# An Evaluation of Paraprofessionals' Skills and Training Needs in Supporting Students with Severe Disabilities

**Virginia L. Walker**
**(vlwalk2@ilstu.edu)**

**Karen H. Douglas**

**Yun-Ching Chung**

**Illinois State University**

## Abstract

*Careful consideration is essential for developing and conducting effective paraprofessional development. This study described a process of paraprofessional development and outcomes from assessments, workshops, and social validation focus group interviews from one rural public school in the USA. Fourteen paraprofessionals and their supervisors completed multiple surveys to indicate their perceived skill level and training needs before outside experts conducted a workshop on two high priority skill areas. Results showed that paraprofessionals increased their knowledge and skill development after a full-day workshop. Although paraprofessionals found the training procedures and targeted strategies to be socially valid, they identified challenges associated with implementation of the strategies and access to follow-up coaching.*

**Keywords:** *needs assessment, paraprofessional development, workshops, severe disabilities*

## Introduction

Paraprofessionals—who often provide individual support to and develop close relationships with students with extensive support needs—play an important role in advancing the educational outcomes of students with severe disabilities (Carter, O'Rourke,

Sisco, & Pelsue, 2009; Giangreco, Suter, & Doyle, 2010). Currently, the Individuals with Disabilities Education Act (IDEA) defines a paraprofessional as "a school employee who works under the direction of a certified staff member to support and assist in providing instructional programs and services to children with disabilities or eligible young children" (2008). Given the nature of the paraprofessional's role in working with students with disabilities, it is critical for these individuals to have adequate knowledge and skills necessary to assist teachers and other professionals to address students' support needs (Douglas, 2012; Stockall, 2014). Furthermore, paraprofessionals who work with students with severe disabilities will likely require a *specialized* set of skills to address the unique characteristics of this particular group of students (e.g., behavioral, motor, communication, medical). In the current study, we addressed the following two skill areas relevant to students with severe disabilities (Brown, McDonnell, & Snell, 2016) and that paraprofessionals address on a regular basis (Fisher & Pleasants, 2012): behavior management and social and communication supports.

In general, paraprofessionals often are the most undertrained among support providers in the school setting (Giangreco et al., 2010). Lacking the skills necessary to support students with disabilities due to limited pre-service training is further compounded by limited in-service training opportunities, with some paraprofessionals reporting to have received no training over an entire school year (Brown & Stanton-Chapman, 2017). As such, significant efforts have been made by various researchers to identify effective paraprofessional training strategies that yield positive outcomes regarding knowledge and skill acquisition (e.g., Brock & Carter, 2013; Walker & Smith, 2015). Brock and Carter (2013) conducted a literature review of intervention studies in which paraprofessionals implemented supports for students with intellectual and related developmental disabilities. The results of this review suggest that, with adequate training, paraprofessionals are able to implement various supports, including behavioral and social and communication supports, ultimately leading to positive student outcomes. For example, Walker and Snell (2017) conducted an intervention study in which three paraprofessionals received training comprised of two workshops and weekly coaching sessions to implement function-based interventions to address the challenging behavior of three students with autism and intellectual disability. The results indicated that brief and periodic training resulted in the successful implementation of the behavioral intervention by paraprofessionals and improvements in student behavior. Chung and Douglas (2015) also provided one to three individual training sessions (total of 35-50 min) to three paraprofessionals on facilitative strategies for promoting peer interactions with students who used speech-generating devices (SGD) in inclusive classrooms. Brief feedback sessions were also held after observations. Results illustrated increases in reciprocal peer interactions and in SGD use and gestures for students with severe disabilities. All paraprofessionals perceived the training to be beneficial.

Although the results of these studies are promising and provide evidence regarding effective paraprofessional training practices, additional research is needed to better understand training practices in the context of paraprofessional development as prescribed by schools or school districts and, further, the specific needs of paraprofessionals within rural schools or districts. Rural schools and districts often face unique challenges in the areas of special education personnel preparation, retention, and support (Chopra, Banerjee, DiPalma, Merrill, & Ferguson, 2013; Passaro, Pickett, Latham, & HongBo, 1994). For example, in a large-scale investigation across three rural states, Passaro and colleagues surveyed 286 paraprofessionals on their experiences and needs regarding training and supports. Although the majority of paraprofessionals (84%) reported receiving job training, the percentage of

paraprofessionals who perceived training as sufficient varied from 38-83% across the targeted states. Further, many of the paraprofessional respondents identified managing student behavior as a high-priority training area.

In this study, we worked with an individual school in a rural area to provide paraprofessional development. After collaborating with the school administrator to discuss and develop a paraprofessional development plan, we distributed multiple surveys to measure paraprofessionals' perceived skill level and training needs, facilitated workshops based on the assessment results, and offered coaching sessions. The specific research questions that guided this study included: (a) How do paraprofessionals and paraprofessionals' supervisors perceive their skill level and training needs across areas relevant to educating students with severe disabilities? (b) How do paraprofessionals perceive their skill level and training needs in strategies to manage challenging behavior and to promote and teach social and communication skills after training? (c) How do paraprofessionals perceive the feasibility of applying strategies covered in the training sessions? and (d) How do paraprofessionals perceive the practicality and efficacy of training sessions?

## Method

### Participants

Fourteen special education paraprofessionals who were employed at a public school for students with severe disabilities in a rural school district located in a Midwestern state in the USA participated in this study. Half of the participants had worked as a paraprofessional for 3-5 years (7, 50%). Others reported working in this role for 6-10 years (3, 21%), less than 1 year (2, 14%), and between 11-15 years (1, 7%); one participant did not report his/her experience as a paraprofessional. The average age of paraprofessionals was 49 years with a range of 28 to 57 years. A majority of paraprofessionals were female (13, 93%) and all reported their race/ethnicity as Caucasian. Education levels varied across paraprofessionals: some college experience (6, 43%), two-year Associate degree (4, 29%), Bachelor of Art or Bachelor of Science degree (3, 21%), and graduate degree (1, 7%). At the time of the study, paraprofessionals had experience working with students with varying disability diagnoses: autism (13, 93%), intellectual disability (10, 71%), multiple disabilities (12, 86%), speech or language impairment (11, 79%), hearing or visual impairment, including deaf and blindness (11, 79%), and traumatic brain injury (4, 29%).

### Measurement

Prior to the training workshop, we asked paraprofessionals and their supervisors (e.g., teachers, administrators, related support providers) to complete an online needs assessment to evaluate paraprofessionals' skill level and training needs in *assisting* teachers and other professionals across 10 broad areas relevant to learners with severe disabilities and commonly referenced in training materials in the field of severe disabilities (Brown, McDonnell, & Snell, 2016). Based on the results of this initial needs assessment, we administered a second, more focused survey prior to and following training sessions to assess changes in paraprofessionals' perceived skill level and training needs across two targeted areas: (a) managing challenging behaviors and (b) promoting functional communication and teaching social skills. Additionally, we gathered paraprofessional feedback at the conclusion of the study regarding the social validity of the training procedures and content of the training sessions. Respondents across all assessments remained anonymous, as personally identifiable

information was not collected.

**Initial needs assessment.** Paraprofessionals and 15 of their supervisors (e.g., supervising teachers, school administrators) completed an online needs assessment to evaluate paraprofessionals' skill level and training needs across 10 broad areas relevant to supporting teachers with learners with severe disabilities. Respondents rated perceived skill level and training needs using a 4-point Likert-type scale (1 = *none*, 2 = *low*, 3 = *moderate*, 4 = *high*). A description of these 10 areas and paraprofessional and school member ratings is presented in Table 1. Based on these results, we developed and administered an additional targeted assessment.

**Targeted assessment of paraprofessional skill level and training needs.** The pre- and post-assessment surveys measured paraprofessionals' perceived training needs and skill level in assisting teachers and other professionals across 10 activities associated with function-based intervention to address challenging behavior (see Table 2) and nine activities associated with social and communication supports (see Table 3). Survey items addressing function-based intervention were based on the previous work of Pindiprolu, Peterson, and Berglof (2007) and Walker (2017). Items addressing social and communication skills were derived from a collection of work by Brown and colleagues (2016). We asked paraprofessionals to rate their perceived skill level and training needs online using a 4-point Likert-type scale (1 = *none*, 2 = *low*, 3 = *moderate*, 4 = *high*). On average, respondents completed the survey in 11 min (range: 4-55 min).

**Social validity.** During a follow-up session at the conclusion of the paraprofessional development sessions, the paraprofessionals completed a paper-based social validity questionnaire to assess the acceptability of both the training procedures utilized during the workshop session and the targeted strategies covered during the workshop. Using a 4-point Likert-type scale (1 = *not at all*, 2 = *a little*, 3 = *a lot*, 4 = *a great deal*), paraprofessionals rated their satisfaction across the following four questions: (a) To what extent did the workshop improve your understanding of strategies to support students with challenging behaviors and/or social communication skill deficits? (b) To what extent did the workshop make you more confident in addressing students' behavioral and social communication needs? (c) To what extent have you used the strategies covered in the workshop? and (d) Overall, how satisfied are you with the workshop? In addition, the researchers conducted a brief social validity interview (approximately 30 min in length) with two groups comprised of the original 14 paraprofessional participants. The following questions guided the interview: (a) Have you implemented strategies that were covered in the workshop session? (b) Do you think coaching may have been a helpful support when working with other classroom staff to identify and implement these strategies? and (c) What were some of the challenges or barriers that prevented you from receiving coaching? Additional follow-up questions were included to clarify or expand on participant responses.

## Training Procedures

Over the course of the academic school year, we collaborated with the school administrators to develop and implement the training procedures described here. It should be noted that paraprofessionals were required to attend the brief orientation, workshop, and follow-up sessions to meet the paraprofessional development requirements set forth by the school district; the ongoing coaching activity was voluntary and, unfortunately, none of the paraprofessionals participated in the coaching element of the study. As such, we conducted a social validity interview at the conclusion of the paraprofessional development to explore

further the potential barriers to coaching paraprofessionals.

**Brief orientation.** A brief two-hour orientation was held early in September. During the orientation, we shared the results of the initial needs assessment (see Table 1) and the second follow-up survey (see Tables 2 and 3) and facilitated a group discussion to ensure that participants found the targeted training topics to be relevant and valuable. All participants confirmed that the proposed training topics of managing challenging behaviors and promoting communication and social skills were of high priority and socially valid. Two warm-up activities were provided to promote discussion among participants prior to the workshop session. First, we gave each paraprofessional a copy of the Communication Bill of Rights (National Joint Committee, 1992) and asked them to rate the extent to which each communication right was relevant to their students (*always*, *sometimes*, *never*). Second, we asked paraprofessionals to participate in a hot button activity (see www.vanderbilt.edu/csefel) during which they identified (a) challenging behaviors that "pushed their buttons," (b) emotions they encountered when faced with the identified behaviors, and (c) the effect their emotions had on their relationships with the students who engaged in the behaviors. During both warm-up activities, participants initially completed the activity independently but later voluntarily shared their responses with the whole group. Both activities resulted in group discussion about both training topics.

We also outlined the training plan for the remainder of the academic year and reviewed the consent process and corresponding forms; participants had the option to submit consent forms at the conclusion of the orientation or via mail. At the conclusion of the brief orientation, we asked small groups of participants to write short-term and long-term vision statements for their students, characterizing students' quality of life as a valued and included member of the community (Meadan, Shelden, Appel, & DeGrazia, 2010). The purpose of this closing activity was to establish high expectations for students with severe disabilities among participating paraprofessionals prior to training.

**Workshop.** An all-day workshop was held in late October. The purpose of the workshop was to provide training to paraprofessionals on topics that were previously identified as high priority. The workshop was comprised of a variety of training activities, including distribution of resources and materials, PowerPoint lectures, case studies, video exemplars, demonstrations, role-plays, and knowledge checks. After the workshop session, participants were encouraged to implement the targeted strategies with their students, and to receive additional support and feedback (i.e., coaching) from the researchers during implementation efforts. However, none of the paraprofessionals requested this additional assistance.

The first part of the workshop (3.5 hours) addressed strategies to promote social and communication skills. We began by describing characteristics of social communication of students with severe disabilities and the importance of promoting these outcomes. We then discussed strategies that addressed where communication can take place, what topics can be motivating, and how effective, functional communication can be taught. The paraprofessionals received a copy of the PowerPoint presentation notes, watched videos illustrating successful implementation of communication strategies, and role-played instructional procedures to promote communication (i.e., modelling, mand-modelling, time delay). Paraprofessionals also practiced teaching within the different phases of the Picture Exchange Communication System (PECS; Bondy & Frost, 1994) and selecting appropriate vocabulary. This part of the workshop concluded with each paraprofessional developing an

action plan for enhancing at least one student's communication skills during the next school day.

The second part of the workshop (3.5 hours) addressed function-based strategies to address students' challenging behaviors (i.e., functional behavior assessment [FBA], development and implementation of function-based behavioral supports). A description of FBA and behavioral supports goes beyond the scope of this paper; however, readers are encouraged to access other resources for more information (e.g., O'Neill, Albin, Storey, Horner, & Sprague, 2014). We provided paraprofessionals with a copy of the PowerPoint lecture, including several worksheets that corresponded to the knowledge check activities (e.g., reflection questions, practice activities). We demonstrated the process of conducting an FBA and identifying behavioral supports based on the results. In addition, several videos of a student with a severe disability who engaged in persistent challenging behavior were used to illustrate these concepts and provided additional opportunities to practice applying targeted skills. Paraprofessionals practiced collecting FBA data, developing hypotheses, and identifying behavioral supports based on the student in the video examples.

Due to the nature of their role, paraprofessionals are not responsible for conducting FBAs or developing corresponding behavioral interventions; however, we included this content in the workshop session, as we believe that paraprofessionals, with a basic understanding of the process through which function-driven interventions are developed, will be more successful and motivated when addressing challenging behavior (Walker & Snell, 2017). Furthermore, paraprofessionals will likely assist teachers and other professionals in conducting FBAs and, therefore, are likely to benefit from training.

**Follow-up.** A two-hour follow-up session was held in mid-April. The purpose of this session was to provide paraprofessionals with an opportunity to reflect on their experiences, including accomplishments and challenges, with implementing the targeted strategies covered in the workshop session. We also asked paraprofessionals to complete a questionnaire and participate in a brief focus group interview to assess the social validity of the training procedures and strategies implemented by the paraprofessionals and gather information about barriers to accessing the voluntary coaching.

## Data Analysis

To analyze the results from the initial needs assessment and the pre- and post- skill level and training surveys, we transferred participant responses to Microsoft Excel® to calculate descriptive statistics (i.e., frequency, percentage of responses). Social validity questionnaire data were also analyzed in Microsoft Excel® to identify frequency, percentage, and mean rates of responding across the Likert-type scale response options. Additionally, recorded interviews were analyzed to identify categorical themes. Initially, the first author transcribed paraprofessionals' audio recorded responses to the social validity interview questions. Subsequently, responses were sorted into categorical themes and reviewed and confirmed by a second reviewer.

## Results

Prior to the brief orientation, paraprofessionals and supervisors rated paraprofessionals' skill level and training needs across 10 areas relevant to teaching students with severe disabilities (see Table 1).

**Table 1. Initial Needs Assessment Survey Results**

| | Skill level % low or none (*n*) | | | Training needs % moderate or high (*n*) | |
|---|---|---|---|---|---|
| Skill area | Paraprofessional | Supervisor | | Paraprofessional | Supervisor |
| Managing challenging behavior | 0% (0) | 7% (1) | | 64% (9) | 86% (13) |
| Teaching self-care skills | 8% (1) | 27% (4) | | 46% (6) | 60% (9) |
| Facilitating peer relationships | 21% (3) | 34% (5) | | 71% (10) | 80% (12) |
| Promoting functional communication | 14% (2) | 27% (4) | | 50% (7) | 72% (10) |
| Teaching vocational skills | 61% (8) | 43% (6) | | 69% (9) | 77% (10) |
| Preparing students to transition from school to community | 30% (4) | 61% (8) | | 62% (8) | 54% (7) |
| Increasing students' self-determination | 34% (4) | 43% (6) | | 50% (6) | 72% (10) |
| Teaching academic skills | 39% (5) | 34% (5) | | 46% (6) | 71% (10) |
| Teaching social skills | 8% (1) | 36% (5) | | 59% (7) | 78% (11) |
| Supporting students' physical and health needs | 16% (2) | 13% (2) | | 75% (9) | 57% (8) |

*Note.* Response scale: 1 (*none*), 2 (*low*), 3 (*moderate*), and 4 (*high*). Not all of the participants responded to each item, thus percentages reflect the percentage of those who responded to that particular item.

Paraprofessionals most often reported having a low skill level (*low* or *none*) in the areas of teaching vocational skills (8, 61%), teaching academic skills (5, 39%), and increasing students' self-determination (4, 34%). Although supervisors most often identified preparing students to transition from school to community as a low skill area (8, 61%), they also reported teaching vocational skills (6, 43%) and increasing students' self-determination (6, 43%) as low skill areas. A notable difference was found between supervisor and paraprofessional ratings of training needs across these same 10 areas; paraprofessionals reported moderate or high training needs across the following three areas: facilitating peer relationships (10, 71%), supporting students' physical and health needs (9, 75%), and teaching vocational skills (9, 69%). However, supervisors reported the following as high-priority training areas: managing challenging behavior (13, 86%), facilitating peer relationships (12, 80%), and teaching social skills (11, 78%).

The results of the subsequent pre- and post-assessment surveys addressing the specific

areas of managing challenging behavior and social and communication skills are presented in Tables 2 and 3, respectively.

**Table 2. Pre- and Post-Assessment Survey Results – Managing Challenging Behavior**

| Skill area | Skill level % low or none (*n*) | | | Training needs % moderate or high (*n*) | |
|---|---|---|---|---|---|
| | Pre | Post | | Pre | Post |
| Interviewing caregivers (e.g., parents/guardians, teachers, and staff, etc.) regarding challenging behavior | 50% (4) | 33% (3) | | 25% (2) | 11% (1) |
| Developing a summary based on interview data that includes: (a) events that occur prior to challenging behavior, (b) challenging behavior, and (c) the possible function or purpose of challenging behavior | 72% (5) | 44% (4) | | 57% (4) | 22% (2) |
| Defining or describing challenging behaviors so that they can be observed and measured | 25% (2) | 0% (0) | | 38% (3) | 11% (1) |
| Collecting data on challenging behavior through observations | 13% (1) | 0% (0) | | 25% (2) | 11% (1) |
| Analysing observational data to determine the function or purpose of challenging behavior | 25% (2) | 11% (1) | | 50% (4) | 22% (2) |
| Developing a summary based on observational data that includes: (a) events that occur prior to challenging behavior, (b) challenging behavior, and (c) the possible function or purpose of challenging behavior | 43% (3) | 22% (2) | | 57% (4) | 22% (2) |
| Developing intervention plans to decrease challenging behavior and increase desired behavior | 50% (4) | 11% (1) | | 50% (4) | 22% (2) |
| Selecting intervention plan strategies that address the purpose or function of the challenging behavior | 50% (4) | 11% (1) | | 50% (4) | 11% (1) |
| Implementing intervention plan strategies | 25% (2) | 11% (1) | | 38% (3) | 11% (1) |
| Collecting data to determine the changes in behavior while implementing intervention plan strategies | 38% (3) | 22% (2) | | 38% (3) | 11% (1) |

*Note.* Response scale: 1 (*none*), 2 (*low*), 3 (*moderate*), and 4 (*high*). Not all of the participants responded to each item, thus percentages reflect the percentage of those who responded to that particular item.

**Table 3. Pre- and Post-Assessment Survey Results – Social and Communication Skills**

| | Skill level % low or none (*n*) | | | Training needs % moderate or high (*n*) | |
|---|---|---|---|---|---|
| Skill area | Pre | Post | | Pre | Post |
| Creating opportunities for peer interactions within the school environment (e.g., creating shared space, arranging shared activities, and incorporating common interests within group activities) | 50% (4) | 33% (3) | | 25% (2) | 22% (2) |
| Creating opportunities for peer interactions outside of the school environment (e.g., encouraging social gatherings) | 50% (4) | 33% (3) | | 14% (1) | 22% (2) |
| Ensuring that AAC devices are programmed so that students who communicate with these devices have the opportunity to engage in social interactions with both peers and adults | 63% (5) | 22% (2) | | 25% (2) | 11% (1) |
| Programming AAC devices | 38% (3) | 22% (2) | | 25% (2) | 11% (1) |
| Maintaining and/or teaching students to maintain their AAC devices (e.g., charging battery, backing up AAC device) | 50% (4) | 11% (1) | | 25% (2) | 0% (0) |
| Facilitating peer interactions during play and other leisure activities | 50% (4) | 11% (1) | | 25% (2) | 0% (0) |
| Teaching students to interact with adults by requesting, commenting, questioning, responding, etc. | 50% (4) | 0% (0) | | 14% (1) | 11% (1) |
| Teaching students to interact with peers by requesting, commenting, questioning, responding, etc. | 60% (3) | 11% (1) | | 25% (1) | 11% (1) |
| Addressing other potential barriers to social interactions (e.g., student hygiene, unconventional body language, etc.) | 57% (4) | 11% (1) | | 33% (2) | 11% (1) |

*Note.* Response scale: 1 (*none*), 2 (*low*), 3 (*moderate*), and 4 (*high*). Not all of the participants responded to each item, thus percentages reflect the percentage of those who responded to that particular item.

In general, paraprofessionals' perceived skill level increased (as evidenced by a reduction in ratings of skill level as *low* or *none*) and training needs decreased (as evidenced by a reduction in ratings of training needs as *moderate* or *high*) across both targeted areas after participation in the brief orientation and workshop sessions.

Overall, paraprofessionals found both the training procedures (i.e., brief orientation, workshop) and targeted strategies to be socially valid. All paraprofessionals reported to be satisfied (ratings of *a lot* or *a great deal*) across the four items in the social validity questionnaire. The following three themes emerged from the social validity interviews. First, paraprofessionals reported implementing targeted strategies soon after the conclusion of the workshop but these efforts eventually diminished due to other competing responsibilities and a lack of implementation consistency among supervising teachers who provided behavioral and social/communication support to students. Second, and in despite of the fact that none of the paraprofessionals participated in coaching during the course of this study, respondents

acknowledged that coaching would be a helpful support, noting that coaching from supervising teachers may be more beneficial than from an outside expert such as a researcher. Third, paraprofessionals suggested that coaching was not pursued during this study due to limited time to dedicate to coaching sessions, anxiety induced by the presence of an outside observer in the classroom, or adverse reactions of students due to observer presence.

## Discussion

This study was designed to assess the perceived skill level and training needs of paraprofessionals, facilitate workshops based on assessment results, and offer coaching sessions to further enhance specific skills. After an initial needs assessment completed by paraprofessionals and supervisors, we administered a targeted survey on function-based intervention and social and communication skill development. The results led to a full-day workshop promoting knowledge and skill development in these two skill areas.

The initial needs assessment illustrated some similarities between paraprofessional and supervisor skill level responses, somewhat mirroring the results from previous research (e.g., Passaro et al., 1994). This finding indicated that, while both supervisors and paraprofessionals may have an understanding of the current skill level of paraprofessionals, their perspectives of training priorities are different. We opted to address those priority areas identified by supervisors, but assessed social validity with paraprofessionals before proceeding with training. Differences in reported training needs may be explained by determining whether such reports were based on paraprofessionals' actual skill set (or lack thereof) or a personal preference of the supervisor and paraprofessional. These results also exemplify a need for collaboration among paraprofessionals and supervisors to devise plans for training development (Douglas, Chapin, & Nolan, 2016; Stockall, 2014) that align with both the needs of the paraprofessionals and the needs of the school, classroom, and student body. Nonetheless, we found that, by administering a needs assessment, we were able to tailor the training to the unique needs of the paraprofessional participants (e.g., Walker & Snell, 2017).

Improvements between the pre- and post-assessments in both skill areas suggested that the workshop training procedures were effective relative to *perceived* skill level and knowledge. However, a true assessment, through direct or virtual observation, of paraprofessional skill application would be important to consider in the training process. We were unable to measure improvements in skill implementation via observation due to time and practicality issues. Furthermore, paraprofessionals declined participation in voluntary coaching sessions. Coaching can be advantageous over stand-alone workshops that often time lack generalization from content knowledge to effective implementation (Hall, Grundon, Pope, & Romero, 2010). Coaching, which often relies on modeling, performance feedback, and accountability as daily classroom activities take place (Brock & Carter, 2015), may have enhanced the skill development and implementation fidelity of paraprofessionals in the current study and allowed for more objective measurement of skill application. Fortunately, we were able to evaluate the barriers to paraprofessionals' participation in coaching sessions through a social validity interview.

According to the social validity data, paraprofessional participants found that both the training procedures and recommended strategies were helpful; however, intervention implementation was not maintained over time. As mentioned earlier, coaching may have promoted continued implementation of such strategies. It was interesting that the

paraprofessionals found coaching to be potentially valuable but did not pursue it due to noted challenges during the focus group interviews (e.g., lack of consistency in teacher practices, influence of outside expert). In the future, it may be important to discuss the need for train-the-trainer models whereby the supervising teacher receives training from the outside expert and then coaches the paraprofessionals (e.g., Brock & Carter, 2016). This would be a more natural approach, which may potentially eliminate the challenges reported by paraprofessionals.

## Limitations and Future Research

There were several limitations in this study that could be improved upon in future studies. First, the assessments evaluated perceptions as opposed to objective measures of paraprofessional skill and knowledge. Additionally, because the paraprofessionals did not volunteer to participate in the coaching sessions, we were unable to determine whether paraprofessionals applied learned skills in the classrooms after workshop sessions. Future research should include measures of knowledge and skill application during both workshop and applied training sessions to ensure acceptable implementation fidelity and skill maintenance. Furthermore, it will be important to explore further the benefits of training supervisors (e.g., special educators) on coaching strategies for paraprofessional skill development, as this may address limitations associated with coaching delivered by outside experts (e.g., Brock, Biggs, Carter, Cattey, & Raley, 2015). Administrators should also consider such training practices when developing paraprofessional development plans. Researchers working with schools in rural areas must collaborate with administrators to develop effective training plans that reflect best practice but also those needs unique to rural special education providers. Ideally, teachers and paraprofessionals should receive training together or a train-the-trainer model could be enacted to ensure accuracy and accountability of skill implementation.

## Conclusion

Empowered and skilled paraprofessionals are key educational team members who contribute to positive student outcomes. In this study, we presented a process of facilitating paraprofessional development and evaluating workshop outcomes for a group of paraprofessionals educating students with severe disabilities in a rural special education school. Through sharing this process, we hope to provide guidelines for teachers and administrators who support paraprofessionals in fulfilling their valuable roles and responsibilities. The use of similar training approaches could support teachers and school districts in identifying areas for further knowledge and skill development for their paraprofessionals.

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