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Training Paraprofessionals for Enhanced IEP Goal Achievement in Special Education

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Signature Sheet

This thesis, written under the direction of the candidate's thesis advisor and approved by the Chair of the Master's program, has been presented to and accepted by the Faculty of Education in partial fulfillment of the requirements for the degree of Master of Science. The content and research methodologies presented in this work represent the work of the candidate alone.

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Abstract

This research study involved training paraprofessionals in one special education classroom to implement student IEP in a variety of different settings. Three paraprofessionals participated in this training and with the assistance of the researcher, they determined if the current program at the school site was effective, what some of the reasons were for students not achieving a higher rate of IEP goal success, and if the implementation of a new pilot program helped students become more successful in achieving their IEP goals and benchmarks during a nine-week research period. Through research conducted on the history of paraprofessionals in classrooms and other successful training programs for paraprofessionals, the researcher used model-based and step-by-step training techniques to train and observe the paraprofessionals during the nine-week period. The three participating paraprofessionals were able to successfully implement the new program, which showed through data collection and analysis, and student assessment and observation to be a successful alternative to the current program being used at the school.

Chapter 1 Introduction

I teach in a non-public school for students with special needs in Northern California. The name of the school for the purpose of this study is Redwood, and it serves students who have more complex support needs and neurological differences such as autism. The school primarily focuses on vocational, social, and independence skills, and we do a lot of our teaching in the community. Through my years as a teacher, I have been managing and observing paraprofessionals (teacher aides) who are assigned each day to support students around the school. Their role is to assist the teacher of the classroom they are working in with all daily student activities including helping manage student behaviors, making sure their student(s) are going to all of their scheduled therapy sessions, and working with their assigned student(s) on their Individualized Education Program (IEP) goals. Teachers write these IEP goals each year, and they focus on specific student progress toward academic, social, behavioral, and vocational development.

Statement of the Problem

Over the last year, I have noticed a significant disconnection between the teachers and paraprofessionals; leading to inconsistencies in the implementation of the IEP goals for each of the students the school serves. This has resulted in a lower percentage of student achievement based on the IEP goals per the routine assessment data I have on record. The problem is that there seems to be very little evidence of an effective program of training paraprofessionals to successfully help students in special education work more efficiently on their annual goals. McKenzie (2011) identifies this problem emphasizing a need for professional development training:

> Paraprofessionals in special education settings serve an important role in the education of students with disabilities, but they very often do not receive the same level of professional development given to other service providers. Paraprofessionals are asked to implement behavior intervention strategies as well as IEP goals, which is why ongoing professional development is a critical component in retaining paraprofessionals. (p. 38)

Wilson and Blednick (2011) state how not having defined roles for paraprofessionals can add to the problem with the following:

> Paraprofessionals rarely receive formal professional development in classrooms, which undermines the important role that they can play in the school community. If paraprofessionals are given too little responsibility or guidance, they can feel underused and undervalued. To capitalize on the contributions from paraprofessionals, clear roles and guidance need to be established by the school district, the school, and the teachers. (p. 3)

Terms and Definitions Used

> "Paraprofessional" means a district employee who is primarily engaged in direct instruction with one or more pupils for instructional activities, physical or behavior management, or other purposes under the direction of a regular education or special education teacher or related services provider. (Special Education Paraprofessional Handbook, 2010, p. 8)

Individualized Education Program (IEP)- "Special education term outlined by IDEA to define the written document that states the disabled child's goals, objectives and services for students receiving special education (Hancock, 2015)."

Crisis Prevention Institute (CPI)- CPI is a standard-setting resource for organizations that serve society's most vulnerable. Our proven model for staff training and personalized support empowers professionals who strive to sustain true cultures of compassion (CPI- Training and consulting in behavior management and dementia care, 2016).

Purpose Statement

This study had two interrelated purposes. First, this study assessed the effectiveness of a current training program for paraprofessionals (Program A) in an effort to uncover the factors that contributed to inconsistencies between teachers and paraprofessionals, and resulted in low achievement of IEP goals for students in one classroom at Redwood in Northern California. Secondly, this study pilot tested an alternative paraprofessional training program (Program B) in the same classroom and comparatively assessed IEP goal achievement for students over a two and a half month period.

Research Questions

This study is focused on the following questions:

1. How effective is the current program of paraprofessional training at the school site (Program A)?

2. What factors contribute to low goal success and achievement of the IEP goals for students at this site?

3. Has the implementation of an alternative pilot program (Program B) of paraprofessional training at this site resulted in higher IEP goal success and achievement for the students?

Theoretical Rationale

The theoretical rationale behind paraprofessional training for this study is derived from theory-based techniques which include; training by modeling, cognitive apprenticeship, and using a step-by-step approach. This ranges from demonstrating how to speak to students during instruction, behavioral intervention strategies designed to keep students on task, or demonstrating the expected way to complete tasks related to their IEP goals. Since modeling is a successful teaching practice in special education, the rationale is that using it for paraprofessional training may have a more direct impact on the students when it is applied by the paraprofessionals working with them. Duncan (1996) explains "cognitive apprenticeship" which is one such technique used in classrooms:

> In cognitive apprenticeship, instructors model the strategies and activities necessary to solve problems, while providing appropriate scaffolds (organizational strategies and other supporting materials) to support paraprofessional efforts. Coaching and correction are provided as they work on increasingly complex tasks, and then support is withdrawn as they develop competency. (p. 3)

Prior to using cognitive apprenticeship in the classroom, the theory was developed as a master/apprentice practice through different trades.

> Cognitive apprenticeship teaching strategies emerged independently, through parallel attempts to address some chronic professional development problems. The problem domain was the apparently frivolous but actually quite scientifically relevant area of stage

> magic. This is referring to the apprentice learning a new "trick" from their master, or in the case of a teacher/student relationship in the classroom, a new skill or learning practice. Diverse simple cases of cognitive apprenticeship turn up whenever teachers report on ways that they have found, through classroom experience, to iteratively build the intellectual skills of their students (Girill, 2013, pp. 1-2).

Another modeling technique often used is referred to as "think aloud modeling." For the five out of the seven students in the classroom who have further developed their verbal and social skills, this practice was implemented by the participating paraprofessionals, along with the cognitive apprenticeship technique, as part of their training process. Collins, Brown, and Newman (1987), explain this practice in the following way:

> Think aloud modeling reveals the most complete description possible of their cognitive activities and strategies, while providing organizational scaffolds. Instructors describe *what* they are thinking and doing, *why* they are doing what they are doing, and verbalize their self-correction processes. After modeling, instructors support through similar problems by coaching, demonstrating the use of scaffolds and explaining the principles and rules that apply to the writing task. Each successive problem is designed to be increasingly complex, and the instructor provides less and less assistance as they gain experience. Ultimately, developing competency, solving problems and developing their own expertise. (p. 4)

At this study site, the paraprofessionals work with students on their IEP goals in a variety of different settings, in and outside of the classroom. As a result, they have to intervene with many unexpected behavioral situations that being in such a community setting can present. Therefore, knowing specifically how to communicate with students and modeling appropriate

behavior in the classroom and in the community for them can be the difference in keeping them on task. The theory is that once a student feels comfortable in his or her surroundings, this builds a stronger foundation for learning to take place. Hence, it can be argued that training paraprofessionals for, and by using different modeling techniques was the most appropriate framework for this study. While the cognitive apprenticeship technique originated from the teacher/student relationship in stage magic, think aloud modeling techniques used for the purpose of this research was derived from Eggen and Kauchak's educational psychological theory, which defines modeling as "changes in people that result from observing the actions of others" (p. 236). It is envisioned that training paraprofessionals using modeling techniques will provide the tools needed for proper intervention strategies and IEP goal implementation.

Assumptions

This study was conducted with three basic assumptions. First, the study assumed that paraprofessional training is the primary determinant of IEP goal success for special education students at this school site. Secondly, this study assumed that the study's sample of participating paraprofessionals are representative of all special education paraprofessionals at this site. Thirdly, this study assumed that more paraprofessional training would result in better communication between paraprofessionals and the teachers who serve the special education students at this site.

Background and Need

An extensive training program for paraprofessionals at this non-public school site in relation to student IEP goals is not a regular practice. It is expected that a paraprofessional will work on the goal(s) with their assigned student(s) that the teacher of the classroom tells them to

work with on that given day. Trainings for teachers and paraprofessionals have been done at the site on behavior interventions, first aid and CPR, and Crisis Prevention (CPI). All of these trainings help paraprofessionals assist special education students in times of crisis. It seems that there is a need for a professional development program, and or a more detailed IEP training program for paraprofessionals including best practices for teaching and learning for working on critical skills imbedded in the IEP.

As Patterson, (2006) points out, "Adequate training needs to be provided before paraprofessionals assume full-time responsibilities so they are more comfortable and proactive with the needs of the supported student(s), while providing instruction that addresses IEP goals and objectives (p. 12)."

Redwood does not offer an in-depth IEP training for paraprofessionals, and places the responsibility on the teacher to train the paraprofessionals who work in their classrooms. Currently, the academic period at Redwood averages 45-minutes per day, since the school is more focused on social interaction, community involvement, and student independence. This leaves a 45-minute focus period on IEP goals during a 6-hour school day. In most classes at Redwood, after a paraprofessional is assigned their student for the day, they are responsible for working with that student on their IEP goals for that 45-minute period. Most often, students will only focus on one goal for that period. This could be anything from a math goal, reading goal, or social goal, and the teacher will have the materials ready for the paraprofessional during that academic period. Once the academic period begins, which is usually from 10:00-10:45 am, paraprofessionals will work with their student(s) on their IEP goal(s). They will engage the students for that academic period based on informal, on the job training the classroom teacher

has given them, or if there has been no specific training given, they will work with the student(s) in the best way they know how.

The other unique aspect at Redwood is that teachers assign themselves a specific student during the day, just as the paraprofessionals are assigned a student. There is not enough staff at Redwood to allow the teacher to oversee the whole class, which means the amount of time teachers spend training paraprofessionals is very limited. There is no time before or after school for training because the paraprofessionals are also responsible for driving the students to and from school, so they arrive when the students arrive, and leave when the students leave. The options teachers at Redwood have for finding time to train paraprofessionals are when the student they assign themselves for the day are in a therapy session, or after school hours, which is usually only through phone calls or email.

There is a need for this study for three reasons: One; there has been low achievement of student IEP goals. Two; there are inconsistencies with Program A for paraprofessional training at the site. And three; testing program B for paraprofessionals will provide insight into whether or not there is a need for a change in paraprofessional training at the site.

Summary

This study was conducted at a non-public school for special education students in Northern California wherein it attempted to inquire into the causes for low achievement in special education student IEP goals. As currently there is not a consistent or extensive training program for paraprofessionals, this has been an identified need that this study has addressed. This study had two interrelated purposes: to assess the effectiveness of Program A for paraprofessional training, and to pilot test Program B for training paraprofessionals in the same classroom and assess IEP goal achievement for students over a two and a half month period. The

next chapter provides a review of the scholarship and existent literature on the history of paraprofessionals working in classrooms, and other paraprofessional training programs in special education, relating back to the theoretical rationale of training by modeling, which includes research on cognitive apprenticeship and a step-by-step training approach.

Chapter 2 Review of Literature

Introduction

This section is an examination of the research literature on paraprofessionals and their role in classrooms. Information was gathered from academic library searches using online resources. Relevant research studies from 2004-2015 were reviewed to gain a better understanding of how teachers and paraprofessionals can successfully work together in the classroom. These articles were reviewed based on similar research involving training programs for paraprofessionals and their overall success rate. The following review is organized with the following sub-sections: Historical Context, Review of the Academic Research, and Summary.

Historical Context

Ashbaker and Morgan (2004) reviewed the history of paraprofessionals working in education. The following are key events that shaped the roles that paraprofessionals now have in the classroom.

Paraprofessionals in the classroom (world war II-present)

Use of paraprofessional staff members in U.S. schools began during World War II, when there were shortages of professional teachers. Schools employed paraprofessionals to relieve teachers of some of their less-technical responsibilities. The hiring trend continued, and the U.S. Department of Education estimated that 621,000 instructional aides were employed in the classroom during the 1999–2000 school year. (A Legal Memorandum; Legal Issues relating to School Paraprofessionals, 1999, p. 2) Other estimates suggest that almost 1 million paraprofessionals are employed in U.S. schools

and predict that this number will increase by 38% in 2005. (Bairu, 2001; Moskowitz & Warwick, 1996; Pickett, 1997, p. 2)

Individuals with Disabilities Education Act (1997)

The changing classroom climate is clearly reflected in the 1997 reauthorization of IDEA and the passage of No Child Left Behind (NCLB). The 1997 reauthorization of IDEA makes the following specific reference to paraprofessionals: "A state may allow paraprofessionals who are *appropriately trained and supervised* under state standards to assist in the provision of special education and related services." (p. 4)

Office of Special Education Programs (1999)

During the 1999 U.S. Department of Education Office of Special Education Programs (OSEP) training sessions on IDEA, the National Information Center for Children and Youth with Disabilities (1999) informed states that employing paraprofessionals and assistants was contingent on state law and regulation. OSEP gave states the option of determining whether paraprofessionals can assist in providing special education and related services under Part B of IDEA. (p. 4)

No Child Left Behind Act (2002)

The No Child Left Behind Act (NCLB) defines *paraprofessional* as "an individual who is employed in a preschool, elementary school, or secondary school under the supervision of a certified or licensed teacher, including individuals employed in language instruction educational programs, special education, or migrant education." Requirements for paraprofessionals under NCLB are as follows:

Title I paraprofessionals whose duties include instructional support must have:

1. High school diploma or the equivalent, and

2. Two years of college (48 units), or
3. A. A. degree (or higher), or
4. Pass a local assessment of knowledge and skills in assisting in instruction.

(This is a locally approved assessment. Local education agencies may develop their own assessment or use an existing assessment so long as it measures the knowledge and skills in assisting in instruction. Many districts use the California Basic Educational Skills Test [CBEST] for this purpose). (p. 5)

Every Student Succeeds Act (ESSA) (Dec 2015-current)

ESSA supports paraprofessionals by:

1. Maintaining the role of paraprofessionals. ESSA keeps paraprofessional certification requirements, which help prevent school districts from hiring paraprofessionals with little educational experience or professional training.

2. Requiring collaboration with and professional advancement of paraprofessionals. ESSA ensures that paraprofessionals are included in the list of stakeholders who must be consulted in the development of state and local plans under Title II, and local plans under Title I, including the operation of a targeted assistance school program. Other provisions expand professional development opportunities for paraprofessionals, including programs on how a state can establish, expand or improve pathways for paraprofessionals to earn a teacher certification.

3. Providing collective bargaining protections. Teachers and paraprofessionals are covered by the Title I and Title II collective bargaining protections. (p. 6)

Review of the Academic Research

The literature revealed a variety of different studies that focused on the training of paraprofessionals. A general review of the scholarship indicated that while there were a lot of different methods used to train paraprofessionals through the years, one common theme prevailed throughout the literature: that training paraprofessionals to work in classrooms was extremely important and essential for student success.

Lack of Training can lead to Student Regression and Frustration in Paraprofessionals

Despite the belief that paraprofessionals are essential, Giangreco (2010), and Suter, & Hurley (2011), reported little to no positive outcomes for students working with paraprofessionals, which is a result of a lack of training and preparation for paraprofessionals:

> By observing paraprofessionals working in a 1:3 staff to student ratio in special education classrooms, that students with disabilities felt stigmatized and rejected by their peers and that they faced inadequate instruction when working with paraprofessionals. In their review of 32 studies, in 2011 Giangreco and colleagues highlighted the absence of preparation for paraprofessionals. (p. 121)

In a study done by Karen Patterson in 2006 on the roles and responsibilities of paraprofessionals, the goal of the research was to understand the thought process of paraprofessionals working in special education classrooms prior to taking part in a professional-development training program. After interviewing several of the paraprofessionals, she found there was consistent frustration amongst the participants.

One participant from the interview process stated:

> What bothers me is that I am here to work with one child (full time assistant for a child with a disability) and the teacher apparently forgets because I am being asked and

> expected to keep everyone calm and quiet all day. If the students are disruptive, everyone looks at me as if I am sup- posed to deal with it. (p. 5)

Another stated that he was being treated unfairly in the classroom based on his physical ability to work with students who have the potential for more aggressive behaviors:

> Because I am a man, everyone thinks I am a security guard. If a fight breaks out or child is unruly, they call me. Although I don't mind helping, I don't think it is fair for me to leave what I am doing to break up every fight. (p. 6)

These statements are examples of paraprofessionals who are frustrated with the fact that their roles in the classroom are not defined. From this article, it is understood that this should be an important step in any training.

From each of the studies having to do with a lack of paraprofessional training, the common themes were that a lack of training led not only to a clear regression in student achievement, but it also led to several paraprofessionals feeling frustrated about their roles and responsibilities in the classroom, which was expressed by several of them. "Paraprofessionals reported that if their roles were clearly defined and clarified, everyone, themselves included, would know of their responsibilities, and the expectations of principals and teachers would be more realistic" (Patterson, 2006, p. 9).

Successful Paraprofessional Training Programs

Stockall's article from 2014 gives an overview of how to properly train paraprofessionals in the classroom by modeling using a step-by-step process. The following "Direct Instruction

Training Model" shows a successful method for training paraprofessionals to who work with special education students:

> Step 1: Establish Training Goals. The special educator and the paraprofessional should decide the specific goals, and these emerge from discussions related to the current interests, needs, and competencies of both parties.
>
> Step 2: Instruction. After setting the goals and objectives, the teacher explains the skill that will be taught and the rationale.
>
> Step 3: Demonstrate. Now, the teacher demonstrates the skill (i.e., prompting) with several students.
>
> Step 4: Guided Practice. In this step, the teacher works with the paraprofessional to complete the targeted skill together.
>
> Step 5: Observe Independent Practice. At this point, the teacher begins to shift responsibility over to the paraprofessional.
>
> Step 6: Performance Feedback. Teachers need to provide immediate feedback and reinforcement to paraprofessionals. (p. 199)

In a different training program for paraprofessionals, Da Fonte and Capizzi (2015) introduce a program that includes three separate parts that paraprofessionals will need to be trained in:

> They call it the three P's (Praise, Pause, Prompt), and each of these need to be completed in a step-by-step process. This is a process that involves giving the students positive

feedback while giving them an instruction, allowing them time to complete the task based on that instruction, and then stepping in with a limited prompt if necessary. When these steps are presented to students in order, the success rate of student independence should begin to increase. (pp. 33-34)

Wilson and Blednick (2011) conducted training for paraprofessionals and laid out an organized process of their training. They implemented this training, which promotes the importance of communication between teachers and paraprofessionals in order to figure out how they could increase the effectiveness of paraprofessionals in the classroom:

- Clear lines of communication need to be set up between the teachers and the paraprofessional.
- The administration should set clear duties and expectations for paraprofessionals and needs to communicate them to everyone.
- The administration needs to limit the number of different assignments given to each paraprofessional. For example, a paraprofessional may be given the assignment to work in only 11th grade U.S. history. Narrowing the focus to one subject enables the paraprofessional to know or learn the curriculum being taught
- A weekly planning session, even if held after school hours, enables paraprofessionals to know what is being taught in the classrooms and help make their role meaningful.
- The paraprofessional needs to feel like he is contributing to the success of the class by understanding and knowing what is being taught, as well as which students need his assistance and how he can assist them. (p. 170)

Each of these studies found success with the paraprofessionals who took part in it. Overall, the students improved in the targeted areas based on the implemented training for the participating paraprofessionals. These studies give insight into the types of modeling and step-by-step training processes, and the success they can have.

Patterson (2006) conducted a study involving paraprofessionals themselves, which revealed a need for better training and more organization. Twenty-two paraprofessionals (18 females and 4 males) between the ages of 23 and 57 with experience ranging from less than 1 to 24 years participated in this study:

> The results of this study revealed there were no roles defined by the school or teacher in their professional development training. While the overwhelming majority (95%) reported a willingness to help with the many tasks required during the workday, 81% indicated the need to be seen and treated as equals and "not be expected to do the things that the teachers do not want to do", as reported by one paraprofessional. In response to suggestions that would help to alleviate problems encountered with this issue, 15 of the 22 participants (68%) suggested the need for improvement in the organizational skills of the classroom teacher. In addition, 81% expressed the need for assignments to be given to them in a timely manner. (p. 7) Patterson's study expressed the need for more defined roles in the classroom.

In 1990, the Educational Resources Information Center in Portland, Oregon released a document defining clear roles for teachers and paraprofessionals for just this reason. The paraprofessional and the teacher will be better able to work as an instructional team if both understand each other's roles and expectations. Since the teacher is ultimately accountable for

all instruction activities in the classroom, the responsibility lies with the teacher to carefully explain procedures and daily operations to the paraprofessional. These roles and expectations are defined below:

Teacher	Paraprofessional
Legally responsible for the instruction of students.	Responsible to the teacher for instructional guidance.
Responsible for providing quality instruction. Prepares or oversees lesson plans.	Carries out lesson plans. Adds creative ideas and suggestions as appropriate.
Supervises professional staff.	Works with the students, helps maintain discipline.
Maintains a professional attitude and environment.	Helps by becoming a positive liaison to the community.

(Educational Resources Information Center, 1990).

Summary

This review of literature presented information from multiple studies regarding personal viewpoints of paraprofessionals who have not been properly trained in the classroom, as well as several different successful training models that have been used in various sites. There were several common themes from each of these studies. The first is having clear lines of open communication between the teacher and the paraprofessional is extremely beneficial. Also, having the roles of paraprofessionals clearly defined can limit their frustration working in the classroom. Lastly, if the paraprofessionals feel like they are part of a classroom team rather than working *for* the teacher, it will have a positive effect on the entire classroom staff. Causton-

Theohais, Giangreco, Doyle, & Vaday explain how welcoming and acknowledging paraprofessionals is an important part of classroom success in special education classrooms: "Introduce the paraprofessional as part of the teaching team, not as a specific student helper. It is important to make them feel they are contributing to success of the students, not just helping the teacher" (p. 57).

Chapter 3 Methodology

Research Approach

This is a mixed-method study utilizing a qualitative and quantitative research methodology within one special education classroom, at one school site. As defined by Onwuegbuzie and Leech (2005):

> A mixed methods study in the classroom can be applied at the primary empirical study level as well as at the synthesis level. In a *primary level* mixed methods study a researcher collects qualitative and quantitative data directly from the research participants, for example through interviews, observations, and questionnaires, and combines these diverse data in a single study. (p. 2)

The mixed method approach provided the best fit for this study because it permitted the equivalent comparison of raw quantitative data between Program A and Program B at the school site, and qualitative data for Program B that allowed the researcher to determine the overall progress of the participating paraprofessionals upon completion of the training. Due to the quantitative nature of the data from the number of times students work on their IEP goals during a given week, and the qualitative nature of the personal interviews with the paraprofessionals and their documented observation data throughout the research process, a mixed methodology was both relevant and necessary in order to combine the diversity of the data for collection and analysis. Both quantitative and qualitative elements together provide a more complete set of data that can be compared and corroborated for analytical purposes that respond to the research questions for this study.

Ethical Standards

This paper adheres to the ethical standards for protection of human subjects of the American Psychological Association (2010). Additionally a research proposal was submitted and reviewed by my advisor and approved. This project was approved by the IRBHP (Institutional Review Board for the Protection of Human Participants) and the approval number for this project is #10438.

Data and participant information for this project was kept anonymous and protected via a secure and locked classroom cabinet for the duration of the study. Each participant was provided with a letter of consent in relation to this study, which included a list of participant rights, and with written attestation that this process would not in any way affect their job status in the classroom. The letters of consent were signed by each participating paraprofessional to indicate voluntary and informed consent. Throughout the pre and post interview process, it was reiterated to the participants that their role was one of joint inquiry, and that they were not just participants in a research project. Samples of the consent forms and the participant rights are included in Appendix C.

Sample and Site

The three participating paraprofessionals ages 26, 30, and 31 years have a combined eight years of experience working in special education classrooms and work in the middle school classroom at a non-public school site in Northern California. The school site currently has nine classrooms with 85 students, and employs over 60 full-time paraprofessionals. The three paraprofessionals who volunteered for this study also served as the participants in the initial training. The participants were selected based on their familiarity with the current IEP goal

implementation program at the site, their varying degrees of experience as paraprofessionals, and most importantly, their expressed passion for student success. Only three paraprofessionals were included in this study so as to maintain a like population of students in the classrooms they each worked in regularly. All three paraprofessionals were supported through this process on a daily basis. They had weekly one-on-one meetings with the researcher to verify the data they collected and were involved in any discusions about modifications that needed to be made for the benefit of the students.

Program B was designed for the students they worked with to have a better chance of achieving more IEP goals throughout the year, and was explained in detail to all three participants. The school is a nonpublic school for children with special needs such as autism, cerebral palsy, and emotional disability. The classroom operated on a weekly schedule that did not deviate much from week to week. The students engaged in daily activities according to a weekly schedule, so they were aware of their activities and which paraprofessional they would be working with. The students worked on their social, emotional, and behavioral skills while receiving instruction from the teacher and paraprofessionals during the class sessions.

The school primarily focused on functional, vocational, behavioral, and communication skills through classroom activities and community outings. The students stay with assigned classrooms during the school day, (as is typical for the school year), and were placed with other students around the same age and functioning level. Most of the students were provided with therapeutic supports during the school week and received at least one hour of speech therapy and thirty minutes of occupational therapy. The therapists worked together along with the lead teachers, and the paraprofessionals to provide the appropriate supports for each of the students.

Paraprofessional Participants

Paraprofessional #1 was a 26-year-old Caucasian woman who has been working at the site for nine months in three different classrooms with students raging in ages from 6-16. Paraprofessional #2 was a 31-year-old man of Filipino heritage and has been working at the site for four years in eight different classrooms with students ranging in ages from 6-22. Paraprofessional #3 was a 30-year-old Native American woman who has been working at the site form two years in two different classrooms with students ranging in ages from 12-16.

Access and Permissions

The researcher is the credentialed lead teacher of record and obtained written permission from the Director of Education at the school site to survey and interview all participants. A sample of the letter of permission is included in Appendix C. During a monthly classroom meeting with ten different paraprofessionals, the researcher provided a brief explanation of the research project and solicited volunteers for participating in this study. From the five paraprofessionals who volunteered, the researcher selected three, and formally requested their participation. Once the IRB application for the study was approved, the three paraprofessionals thus selected agreed to be participants, and were each given a copy of the pre-research interview questions, and asked to sign a letter of consent explaining their rights as a participant for this study.

Data Gathering Procedures

Data for this research was collected using a mixed methods approach, where the researcher gathered data from discussions during training of Program B, as well as the amount of times each students worked on their IEP goals throughout the research process. All data from Program B was compared with data from Program A at the Redwood site.

Prior to the model-based training the participating paraprofessionals received, they each completed a pre-research survey on basic knowledge of the IEP process. A copy of this survey is in Appendix A of this document. The purpose of this survey was to determine how much emphasis each participating paraprofessional placed on implementing student IEP's during the day, and if they knew *how* to implement those goals at the school site. Once the survey was completed and analyzed by the researcher, the paraprofessionals received the Program B training and were able to record information about the students they worked with.

The information that the paraprofessionals recorded was on a weekly basis, and they recorded data during several different activities throughout the week. The activities in which IEP data was recorded were: school academic periods, dance class, gymnastics class, working at the community garden, during art projects, during store purchase and cooking classes, and during van wash and vacuum activities. All of these vocational activities were built in to the program at Redwood.

During their training in Program B, when one of the participating paraprofessionals accompanied the student(s) they were working with to one of these activities, they brought the student binder(s) containing the information recording forms as well as any other materials that were needed for that activity. These forms contained a list of the IEP goals and specific tasks that were to be worked on for each of those goals. For example, if a student's math goal for working at the garden read: When given four different suffix sounds of up to 3 letters ("ed", "at", "eed"...), L will accurately read the sound and create and read 5 of her own words using each sound in 3 out of 4 opportunities as observed and documented by teacher and staff. The related task for that goal is: Find a word at the garden in the shed or outside. Review reading that word and work on finding 4 words that rhyme with the word she found. If the student worked on that

task, the paraprofessional would simply record a yes or no, by putting a “Y” or “N” in the corresponding box. There are anywhere between two and five different IEP goals for students to work on at each of these activities, depending on which of their IEP goals most closely relate to that activity. After the paraprofessionals record whether or not the student worked on each goal, then they recorded the specific information about that activity in the "notes" section. Each of the paraprofessionals was trained to record certain aspects of the activity in this section: How much time was spent on each related task? Did they work with another student? If so, who and how was the interaction? Was that partnership part of one of their tasks or a voluntary interaction? Were there any distractions during the time period that altered the focus of the student(s) and if so, what was it? How accurately did the student(s) complete each task, and what were the numbers if that specific goal calls for that?

All of the responses to these questions, as well as the raw data from both programs for how many total goals students worked on each week were discussed in detail with each paraprofessional during the weekly one-on-one meetings with the researcher, which averaged an hour each, per week. An example of the IEP goal data forms used in Program B, as well as the forms from Program A at Redwood are in Appendix-B of this document.

Training the Paraprofessionals

All three participating paraprofessionals took part in an initial 1-hour meeting together with the researcher prior to the research period. All aspects of the study were described in detail including which goals they would be tracking, which activities the students would be working on throughout the week, which data would be collected, how much time the students were expected to spend working on each goal, and how the training process would work so that each paraprofessional would be able to utilize the necessary teaching techniques with any potential

behavior interventions that would help keep the students on track.

Prior to recording information on their own, each paraprofessional took part in a one-on-one model based training with the researcher for a total of three 20-minute sessions each across three different activities. The three activities used for the purpose of their training were: working at the garden, store purchase and cooking, and gymnastics class. All three of these activities combined covered all three target IEP goals used for the study (reading/writing, math, and social/emotional/behavioral). This training was completed in the week prior to the beginning of the research period.

At the start of each activity during the training week, the researcher took the bag(s) of the student(s) who the paraprofessionals would be working with, including all necessary goal recording forms, student information, and materials needed to implement their IEP goals during that activity. Prior to beginning the activity on campus or arriving at the activity off campus, each student IEP goal that was worked on during that activity was read and reviewed by the researcher with the paraprofessional. The participating paraprofessional for that activity shadowed the researcher during the instruction with the student(s), observing the researcher as he worked on the tasks for that specific activity which related directly to their IEP goals. Depending on how many goals the student(s) worked on for that activity, the instructional period lasted anywhere from 20 to 45 minutes. The more goals the student(s) worked on during that activity, the longer the instruction period lasted.

Upon completion of the activity, the researcher would review the instruction with the observing paraprofessional, and talk with them about what they saw and what they learned. Through this part of the training, the step-by-step process that the researcher used during the instruction period was gone over in detail with the paraprofessional. The paraprofessionals had a

list of the steps taken during their observation so that they could follow along as the researcher conducted the instruction. These steps were given to each paraprofessional and reviewed and provided by the researcher so they could easily access them during each research activity. Below is an example of the step-by-step process used for one student during a cooking class:

Step 1. Review IEP goals for student A that relate to cooking class:

Goal 1: B will participate in 5 weekly group activities for up to 20 minutes without displaying any target behaviors and will communicate to her staff if she needs a break as observed and documented by teacher and staff (participation goal).

Goal 2: B will create and solve 5 of her own animal themed word problems using the iPad to find pictures during a 30-minute session, which will include at least two subjects and two values using addition, subtraction, multiplication, division, or fraction based problems (math goal).

Goal 3: In 7 out of 10 opportunities, B will replace yelling and screaming with successfully using a communication board with several options for her to choose from when she is feeling frustrated which will include an "I feel___, I need___ system as well as a zone recognition chart (behavior goal).

Step 2. Review tasks for student A to work on during cooking class that directly relate to their IEP goals.

Task 1: Have B choose her task in the kitchen and if completed before 20 minutes, choose another task. Show her the clock upon arrival. Have her begin her task 5 minutes before the rest of the class (participation).

Task 2: Use ingredients (veggies, fruits, or pizza toppings) in the kitchen to create one or more word problems while cooking. Bring items to the table and help her with the problem (math).

Task 3: Bring zone chart into the store/kitchen, and encourage her to use it. Be consistent with asking her to express how she feels and what she needs to increase her skills in communication (behavior).

Step 3. Make sure student A has all necessary materials needed to work on these tasks. For this activity, she will need some form of food manipulative (fruits, veggies, or pizza toppings), her zone regulation chart, a clock or timer, and a calculator or iPad.

Step 4. Begin 20-minute timer and show it to student A so she knows this is how long you expect her to work. If she continues to work past 20 minutes, allow her to continue on her tasks.

Step 5. Set expectations by showing her the zones of regulation chart and ask her to communicate with her staff if she is starting to move out of the "green" (clam and regulated) zone and needs to take a break.

Step 6. Help her choose her task and identify what manipulatives will be used to work on her math task.

Step 7. Once her task in the kitchen is chosen, help her formulate one or more word problems using her ingredients while she is cutting, sorting, or cooking. Example for fruit salad: "I have seven strawberries on this side of the table, and you have six blueberries on that side of the table. How many total pieces of fruit do we have?" Have the calculator or iPad available if she needs it and once it is complete, encourage her to come up with a word problem on her own.

Step 8. Show her the timer so she can see how much time she has left, and ask her which zone she is in, referring to her zones of regulation chart.

Step 9. Once her timer is done, celebrate with her that she worked for 20-minutes and give her the option to help her peers with other tasks in the kitchen.

Step 10. After the activity, record data immediately stating whether or not she worked on each of her goals, and specific information about the instruction session.

Upon completion of each observation, the researcher and the observing paraprofessional discussed the recent activity in detail so they were clear on all the steps that were implemented. After the training week was complete, the three paraprofessionals were able to conduct instruction with the students on their own under the step-by-step instructions provided to them while under the observation and guidance of the researcher.

Data Analysis

Both sets of quantitative data from Program A and Program B were compared in order to determine which training approach was the most effective. Effectiveness was defined by the number of opportunities students had to work on their IEP goals, and whether or not the students met their IEP goals or tri-annual IEP goal benchmarks for the target goals during the research period. Data was compared by looking at the amount of times a student will work on specific IEP goals for each of the three target categories (subjects: reading and writing, math, and social/emotional/behavioral) during the amount of time the research was conducted, as well as how much total time was spent working on their target goals. This was broken down by days and weeks during the data collection period of nine weeks. Each student in the class where the participating paraprofessionals worked had at least one IEP goal that represented each of their target categories. Below is a breakdown of the data collected for Program A and during the research period for Program B:

Program A (Appendix B)

The researcher collected data for the amount of times each of the target IEP goals were worked on during the week by each student, which days during the week those goals were

worked on, how much time they spent working on them, and whether or not the assignment relating to the target goals was worked on during that time. There was no qualitative data collected in Program A, only quantitative data from Program A was compared to the quantitative data from Program B.

Program B (Appendix B)

The researcher collected data for the amount of times each target IEP goal was worked on during each week, which days during the week those goals were worked on, and how much time was spent working on them.

After all the data for the research period was collected, the two sets of quantitative data from the two different programs (A and B) were compared based on the amount of times goals were worked on during the week, the amount of time was spent working on them, and the outcomes of student IEP goal or benchmark completion for each of their target IEP goals. Goal and benchmark success was compared from Program A, and after the nine-week research period for Program B was completed. Success of student IEP goals and/or benchmarks was determined by in-class assessments and observations by the researcher. For example, if a benchmark for a student's math goal was that the student would be able to independently complete three out of ten single digit addition problems on the calculator by his or her first benchmark period (three months after the annual IEP), that student was given ten single digit addition problems to attempt prior to the benchmark date. If he or she could complete three of those problems independently, then they would have achieved that benchmark. Whether or not the researcher used the final goal completion data or the tri-annual benchmark data depended on the dates of each student's annual IEP meeting. All students in special education have their annual IEP scheduled at different times throughout the year, so if the annual IEP was not during the nine-week research

period, then tri-annual benchmarks were used for data collection purposes rather than the final annual IEP.

The researcher referred to the notes section of the goal collection forms as well as the one-on-one discussions and post-research interviews with each of the participating paraprofessionals. The notes section was used to guide the one-on-one discussions between the researcher and the participating paraprofessionals. Some of the aspects discussed during these conversations were as follows: 1) if students were working together on their tasks, 2) if they started to begin their tasks on their own during the research period as the weeks went on, 3) if they have become more successful completing tasks rather than just attempting them, 4) which behavioral interventions worked to keep students focused and on task, and 5) which steps in the step-by-step instruction and modeling techniques were most beneficial. The information through these discussions and reviewing the notes section in the IEP goal forms were used as the sources of data to reveal if each of the participating paraprofessionals felt more confident and knowledgeable about implementing the student IEP goals.

Chapter 4: Findings

Findings from Quantitative Data

The data collected on student IEP goals from Program A and Program B is presented below. Table 1 represents IEP goal data collected from Program A at Redwood from November 23, 2015 to February 10, 2016. Table 2 represents IEP goal data collected by the participating paraprofessionals using Program B. This period was from February 11, 2016 through April 22, 2016 for seven students. Both tables show the total number of times that the seven students combined worked on their IEP goals during a given week, along with the total *amount of time* that the seven students combined spent working on their IEP goals for that week.

Some students have multiple goals for each activity which means it is possible they could be working on two or three goals at once. For example, a student could have a participation goal that states he or she will work on an activity for 20 minutes without distraction. During that time, he or she could be working on a math goal, which means he or she would essentially be working on two goals at once for that 20 minute time period. For the purposes of this study, working on two goals at once in a 20-minute period would equal 40 minutes spent working on IEP goals (20 minutes for goal one and 20 minutes for goal two). Students are at school for 25 hours each week (5 days a week at 5 hours per day). Each of the students are working on at least one math, reading/writing, and social/emotional and behavioral goal, which are the goals that were documented for data collection.

Table 1- IEP goal data collected from Program A at Redwood school

Week of	Math	Reading/Writing	Soc/Emo/Beh	Total Time
11/23-11/27	7	7	7	7 hours
11/30-12/4	3	4	7	4 hours 45 min.
12/7-12/11	4	7	6	3 hours 35 min.
12/14-12/18	7	5	7	5 hours 40 min.
12/21-12/25	Winter Break	Winter Break	Winter Break	Winter Break
12/28-1/1	Winter Break	Winter Break	Winter Break	Winter Break
1/4-1/8	8	18	9	7 hours 40 min.
1/11-1/15	3	12	9	8 hours 50 min.
1/18-1/22	9	12	7	8 hours 35 min.
1/25-1/29	5	12	8	8 hours 10 min.
2/1-2/5	4	9	11	9 hours 10 min.
2/8-2/10	Ski Week	Ski Week	Ski Week	Ski Week

Table 2- IEP goal data collected using Program B for paraprofessionals.

Week of	Math	Reading/Writing	Soc/Emo/Beh	Total Time
2/11-2/19	14	18	16	15 hrs. 10 min.
2/22-2/26	13	20	24	17 hrs. 20 min.
2/29-3/4	16	12	30	15 hours
3/7-3/11	23	18	28	20 hrs. 20 min.
3/14-3/18	15	15	33	15 hrs. 55 min.
3/21-3/25	31	33	32	21 hrs. 50 min.
3/28-4/1	12	24	27	17 hrs. 20 min.
4/4-4/8	12	19	24	17 hrs. 50 min.
4/11-4/15	Spring Break	Spring Break	Spring Break	Spring Break
4/18-4/22	18	28	30	19 hrs. 45 min.

Tables 3 and 4 represent student achievement on IEP goals and benchmarks for each of their target subjects. Table 3 contains data used from Program A, and Table 4 contains data from Program B.

Table 3- IEP goals/benchmarks achieved prior to 2/11/16 from Program A

	MATH	L.A.	S/E/B
STUDENT A- amount of goals (1 M) (2 L.A.) (3 S/E/B)			
STUDENT B- amount of goals (1 M) (2 L.A.) (3 S/E/B)		XX	
STUDENT C- amount of goals (1 M) (2 L.A.) (2 S/E/B)		X	
STUDENT D- amount of goals (1 M) (3 L.A.) (3 S/E/B)	X	X	XX
STUDENT E- amount of goals (1 M) (2 L.A.) (2 S/E/B)		X	X
STUDENT F- amount of goals (1 M) (2 L.A.) (3 S/E/B)	X		
STUDENT G- amount of goals (2 M) (2 L.A.) (2 S/E/B)		XX	

X= Goal(s)/Benchmark(s) met

M= Math

L.A.= Language Arts

S/E/B= Social/Emotional/Behavioral

Table 4- IEP goals/benchmarks achieved after 4/22/16 from Program B

	MATH	L.A.	S/E/B
STUDENT A- amount of goals (1 M) (2 L.A.) (3 S/E/B)		X	X
STUDENT B- amount of goals (1 M) (2 L.A.) (3 S/E/B)	X	XX	XX
STUDENT C- amount of goals (1 M) (2 L.A.) (2 S/E/B)	X	X	
STUDENT D- amount of goals (1 M) (3 L.A.) (3 S/E/B)	X	XX	XXX
STUDENT E- amount of goals (1 M) (2 L.A.) (2 S/E/B)		X	XX
STUDENT F- amount of goals (1 M) (2 L.A.) (3 S/E/B)	X	X	XXX
STDUENT G- amount of goals (2 M) (2 L.A.) (2 S/E/B)		XX	

X= Goal(s)/Benchmark(s) met

M= Math

L.A.= Language Arts

S/E/B= Social/Emotional/Behavioral

Discussion and Analysis of Quantitative Data

The quantitative data revealed that there was a significant difference in the number of times student IEP goals were worked on, and in the amount of time spent working on IEP goals from Program A to Program B. It was also found that there was an overall increase in IEP goal achievement. Under Program A, the seven students in the Redwood class worked a combined total of 207 times on their target IEP goals over a period of nine weeks. Under Program B, with the same seven students and using all of the same target IEP goals, combined they worked a combined total of 585 times on their IEP goals over nine weeks, resulting in an increase of 387 times compared to Program A.

When comparing the total amount of time spent working on their target IEP goals, under Program A, the seven students combined worked on their goals for a total of 62 hours and 20 minutes over a nine week period. Under Program B, with the same seven students and using all of the same target IEP goals, they worked on their IEP goals for a combined total of 160 hours and 40 minutes, an increase of 98 hours and 20 minutes over a similar nine-week period as compared to Program A.

What follows below are Table 5 and Table 6 which compare the weekly goal and time averages of the students from Program A and Program B respectively:

Table 5- Weekly Averages from Program A

Dates	Ave. # of goals per week	Ave. time spent per week
11/23-2/5	23	7.1 hours

Table 6- Weekly Averages from Program B

Dates	Ave. # of goals per week	Ave. time spent per week
2/11-4/22	65	18.6 hours

During the assessment and observation period after the study was completed, and referring to Table 3 and Table 4, the researcher was able to determine the number of IEP goals or benchmarks that each of the seven students achieved. Out of 41 possible IEP goals or IEP goal benchmarks for the seven students under Program A, they achieved a combined total of 12 goals or goal benchmarks, that translated to a total success rate of 29%. Under Program B, the students achieved a combined total of 25 out of the possible 41 goals or goal benchmarks, that translated to a total success rate of 60%, revealing a significant difference of IEP goal achievement over a nine-week period by comparison.

The quantitative data findings showed that paraprofessionals who have been trained to implement student IEP goals across a number of different settings are more likely to contribute to the student IEP goal success rate, which re-enforces the importance of having properly trained paraprofessionals working in special education classrooms. In fact, "most special education paraprofessionals receive strikingly limited training. Many have no education past high school and most have never received in-service training on basic instructional strategies" (Fisher & Pleasants, 2012, p. 39). Having clearly defined roles and responsibilities for paraprofessionals through a model-based and step-by-step program training can help ensure that student in special education are receiving the support they need from properly trained professionals.

When looking at research question # 3 for this study, the quantitative data also proved that Program B helped improve the student IEP goal success rate. Program B proved to be more

successful when it comes to higher IEP goal success and achievement than Program A based on the quantitative data collected during the research period. Each of the seven students achieved more IEP goals or benchmarks during the research period than they did during the prior 3-month IEP period under Program A. They also worked on their goals for longer periods of time, which resulted in more opportunities for the students to work on their goals.

Qualitative Data Findings and Analysis

Prior to taking Survey 1 (included in Appendix A), which was the pre-research survey, it was explained to each paraprofessional participant that the survey was not a reflection on their work performance, and the results would not be compared to any qualitative data collected in the post-research interview process. It was only used to gain knowledge on how much the three participating paraprofessionals understood about the overall IEP process. In Survey 1, the three participating paraprofessionals were asked to rate their understanding of this process. Their responses were based on a five-point Likert scale to denote agreement or disagreement with each statement, with 1 indicating they strongly disagree and 5 indicating they strongly agree. The survey comprised eight statements, and their responses showed that they did not have a strong understanding of the IEP process.

After the quantitative data was collected at the completion of the research period, the researcher conducted post-research interviews with the participants, using the questions identified in Appendix A, and through the interview process and the one-on-one discussions throughout the research period, the qualitative data showed that the participating paraprofessionals felt confident, knowledgeable, and productive in the IEP goal implementation process. Their answers in the interview process assisted in answering one of the three research questions for this study, which asked, “what factors contribute to low goal success and

achievement of the IEP goals for students at this site? During the one-on-one interviews, when asked how this training helped them as a paraprofessional, all three participating paraprofessionals stated that it helped them in some way. Paraprofessional #2 stated:

> Participating in this program helped me as a paraprofessional because it gave me clarity on what the students should be working on (specifically) as far as their IEP goals go. It allowed me to interact and engage with the students more productively and effectively and increased my participation in activities as well as the students' (Paraprofessional #2, personal communication, May 3, 2016).

The common theme in the responses for this question during the interview process was that the paraprofessionals each found it helpful to know specifically what the students would be working on during each of their activities. This is an example of something that was not clear for the participating paraprofessionals under Program A, which was a contributing factor in low student goal success. Having their roles and responsibilities clearly defined when working with the students was important to the success of Program B, which connects back to Patterson's study on paraprofessionals from 2006 where she states that "the paraprofessional and the teacher will be better able to work as an instructional team if both understand each other's roles and expectations" (p. 7).

When asked how they would describe their ability to implement student IEP goals after the training, the participating paraprofessionals felt confident in implementing the goals. Paraprofessional #3 said, "before this program was implemented I did not have a clear understanding as to how IEP goals were created, implemented, or achieved" (Paraprofessional #3, personal communication, May 2, 2016). She went on to say how that changed under Program B:

> The new program gave me concrete goals in specific activities to work on (and more

> room on the chart to take notes) so I knew exactly what the student should be working on and what their long term goals were. I gained a great awareness of IEP goals through this program (Paraprofessional #3, personal communication, May 2, 2016).

During the interview process, it was extremely important to understand what aspects of Program B the paraprofessionals felt went well, and to understand what could have been done differently in the hopes of using this program in the future. Two out of the three paraprofessionals stated that it was "helpful to have everything they were using to implement the student IEP goals all in one bag, which included the binders and all the materials they needed to complete their tasks" (Paraprofessional #2 and #3, personal communication, May 2, 3, 2016). Paraprofessional #1 stated that it "created a better line of communication between the teacher and staff" (Paraprofessional #1, personal communication, May 3, 2016). Paraprofessional #1 also stated this when asked what she thought could have been done differently for the benefit of the program:

> Having a summary drawn up every month based on what we've written so far so we could see what they've been working on and how much progress they've made. Also so we could know what needs to be worked on more (progress check-ins), students can even be included in this process (Paraprofessional #1, personal communication, May 3, 2016).

Lastly, the interview process ended with asking each of the participating paraprofessionals if they have seen an increase in student IEP goal success during the research period. Each of them stated that they did see an increase in student success, and when asked what specifically they saw, the common response from each of them touched on the fact that there was a consistent routine for the students:

> The students got into a routine of knowing what they were supposed to be working on.

> Sometimes the ultimate goals were achieved quicker than expected! It gave us better insight as to what they really need to focus on. This program focused specifically on IEP goals, therefore was more effective as a tool to achieve them (Paraprofessional #3, personal communication, May 2, 2016).

This last question during the interview process was the reason this research was conducted, and the findings and comparisons from all sets of quantitative data, as well as the findings from the qualitative data concluded that Program B proved to be a successful alternative to Program A. Not only was there a higher student goal success and achievement rate, but the main themes from the qualitative data showed that the participating paraprofessionals felt confident in their ability to work with the students on their IEP goals upon completion of their training, and that they had a good understanding of how the overall IEP process works. And when looking at the rise in student IEP goal achievement from Program A to Program B, which is shown in the quantitative data; having all three participating paraprofessionals state that they are confident in their ability to implement student IEP goals shows a clear connection between the high goal achievement and having a team of trained paraprofessionals working with the students.

Chapter 5: Conclusions

When looking at the research questions in the introduction and the data collected after the research period, the researcher was able to determine how effective Program A has been for Redwood, what factors were contributing to low goal achievement rates, and if Program B resulted in higher IEP goal success and achievement for the students. It was found that Program B proved to be more successful that Program A based on Program A providing a lack of opportunities for the students to work on their goals, paraprofessionals not being given proper training to implement these goals, and because Program B resulted in a higher success rate of student IEP goal achievement.

How effective is the current program of paraprofessional training at the school site (Program A)?

Program A was not very effective. Students work on their goals each day during the academic period at Redwood, which only lasts a maximum of 45-minutes.

What factors contribute to low goal success and achievement of the IEP goals for students at this site?

A lack of opportunities for the students to work on their IEP goals and paraprofessionals not having the proper training needed to implement student IEP goals across all academic areas.

Has the implementation of an alternative pilot program (Program B) of paraprofessional training at this site resulted in higher IEP goal success and achievement for the students?

Program B proved resulted in higher IEP goal success and achievement for each of the seven students.

Using different training techniques under the theoretical framework of this research that included a teaching by modeling-based philosophy, cognitive apprenticeship, and step-by-step

instruction, the study concludes that Program B as tested with the three paraprofessional participants proved to be more effective in raising IEP goal achievement for the seven students they worked with a this site compared to Program A. The study also concludes that the training provided to the three paraprofessional participants by Program A was incomplete in comparison to the training provided by Program B.

Study Limitations

The limitations of this study were its small sample size of data collected by the researcher, and the small number of participating paraprofessionals. Though Program B proved to be more effective, having only three participants and seven students only proved that Program B was effective for the people involved. This training has yet to be completed on a larger scale with more paraprofessional participants and students, however the results of the research suggest that it can be successful on a larger scale.

Significance of the Study

This study was significant for a number of reasons. First, having properly trained paraprofessionals working in special education classrooms is extremely important to the success of the students. Secondly, the study proved that with more opportunities for students to work on IEP goals in a number of different academic settings, their IEP goal achievement is likely to increase. And finally, it allowed the researcher to understand that a special education classroom needs to be run by a team of properly trained professionals who's main objective is to create opportunities for the success of the students they serve.

Future Research

Program B will continue to be tested and implemented at the school site for the remainder of the school year. The director at the site has given consent to expand the training to a second

classroom involving more paraprofessional participants. The goal is to continue to prove the success of Program B at the school site and eventually conduct training for all paraprofessionals working at the school.

Appendix A

Pre-Research Survey, and Post Research Interview Questions

Paraprofessional Survey-1 (IEP Goals)

Please answer the following questions on a scale from 1-5 based on your agreement with each statement.

Scoring Scale: 5-strongly agree 4-agree 3-nuetral 2-disagree 1-strongly disagree

1. I am very familiar with each student's IEP goals that I work with _____
2. I work daily on specific IEP goals with my student _____
3. I am aware if the students I work with are making progress on their IEP goals _____
4. I work on IEP goals with my student away from campus _____
5. I can apply IEP goals to many different activities without direct instruction _____
6. I am familiar with the overall IEP process _____
7. I take full advantage of making progress with the student I am working with their IEP goals during all activities throughout the school day _____
8. I have provided weekly updates and suggestions to my supervisor(s) on student's IEP progress _____

Post-Research Interview-1 (Questions)

Post Research Survey for Participants

Training Paraprofessionals for Enhanced IEP Goal Achievement in Special Education.

1. How did participating in this training help you in your role as a paraprofessional?
2. How would you describe your ability to implement IEP goals after this training?

3. What do you feel went well as a participant in this research project?

4. What do you feel could have been done differently to improve this training for future participants?

5. Have you seen an increase in student IEP goal success during the training?

Appendix B

Student IEP Goal Collection Charts (Program A and B)

The following page has an example of the school-wide IEP data collection chart that each of the classrooms at Redwood use. This chart represents the 45-minute period per day that students are working on their academic goals, and the therapy sessions they attend during a given week (occupational, speech, physical therapy).

Example: Program A IEP Goal Data Collection Chart:

Goal Data Collection, Week of:

STUDENT A

	Day/Duration	Worked on?	Notes/Staff initials
READING			
WRITING			
MATH			
MONEY			
VOCATIONAL			
THERAPY			
OTHER			

Other Notes:

Below is an example of a chart related to the training being given to the three participating paraprofessionals. This chart represents one activity on one day of the week during a 30-minute time period. Each student has specific tasks related to several of their annual IEP goals. With more than 15 different in class and vocational activities throughout a given week, including their daily 45-minute academic time, this is designed for students to have more opportunities to work on their IEP goals.

Example: Program B IEP Goal Data Collection Chart

A: GARDEN	DATE:	
		WORKED ON?
GOALS RELARTED TO WORKING AT THE GARDEN	TASKS TO COMPLETE IN RELATION TO IEP GOALS	
		Y/N
With limited prompts from staff and with the use of blocks and other manipulatives for assistance, A will accurately complete 8 out of 10 single and double-digit addition and subtraction problems without the use of a calculator.	Simple counting of fruits/vegetables. Single digit adding at the table	
		Y/N
A will participate in 80% of the duration of all group activities while also working together with another student for a minimum of 5 minutes during that activity.	Work together with classmate on a task. Example: A picks weeds, B puts them in the bucket)	
		Y/N
A will generate 6 relevant follow up questions/comments during a 5 minute structured conversation with staff/peer given initial cue, over 4 sessions.	Encourage A to respond to directions with follow-up questions (explain his task, then ask what else he needs to know as a prompt)	

NOTES:

Initials: _____

Appendix C

Consent Form for all Participating Paraprofessionals and Example of Consent Letter From School Director at the Research Site

Consent form for participating paraprofessionals:

CONSENT FORM TO BE A RESEARCH PARTICIPANT
DOMINICAN UNIVERSITY OF CALIFORNIA

1. I understand that I am being asked to participate as a Participant in a research study designed to maximize opportunities for paraprofessionals to work on student IEP goals. This research is part of Mark McLain's Masters research project at Dominican University of California. This research project is being supervised by Dr. Jacquelyn Urbani, Assistant Professor; Chair, Special Education Program Dominican University of California.

2. I understand that participation in this research will involve taking part in a 3 month project that includes a pre and post survey and collecting data and working directly with the classroom teacher for one hour per week.

3. I understand that my participation in this study is completely voluntary and I am free to withdraw my participation at any time.

4. I have been made aware of my potential risks.

5. I am aware that all study participants will be furnished with a written summary of the relevant findings and conclusions of this project. Such results will not be available until May 20th, 2016.

6. I understand that I will be discussing student information that is confidential and that I may refuse to answer any question that causes me distress or seems an invasion of my privacy. I may elect to not participate at any time.

7. I understand that my participation involves no physical or psychological risk.

8. I understand that if I have any further questions about the study, I may contact Mr. McLain at acemark84@gmail.com or his research supervisor, Dr. Jacquelyn Urbani jacquelyn.urbani@dominican.edu. If I have further questions or comments about participation in this study, I may contact the Dominican University of California Institutional Review Board for the Protection of Human Participants (IRBPHP), which is concerned with the protection of volunteers in research projects. I may reach the IRBPHP Office by calling (415) 482-3547 and leaving a voicemail message, by FAX at (415) 257-0165 or by writing to the IRBPHP, Office of the Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901.

9. All procedures related to this research project have been satisfactorily explained to me prior to

my voluntary election to participate.
I HAVE READ AND UNDERSTAND ALL OF THE ABOVE EXPLANATION REGARDING THIS STUDY. I VOLUNTARILY GIVE MY CONSENT TO PARTICIPATE. A COPY OF THIS FORM HAS BEEN GIVEN TO ME FOR MY FUTURE REFERENCE.

_____ _____
Signature Date

Example of consent letter from school director at the research site (name and personal information of school director has been made confidential for the example):

2/10/16

To Whom It May Concern,

I have been made aware and given permission to Mr. Mark McLain to conduct his Masters thesis research project at our school, which involves training paraprofessionals to implement student IEP goals in a variety of different school settings. Mr. McLain has assured the confidentiality of the students in his classroom as well as the participating paraprofessionals for this project. With all of our students at the school having IEPs and annual IEP goals, I feel this project could be an important step in developing a higher rate of student goal success.

Laura B. M.S.

R School Director

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