hoping to conduct the surveys sometime during the months of March or April.

During the school meeting, I would like to do the following:

1. Introduce myself and the reason behind the research.

2. Present to the paraprofessionals the Cover Letter for Anonymous, Nonsensitive Questions (see attached) and answer any questions about the research.

3. Review written directions on how to access the randomly distributed survey via the Internet.

4. Proctor the administration of the survey.

The information gained from this type of research will be very helpful for our district and many others as we interview, hire, train and retain these important members of our school community. I hope you will allow me to come to your school and survey you and your educational paraprofessionals. I will be contacting you via a phone call in order to set up a day and time for my visit.

If you have any questions regarding the research, you may contact me at (503) 673-7228 or taylorc@wlwv.k12.or.us. If you would like to contact my faculty advisor, Dr. Gerald Tindal, he may be reached at (541) 346-1640 or geraldt@uoregon.edu. If you have any questions regarding your rights as a research subject, please contact the Office for Protection of Human Subjects at the University of Oregon, (541) 346-2510.

Sincerely,

Christine Taylor

APPENDIX C

COVER LETTER FOR ANONYMOUS, NONSENSITIVE QUESTIONNAIRES FOR PARAPROFESSIONALS

Cover Letter for Anonymous, Nonsensitive
Questionnaires for Paraprofessionals

Date: (Date of Survey)

You are participating in a research project on the roles, responsibilities and training needs of educational paraprofessionals. You have been selected to participate in this research because you are a paraprofessional who works at least 10% of your day with special education students in a general education setting. This research project is part of my dissertation study and is being conducted by me, Christine Taylor. I am currently a doctoral student in the College of Education at the University of Oregon. I am the Instructional Coordinator at Sunset Primary School in the West Linn-Wilsonville School District.

The results from this research will contribute to a better understanding of the specific roles and responsibilities asked of educational paraprofessionals working in primary schools. This information will also assist school districts in creating current job descriptions and providing appropriate training for educational paraprofessionals. However, I cannot guarantee that you personally will receive any benefits from this research. Thank you for agreeing to participate in my research project.

All you need to do is complete this short questionnaire online, which should take approximately 30 minutes. Your participation is voluntary. If you do not wish to participate, simply do not submit your survey. Responses will be completely anonymous; your name will not appear anywhere on the survey. Completing and submitting the questionnaire constitutes your informed consent to participate.

You may keep this cover letter for your records. If you have any questions regarding the research, you may contact me at (503) 673-7228 or taylorc@wlwv.k12.or.us. If you would like to contact my faculty advisor, Dr. Gerald Tindal, he may be reached at (541) 346-1640 or geraldt@uoregon.edu. If you have any questions regarding your rights as a research subject, please contact the Office for Protection of Human Subjects at the University of Oregon, (541) 346-2510.

Thank you again for your help!

Christine M. Taylor
(503) 673-7228
taylorc@wlwv.k12.or.us

APPENDIX D

VERBAL CONSENT SCRIPT FOR INTERVIEWS

Verbal Consent Script for Interviews

Date: (Date of Interview)

You are participating in a research project on the roles, responsibilities and training needs of educational paraprofessionals working in primary schools. You have been selected to participate in this interview because you work at least 10% of your day with special education students in a general education setting. Additionally, you have been selected based on your descriptive responses to the open-ended survey questions.

This research project is part of my dissertation study and is being conducted by me, Christine Taylor. I am currently a doctoral student in the College of Education at the University of Oregon. I am the Instructional Coordinator at Sunset Primary School in the West Linn-Wilsonville School District.

The results from this research will contribute to a better understanding of the specific roles and responsibilities asked of educational paraprofessionals working in primary schools. This information will also assist school districts in creating current job descriptions and providing appropriate training for educational paraprofessionals. However, I cannot guarantee that you personally will receive any benefits from this research. Thank you for agreeing to participate in my research project.

Today you will be participating in a one-on-one interview, which should take approximately 20 minutes. Your participation is voluntary. If you do not wish to participate, you may stop at any time. Your responses will only be heard by me and will not be disclosed to any member of the school district. No names will be attached to your interview responses and your name will not appear anywhere in the written report. I will erase all portions of our interview after I have transcribed the data and have received approval of my dissertation. Taking part in this interview is your informed consent.

You may keep this cover letter for your records. If you have any questions regarding the research, you may contact me at (503) 673-7228 or taylorc@wlwv.k12.or.us. If you would like to contact my faculty advisor, Dr. Gerald Tindal, he may be reached at (541) 346-1640 or geraldt@uoregon.edu. If you have any questions regarding your rights as a research subject, please contact the Office for Protection of Human Subjects at the University of Oregon, (541) 346-2510.

Are there any questions before we begin?

Christine M. Taylor
(503) 673-7228
taylorc@wlwv.k12.or.us

APPENDIX E

INTERVIEW QUESTIONS

Interview Questions

Have participant read the verbal consent script for interview.

IEPs

1. Please tell me about your knowledge of the IEP process and what are the components of an IEP?

2. How have you learned about the IEP process and its components?

3. In what ways are you familiar with the actual goals on specific students' IEPs?

4. How have you learned this information?

Curriculum and Modifications

5. In the survey, you mentioned that you select and/or obtain materials at the appropriate instructional level for students with disabilities. How do you go about doing this? What are some of the considerations or decisions you have to make?

6. One of the top five skills that you listed as being required of instructional assistants had to do with modifying the curriculum. Can you explain how you go about doing this?

Training

7. In the survey, you mentioned that you would like additional training. Can you elaborate on the content of the training you would think would be most helpful?

8. In your opinion, what would be the best way to go about the training (timing, place, from whom, etc.)?

APPENDIX F

PARAEDUCATOR INCLUSION INVENTORY CODING MANUAL

Paraeducator Inclusion Inventory Coding Manual

Source: Adapted from *The Identification of Paraprofessional Training Needs Within the Context of Inclusive Education* (pp. 218–231), by C. F. Stallings, 2000, unpublished doctoral dissertation, North Carolina State University, Raleigh.

INTRODUCTION AND GENERAL QUALITATIVE CODING RULES

Brief Description of the PII

The PII survey instrument is divided into four parts. The first section contains 45 items to be rated on a 5-point Likert scale. These 45 items are divided into five categories: PII items related to "academic instruction," "behavior/classroom management." "parent contact," "medical/healthcare issues," and an "other" category consisting of items dissimilar to those in the previous four categories.

The second section contains three "task coverage" items. Dissertation participant responses to Item 3 in this section will be the first set of responses that will be coded in this qualitative coding task.

The third section of the PII contains two open-ended questions. Responses to these two questions will also be coded in this task. Section 4 of the PII asked for demographic information from participants.

General Coding Rules for Task Coverage: PII Part 2

Question: Which, if any, of your job activities related to students with disabilities did we NOT include on this questionnaire?

1. Plan to review and code responses to Task Coverage Item I (Activities Not Included on PII) first. Then code responses to Open-Ended Question 1 (Top Five Skills) located in the third part of the PII. Finally, code responses to Open-Ended Question 2 (Training Comments/Suggestion) located in PII Part 3 as well.

2. Review the entire PII to become familiar with the items and content areas.

3. While coding responses for Task Coverage Item 3, first try to categorized participant comments within existing PII item content. If the response CAN

be categorized within existing item content, code the response as "Duplicate" and list the PII item(s) that include the response content on the coding sheet.

4. If response CANNOT be categorized within existing PII content or goes beyond the scope of the PII items, code response in the additional categories provided on the coding sheet. Refer to the category definitions within the PII CODING CATEGORIES AND DEFINITIONS section of this manual for additional guidance.

   A teaching assistant comment that goes beyond the scope of PII items is demonstrated in the following response example: "Develop and implement a time on-task student reward system." Although Item 6 within the PII "academic instruction" category describes job duties of assisting with the monitoring of student contracts or progress reports, and Item 1 within the "behavior/classroom management" category describes assisting with student behavior management, these items describe roles of ASSISTING or HELPING and NOT roles of independently developing and implementing behavioral interventions by oneself.

5. Responses may contain one idea or "thought unit," or multiple ideas or "thought units." Code each distinctively different idea separately. Select only one category for each different "thought unit." Select the one category that seems to be the "best fit" for each idea. (The following sample response contains two different "thought units" that should be coded separately: "working with visually impaired students and record keeping.")

6. Responses may contain repetitive ideas or "thought units." As mentioned earlier, an individual participant's ideas must be distinctively different to be coded. The following response provides an example of a repeated "thought unit" that should be coded only once: "redirecting student attention and helping to keep students on task."

7. If the response indicates all TA activities are covered by the PII either in numeric form or written form (e.g., "100% covered" or "all were covered"), code "All Covered" on the coding sheet.

8. If no response is provided for the question, code "No Comment(s)" on the coding sheet.

General Coding Rules for Two Open-Ended Questions: PII Part 3

Question 1: Please list the top five skills that teaching assistants need in their work with students with disabilities.

Question 2: Please write any comments or suggestions you would like to make regarding the training needs of teaching assistants who work with students who have disabilities.

1. Responses may contain one idea or "thought unit," or multiple ideas or "thought unites." Code each distinctively different idea separately. Select only one category for each different "thought unit." Select the one category that seems to be the "best fit" for each idea. Refer to the category definitions within the PII CODING CATEGORIES AND DEFINITIONS section of this manual for additional guidance.

   The following sample response for the "Top Five Skills" question contains five different "thought units" that should be coded in five different categories: "having knowledge of subject matter; managing student behavior; helping the exceptional student 'fit in' within the regular class; having knowledge of medications that students may be taking; having a great deal of patience."

   The following sample response for the "Training Comments/Suggestions" question contains one "thought unit" that should be coded in one category: "TAs need to be included in meetings that involve special needs students with whom they are working."

2. Responses may contain repetitive ides or "thought units." As mentioned earlier, an individual participant's ideas must be distinctively different to be coded. The following sample response to the "Top Five Skills" question contains only three distinct "thought units" that should be coded in three separate categories: "redirecting student attention; helping to keep students on tasks; preparing class materials; mediating between students; record keeping."

3. If no response is provided for the question, code "No Comment(s)" on the coding sheet.

Overview of PII Coding Categories

PII Part 2, Question 3 (Activities Not Included on PII)

_____ Duplicate
_____ Encourage
_____ Redirect
_____ Dev Beh
_____ Inclusion
_____ General
_____ Other
_____ All Covered
_____ No Comment(s)

PII Part 3, Question 1 (Top Five Skills)

_____ Gen Know
_____ Ind Know
_____ Teaching Skills
_____ Content Know
_____ Lg Group
_____ Sm Group
_____ Tutor
_____ Redirect
_____ Beh Mgmt
_____ Intense Beh
_____ Prevention
_____ Conflict Res
_____ Encourage
_____ Inclusion
_____ Comm Gen
_____ Comm Child
_____ Case Coord
_____ Med/Health
_____ Clerical
_____ Resources
_____ Transitions
_____ Child Dev
_____ Policy
_____ Person Attrib
_____ Patience
_____ Care/Sensitive
_____ Flexible
_____ Other
_____ No Comment(s)

PII Part 3, Question 2 (Training Comments/Suggestions)

___ Need Training	___ Balance Reg/Spec Child	___ Personality Attrib
___ Training Content	___ Comm re Child	___ Other
___ Know Disab.	___ Complexity/Pay	___ No Comment(s)
___Beh Mgmt	___ Reg/Spec Collab	___ Med/Health

PII CODING CATEGORIES AND DEFINITIONS

I. TASK COVERAGE #3: Which, if any, of your job activities related to students with disabilities did we NOT include on this questionnaire?

1. (Duplicate) Duplicate is coded when the content of a response is judged to already exist within current PII items.

2. (Encourage) Provide Encouragement/Assist in Motivating students with disabilities is coded when responses generally include words like "encouragement," or "motivation." Responses may also imply an interpersonal relationship or affective component between a TA and student such as a friendship, or consistent interpersonal interaction in which the TA provides academic, behavioral, or social/emotional support to the student.

3. (Redirect) Redirecting Attention/Keeping Student(s) on Task is coded when responses generally include words/phrases like "keeping students on task" and "redirecting student attention."

4. (Dev Beh) Develop and Implement Behavior Management Plans for Students With Disabilities is coded when responses must imply or specify activity that clearly goes beyond ASSISTING with the implementation or monitoring of behavior management plans. Additionally, responses must indicate more INDEPENDENT development and implementation of behavior plan by TA alone.

5. (Inclusion) Help Facilitate the Inclusion of Students With Disabilities in Regular Education Activities is coded when responses describe activities that involve integrating children with and without disabilities within regular education programs/classes. Responses may include educating nondisabled

children about the needs of disabled children, as well as ways to successfully include exceptional children within regular education activities.

6. (General) Job Activities General to All Students is coded when responses include TA activities that would generally apply to ALL students and not just students with disabilities. Response examples would include activities related to clerical work, record keeping, preparation of class materials/activities, the supervision/monitoring of nondisabled students throughout the day, or interpersonal interactions with all students.

7. (Other) Other is coded when responses include job activities that are dissimilar to the activities coded in previous categories. Responses may also be general comments that do NOT describe specific job duties related to working with students with disabilities that were omitted by PII questions.

8. (All Covered) All Covered is coded when responses indicate that PII item content "covered" or described all of the participant's job activities related to working with students with disabilities.

9. [No Comment(s)] No Comment(s) is coded when no response is provided for the question.

II. OPEN-ENDED #1: List the top five skills that TAs need in their work with students with disabilities.

1. (Gen Know) General Knowledge/Understanding of Disabilities is coded when responses indicate the need for an understanding or general/global knowledge base regarding the various student disabilities TA s may encounter in their work. Responses often include words such as "understanding," "knowledge," or "education about special needs."

2. (Ind Know) Understanding of Individual Student Disability and Individual Student Strengths/Needs is coded when responses indicate the need to understand the strengths, needs, and functioning level(s) of individual exceptional students with whom the TA may be working. Responses tend to imply needing information about individual children with whom the TA may be working (e.g., having appropriate expectations of a child based on student strengths and/or needs; understanding about a specific disability an individual student has; understanding the effects of a disability on student academic, behavioral, or physical functioning levels).

3. (Teaching Skills) General Knowledge of Good Teaching Skills, Differentiated Instructional Methods and Instructional Modifications is coded when responses include having an understanding of good teaching skills, diverse instructional techniques, and various ways to implement academic modification to meet the needs of exceptional students. Also included are general responses about how to work with special needs students and diverse learning styles, and how to implement strategies or curriculum modifications based on diverse student needs and/or functioning levels. IF A RESPONSE MENTIONS MODIFICATIONS, INTERVENTIONS, OR SPECIAL TECHNIQUES IN A GENERAL SENSE (WITHOUT MAKING EXPLICIT REFERENCE TO A *BEHAVIOR* INTERVENTION), CODE RESPONSE WITHIN THIS CATEGORY. IF A RESPONSE SPECIFICALLY MENTIONS INSTRUCTING STUDENTS IN LARGE-GROUP, SMALL-GROUP, OR TUTORIAL/INDIVIDUALIZED SITUATIONS, CODE RESPONSE IN "Large Group Instruction," "Small Group Instruction," or "Tutoring/Individualized Instruction" CATEGORIES.

4. (Content Know) Having Content Knowledge of Subject Matter is coded when responses indicate need for knowledge in content/subject matter being taught to students.

5. (Lg Group) Large-Group Instruction is coded when responses specifically describe instructing students in large-group situations.

6. (Sm Group) Small-Group Instruction is coded when responses specifically describe instructing students in small-group settings/situations or aside from the larger/majority class student group.

7. (Tutor) Tutoring/Individualized Instruction is coded when responses specifically describe tutoring students or providing individualized instruction. Responses may also include one-on-one work with special needs children using modifications to meet the individual student's needs. CODE IN THIS CATEGORY ONLY IF THE RESPONSE MENTIONS INDIVIDUALIZED WORK WITH A CHILD; OTHERWISE, CODE IN THE "General Knowledge of Good Teaching Skills, Differentiated Instructional Methods, and Instructional Modifications" CATEGORY.

8. (Redirect) Redirecting Attention/Keeping Students on Task is coded when responses generally include words/phrases like "keeping students on task," "redirecting student attention," or "using a reward program to keep students focused."

9. (Beh Mgmt) Knowledge of Behavior Management Principles and Techniques—Group and/or Individual Level is coded when responses include needing knowledge/skills in managing student behavior when working with large groups, small groups, or individual students. Also included are responses describing specific behavioral interventions, knowledge or appropriate disciplinary procedures, and skills needed to help meet student behavioral/emotional needs due possibly to complex family or social issues. IF A RESPONSE MENTIONS MODIFICATION, INTERVENTIONS, OR SPECIAL TECHNIQUES IN A GENERAL SENSE (WITHOUT MAKING EXPLICIT REFERENCE TO A BEHAVIORAL INTERVENTION, CODE RESPONSE WITHIN THE "General Knowledge of Good Teaching Skills, Differentiated Instructional Methods, and Instructional Modifications" CATEGORY.

10. (Intense Beh) Skills to Deal With Critical Behavioral Incidents/Intense Disruptive Behaviors is coded when responses include skills needed to intervene with more aggressive, violent, or intensely disruptive behaviors. Responses may describe physical restraint techniques or imply the need for more intense behavioral intervention skills/strategies (e.g., "how to control/manage negative behavior," "how to calm down students," "how to diffuse student anger/emotional situations."

11. (Prevention) Good Observation and Prevention/Early Intervention Skills is coded when responses indicate the need for good observation skills when working with students. Responses may also indicate the linkage between good observation skills and the TA performing some action in an effort to prevent a problem or intervene early in a problem that a student is experiencing.

12. (Conflict Res) Conflict Resolution/Mediation Skills is coded when responses include phrases like "conflict resolution" and "mediation."

13. (Encourage) Provide Encouragement and Emotional Support/Assist in Motivating Students is coded when responses describe providing encouragement and emotional support to students, as well as knowledge of/use of motivational techniques and "self-confidence builders" for students. Also includes counseling skills to help students cope with emotional or social problems, and skills to support exceptional students when regular students appear insensitive to the disabled child's needs or feelings. May also include phrases related to building positive relationships like "bonding" with students. IF A RESPONSE IMPLIES A PERSONAL CHARACTERISTIC OR ATTRIBUTE SUCH AS "LOVES CHILDREN,"

"SYMPATHETIC," OR "CARING," CODE IN THE PERSONAL ATTRIBUTE SUBCATEGORY "Caring and Sensitivity."

14. (Inclusion) Facilitate Social Integration and the Inclusion of Students With Disabilities in Regular Education Activities is coded when responses describe job duties that involve integrating children with and without disabilities within regular education academic and social activities. Responses may also include educating nondisabled students about the needs of disabled children, and conducting discussions or facilitating social interactions between disabled and nondisabled.

15. (Comm Gen) Communication Skills-General is coded when responses include the need for general communication skills. Additional responses include phrases related to good oral and written communication skills, as well as general conversational skills.

16. (Comm Child) Communication Skills With Children is coded when responses specify the need for good communication skills with STUDENTS. Additional response examples include how to use appropriate language or how to provide appropriate feedback when working with students. Also included would be phrases related to how best to communicate with speech- or language-impaired students.

17. (Case Coord) Collaboration and Case Coordination With Other Adults is coded when responses include comments related to TAs and other adults collaborating/communicating in a timely and consistent manner about exceptional student identities, needs, educational goals, and how to meet and monitor progress of educational goals. Additionally, this collaboration is done in an effort to enhance educational program planning and development, and to provide continuity of services to students. Comments may also include needing information about student contextual issues (e.g., home/community stressors in which the child may be dealing with and needing a clear understanding about TA roles with students and/or parents in various situations).

18. (Med/Health) Medical/Healthcare Issues is coded when responses include needing training/skills on various students healthcare issues such as administering First Aid, assisting with medical emergencies at school, assisting with student toileting or mobility needs, or having knowledge about medications students may be taking.

19. (Clerical) Clerical Duties is coded when responses include various record-keeping duties and activities related to preparing various classroom materials.

20. (Resources) Having Access to and Knowledge of Resources is coded when responses indicate need for knowledge of resources within a classroom or school district to facilitate teaching and student learning. Responses may also indicate a need for understanding how to access or appropriately use resources to assist students and families.

21. (Transitions) Transitions is coded when responses include supervising/monitoring students when moving from place to place within the school building or when transitioning from one task to another.

22. (Child Dev) Understanding of Child Development and Academic Grade Level Expectations is coded when responses indicate need for knowledge in child development so TAs will appropriate developmental expectations of students. Responses may also indicate need for knowledge in grade-level expectations and requirements so TAs will have appropriate academic expectations of students.

23. (Policy) Knowledge of Policy and Procedures is coded when responses indicate need for knowledge about district policy that applies to the TA job. Responses may also indicate need for knowledge of state/district/school policy and procedures in working with exceptional students.

24. (Personal Attrib) Personal Attributes/Characteristics is coded when responses describe personal characteristics judged by TAs to be important to possess in working with exceptional students. Examples may include personal attributes such as creativity, a sense of humor, or dependability. NOTE THAT THERE ARE THREE SUBCATEGORIES WITHIN THE OVERALL DOMAIN OF "Personal Attributes/Characteristics." IF A RESPONSE FALLS WITHIN ONE OF THE SUBCATEGORIES DESCRIBED BELOW, CODE THE RESPONSE ONLY IN THE SUBCATEGORY.

    (Patience) Patience is coed when responses contain the word "patience."

    (Care/Sensitivity) Caring and Sensitivity is coded when responses include positive interpersonal attributes such as love for children, compassion, empathy, care, or sensitivity. Additional responses to be coded in this subcategory may contain words like "friendliness," "kindness," or

"understanding attitude." RESPONSES IN THIS CATEGORY IMPLY A PERSONAL CHARACTERISTIC OR ATTRIBUTE. RESPONSES DESCRIBING AN ACTION BEING PERFORMED IN AN EFFORT TO PROVIDE EMOTIONAL SUPPORT OR ASSIST WITH STUDENT MOTIVATION SHOULD BE CODED IN THE "Provide Encouragement and Emotional Support/Assist in Motivating Students" CATEGORY. For example, phrases like "how to comfort students," "encouraging students to complete their work," or "how to motivate students to participate or to keep working" should be coded in the "Provide Encouragement and Emotional Support/Assist in Motivating Students" category.

(Flexible) Flexibility is coded when responses contain words such as "flexibility" and "adaptability." Also includes phrases related to a willingness to be flexible or to make the necessary adjustments or modifications when working with exceptional learners.

25. (Other) Other is coded when responses describe skills that are dissimilar to the skills coded in previous categories. Responses may include general or ambiguous comments.

26. [No Comment(s)] No Comment(s) is coded when no response is provided for the question.

III. OPEN-ENDED #2: Please write any comments or suggestions you would like to make regarding the training needs of TAs who work with students who have disabilities.

**THERE MAY BE MORE THAN ONE SENTENCE IN EACH COMMENT. IF THE SENTENCES ARE RELATED TO THE SAME IDEA OR GENERAL "THOUGHT UNIT," THE IDEA IS CODED ONCE IN ONE CATEGORY. ONLY WHEN THERE ARE DISTINCTIVELY DIFFERENT "THOUGHT UNITS" SHOULD MORE THAN ONE CATEGORY BE USED PER RESPONSE. The following response should be coded in the "Need Training" category: "We need much more training in how to work with exceptional students. No one has provided me with any detailed information about these children!" The next response should be coded in two categories ("Training Content Subcategories 'Behavior Management' and 'Medical/Healthcare'"): "I need training in two specific areas: behavior management and how to deal with medical emergencies like a child having a seizure."

1. (Need Training) Need More Training is coded when responses indicate the need for more training opportunities (e.g., staff development activities, workshops for TAs in their work with students with disabilities). Some

responses may also suggest timeframes for training such as at the beginning of the school year, and that training be mandatory.

2. (Training Content) Training Content is coded when responses describe types of materials, resources, experiences, or information that would be helpful to a TA in working with exceptional students. NOTE THAT "Training Content" also has three subcategories: "Knowledge of Disabilities," "Behavior Management," and "Medical/Healthcare." CODE RESPONSE WITHIN "Training Content" ONLY WHEN THE COMMENT DESCRIBES TRAINING TOPICS THAT DO NOT FIT WITHIN EITHER OF THE THREE SUBCATEGORIES. Sample responses for "Training Content" include topics or training experiences related to instruction, academic modification, mentoring for the TA, TA roles in the classroom, or classroom observation opportunities.

3. (Know Disability) Knowledge of Disabilities is coded when responses describe needing training on general aspects of disabilities and/or specific aspects of individual disabilities. Responses may also include training topics related to how disabilities affect/impact individual children, and how learning styles and processing difficulties of students need to be understood so TAs can effectively work with them.

4. (Beh Mgmt) Behavior Management is coded when responses describe needing training in areas such as general positive classroom management, strategies for dealing with behavioral difficulties, physical restraint holds, or intervention skills for more intense, disruptive behaviors. Responses may also include how to work with children with behavioral difficulties from dysfunctional families, and how to keep students focused and listening to instructions.

5. (Med/Health) Medical/Healthcare is coded when responses describe needing training on medical, healthcare, life skills, or mobility issues. Response examples may mention how to administer First Aid, how to assist students with toileting needs, how to help students in wheelchairs, or how to intervene with a student having a seizure.

6. (Balance Reg/Spec Child) Balance Between Regular and Special Education Students is coded when responses suggest considering the needs of regular education students as well as when discussing issues of including exceptional students in regular education activities. Other responses might suggest a "realistic" or "common sense" approach when making educational

programming decisions for special needs students given the resources within a school or district.

7. (Comm re Child) TAs Need to be More Informed About Special Needs Students is coded when responses indicate that TAs want more communication and collaboration in a timely and/or consistent manner regarding the exceptional students with whom they are working. Responses may also indicate that TAs want to know who is identified as an exceptional student in the classroom, and want to contribute or be included in meetings that pertain to educational planning for exceptional students with whom they are working.

8. (Complexity/Pay) Complexity of Job/Low Pay is coded when responses describe the TA's job as becoming increasingly complex, while recognition for good work is very limited. Responses may also describe the salary as very low.

9. (Reg/Spec Collab) Bridging Regular and Special Education Programming is coded when responses indicate the need for continued cooperative efforts between regular and special education departments and staff to meet the needs of exceptional students and to provide continuity of services.

10. (Personality Attrib) Importance of Personality Attributes is coded when responses describe the importance of personal attributes or personality characteristics in the TA job.

11. (Other) Other is coded when comments are dissimilar to others coded in previous categories. Responses may also be general comments.

12. [No Comment(s)] No Comments(s) is coded when no response is provided for the question.

CODING SHEET (USE ONE SHEET PER PROTOCOL)

I. PII Part 2, Question 3 (Activities Not Included on PII)

_____ Duplicate _____ Inclusion

_____ Encourage _____ General

_____ Redirect _____ Other

_____ Dev Beh _____ All Covered

_____ No Comment(s)

II. PII Part 3, Question 1 (Top Five Skills)

_____ Gen Know _____ Prevention _____ Transitions

_____ Ind Know _____ Conflict Res _____ Child Dev

_____ Teaching Skills _____ Encourage _____ Policy

_____ Content Know _____ Inclusion _____ Person Attrib

_____ Lg Group _____ Comm Gen _____ Patience

_____ Sm Group _____ Comm Child _____ Care/Sensitive

_____ Tutor _____ Case Coord _____ Flexible

_____ Redirect _____ Med/Health _____ Other

_____ Beh Mgmt _____ Clerical _____ No Comment(s)

_____ Intense Beh _____ Resources

III. PII Part 3, Question 2 (Training Comments/Suggestions)

___ Need Training ___ Balance Reg/Spec Child ___ Personality Attrib

___ Training Content ___ Comm re Child ___ Other

___ Know Disab. ___ Complexity/Pay ___ No Comment(s)

___Beh Mgmt ___ Reg/Spec Collab ___ Med/Health

REFERENCES

American Federation of Teachers. (1998). *Standards for a profession.* Washington, DC: Paraprofessional Division of The American Federation of Teachers.

American Federation of Teachers. (2002*). It takes a team: A profile of support staff in American education.* Washington, DC: Paraprofessional and School-Related Personnel Division of The American Federation of Teachers. Retrieved November 2, 2006, from www.aft.org/pubs-reports/psrp/team2002.pdf

American Federation of Teachers. (2006). *Track the status of state-level certification.* Washington, DC: Author. Retrieved November 25, 2007, from http://www.aft.org/topics/para-certification/status.htm

Ashbaker, B.,Young, J., & Morgan, J. (2001, March*). Paraeducators: Their roles in the instructional process.* Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Dallas, TX. (ERIC Document Reproduction Service No. ED454223)

Beale, E. W. (2001). Analysis of state standards for paraprofessionals. *Journal of Instructional Psychology, 28*(4), 244–248.

Bemis, S. E., Belenky, A. H., & Soder, D. A. (1983). *Job analysis: An effective management tool.* Washington, DC: Bureau of National Affairs.

Blalock, G. (1991). Paraprofessionals: Critical team members in our special education programs. *Intervention in School and Clinic, 26*(4), 200–214.

Carroll, D. (2001). Considering paraeducator training, roles, and responsibilities. *Teaching Exceptional Children, 34*, 60–64.

Child Nutrition Act, 42 U.S.C. (1966).

Christie, K. (2005, November). Paraprofessionals on the front line. *Phi Delta Kappa*, 181–182.

Chung, H. E. (2006). Paraeducators in special education classrooms (Doctoral dissertation, University of Oregon, 2006). *Dissertation Abstracts International, 68*, 2.

City University of New York, National Center on Educational Restructuring and Inclusion. (1995). *National study of inclusive education.* New York: Author.

Clarke, C. (2001). *An exploration of the role expectations for paraprofessionals in education.* Unpublished doctoral dissertation, Washington State University, Pullman.

Deno, S. L., Foegen, A., Robinson, S., & Espin, C. (1996). Commentary: Facing the realities of inclusion for students with mild disabilities. *Journal of Special Education, 30*, 345–357.

Devlin, P. (2005). Effect of continuous improvement training of student interaction and engagement. *Research and Practice for Persons With Severe Disabilities, 30*, 47–59.

Downing, J. E., Ryndak, D. L., & Clark, D. (2000). Paraeducators in inclusive classrooms. *Remedial and Special Education, 21*(3), 171–181.

Education for All Handicapped Children's Act, 20 U.S.C. (1975).

Education Professions Development Act, 20 U.S.C (1967).

Elementary and Secondary Education Act, 20 U.S.C. (1965).

French, N. K. (1998). Working together: Resource teachers and paraeducators. *Remedial and Special Education, 19*, 357–368.

French, N. K. (1999). Paraeducators and teachers: Shifting roles. *Teaching Exceptional Children, 32*(2), 69–73.

French, N. K. (2001). Supervising paraprofessionals: A survey of teacher practices. *Journal of Special Education, 35*, 41–53.

French, N. K. (2003). Paraeducators in special education programs. *Focus on Exceptional Children, 36*, 1–16.

French, N., & Chopra, R. (1999). Parent perspectives on the roles of paraprofessionals. *Journal of the Association for Persons With Severe Handicaps, 24*, 259–272.

French, N. K., & Pickett, A. L. (1997). Paraprofessionals in special education: Issues for teacher educators. *Teacher Education and Special Education, 20*, 61–73.

Frith, G. H., & Lindsey, J. D. (1982). Certification, training, and other programming variables affecting special education and the paraprofessional concept. *Journal of Special Education, 16*, 229–236.

Fuchs, D., & Fuchs, L. S. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children, 60*, 294–309.

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston: Allyn & Bacon.

Giangreco, M. F. (2003). Working with paraprofessionals. *Educational Leadership, 61*, 50–53.

Giangreco, M. F., & Broer, S. M. (2005). Questionable utilization of paraprofessionals in inclusive schools: Are we addressing symptoms or causes? *Focus on Autism and Other Developmental Disabilities, 20*, 10–26.

Giangreco, M. F., Broer, S. M., & Edelman, S. W. (2002). "That was then, this is now!" Paraprofessional supports for students with disabilities in general education classrooms. *Exceptionality, 10*, 47–64.

Giangreco, M. F., & Doyle, M. B. (2002). Students with disabilities and paraprofessional supports: Benefits, balance, and band-aids. *Focus on Exceptional Children, 34*, 1–12.

Giangreco, M. F., Edelman, S. W., & Broer, S. M. (2001). Paraprofessional support of students with disabilities: Literature from the past decade. *Council for Exceptional Children, 68*, 45–63.

Giangreco, M. F., Edelman, S. W., Luiselli, T. E., & MacFarland, S. Z. (1997). Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children, 64*, 7–18.

Griffin-Shirley, N., & Matlock, D. (2004). Paraprofessionals speak out: A Survey. *Review, 36*, 127–136.

Halvorsen, A. T., & Neary, T. (2001). *Building inclusive schools: Tools and strategies for success*. Needham Heights, MA: Allyn & Bacon.

Hawkins, S. R. (2004). *A study of the perceptions of special education teachers and paraeducators regarding the training of paraeducators*. Unpublished doctoral dissertation, Regent University, Virginia Beach, VA.

Individuals With Disabilities Education Act, 20 U.S.C. (1997).

Lamont, I. L., & Hill, J. L. (1991). *Roles and responsibilities of paraprofessionals in the regular elementary classroom. B. C. Journal of Special Education, 15*(1), 1–24.

Lipsky, D. K., & Gartner, A. (1996). Inclusion, school restructuring, and the remaking of American society. *Harvard Educational Review, 66*, 762–796.

Love, I. H., & Levine, D. U. (1992, April). *Performance ratings of teacher aides with and without training and follow-up in extending reading instruction.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco. (ERIC Document Reproduction Service No. ED349294)

Madge, S., Affleck, J., & Lowenbraun, S. (1990). Social effects of integrated classrooms and resource room/regular class placements on elementary students with learning disabilities. *Journal of Learning Disabilities, 23*, 439–445.

Marks, S., Schrader, C., & Levine, M. (1999). Paraeducator experiences in inclusive settings: Helping, hovering, or holding their own? *Exceptional Children, 65*, 315–328.

Marston, D. (1996). A comparison of inclusion only, pull-out only, and combined service models for students with mild disabilities. *Journal of Special Education, 30*, 121–132.

Morehouse, J. A., & Albright, L. (1991). Training trends and needs of paraprofessionals in transition service delivery agencies. *Teacher Education and Special Education, 14*(4), 248–256.

Moshoyannis, T., Pickett, A. L., & Granick, L. (1999). *The evolving roles and education/training needs of teacher and paraprofessional teams in New York City public schools: Results of survey and focus group research.* New York: City University of New York, Center for Advanced Study in Education. (ERIC Document Reproduction Service No. ED436872)

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform.* Washington, DC: Department of Education.

National Education Association. (2003). *Paraeducator handbook.* Washington, DC: Author.

No Child Left Behind Act, 20 U.S.C. (2001).

Pardee, S. (1992). *A descriptive study of the responsibilities and professional development of paraprofessionals serving students with and without disabilities.* Unpublished doctoral dissertation, Southern Illinois University, Carbondale.

Passaro, P. D., Pickett, A. L., Latham, G., & HongBo, W. (1994). The training and support needs of paraprofessionals in rural special education. *Rural Special Education Quarterly, 13*(4), 3–9.

Pickett, A. L. (1981). *Paraprofessionals in special education: The start of the art.* New York: City University of New York, New Careers Training Laboratory.

Pickett, A. L. (1986). Certified partners: Four good reasons for certification of paraprofessionals. *American Educator, 10*, 31–47.

Pickett, A. L. (1997). Paraeducators in school settings: Framing the issues. In A. L. & K. Gerlach (Eds.), *Supervising paraeducators in school settings* (pp. 1–24). Austin, TX: Pro-Ed.

Pickett, A. L., Vasa, S. F., & Steckelberg, A. L. (1993). *Using paraeducators effectively in the classroom.* Bloomington, IN: Phi Delta Kappa Educational Foundation.

Riggs, C. G. (2001). Ask the paraprofessionals: What are your training needs? *Teaching Exceptional Children, 33*, 78–83.

Schumm, J. S., & Vaughn, S. (1995). Getting ready for inclusion: Is the stage set? *Learning Disabilities: Research and Practice, 10*, 169–179.

Stallings, C. F. (2000). *The identification of paraprofessional training needs within the context of inclusive education.* Unpublished doctoral dissertation, North Carolina State University, Raleigh.

Stevenson, R. B. (2004). Constructing knowledge of educational practices from case studies. *Environmental Education Research, 10*, 39–51.

Turney, D. T. (1962). *Secretaries for teachers*. Nashville, TN: George Peabody College of Teachers, Department of Education.

U.S. Department of Education. (1999). *School implementation of standards-based reform: follow-up public school survey on educational reform*. Washington, DC: U.S. Government Printing Office.

U.S. Department of Education, National Center for Education Statistics. (2003). *The condition of education, 2003* (NCES Report No. 2003-067). Washington, DC: U.S. Government Printing Office.

U.S. Department of Education, National Center for Education Statistics. (2006a). *English language learner students in U.S. public schools: 1994 and 2000*. Retrieved January 25, 2008, from http://nces.ed.gov/pubsearch/pubsinfo.asp ?pubid=2004035

U.S. Department of Education, National Center for Education Statistics. (2006b). *Digest of education statistics, 2005* (NCES Report No. 2006-030). Washington, DC: U.S. Government Printing Office.

U.S. Department of Education, National Center for Education Statistics. (2006c). *Public elementary and secondary students, staff, schools, and school districts: School year 2003-04* (NCES Report No. 2006-2007). Washington, DC: U.S. Government Printing Office.

U.S. Department of Education, Office of Special Education and Rehabilitative Services. (2007). *IDEA reauthorized statute: Alignment with the No Child Left Behind Act*. Retrieved January 1, 2007, from www.ed.gov/policy/speced/guid/idea/tb-nclb-align.doc

Wadsworth, D., & Knight, D. (1996). Paraprofessionals: The bridge to successful full inclusion. *Intervention in School and Clinic, 31*, 166–171.

West Linn-Wilsonville School District. (2006). *Employee resources*. Retrieved November 16, 2006, from http://www.wlwv.k12.or.us/EmployeeResources/

Wiener, J., & Tardiff, C. (2004). Social and emotional functioning of children with learning disabilities: Does special education placement make a difference? *Learning Disabilities Research and Practice, 12*(1), 20–32.

Will, M. C. (1986). Educating children with learning problems: A shared responsibility. *Exceptional Children, 52*, 411–415.

Wisconsin Executive Summary. (1997). *Views on paraprofessionals: A vision for paraprofessionals within a comprehensive system of personnel development.* Retrieved November, 26, 2006, from www.cesa4.k12.wi/us/paraprof.htm

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage.

Zigmond, N., & Baker, J. M. (1995). An exploration of the meaning and practice of special education in the context of full inclusion of students with learning disabilities. *Journal of Special Education, 29*(2), 163–180.

Zigmond, N., & Baker, J. M. (1996). Full inclusion for students with learning disabilities: Too much of a good thing? *Theory Into Practice, 35*, 26–34.