

1-1-2022

## Exploration of Training Needs of Paraprofessionals to Support Students with Disabilities

Amy Lichte M.Ed

*Palouse Prairie Charter School, Moscow, ID*

Andrew R. Scheef Ph.D.

*University of Idaho*

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/josea>



Part of the [Special Education and Teaching Commons](#)

---

### Recommended Citation

Lichte, Amy M.Ed and Scheef, Andrew R. Ph.D. (2022) "Exploration of Training Needs of Paraprofessionals to Support Students with Disabilities," *The Journal of Special Education Apprenticeship*: Vol. 11 : No. 1 , Article 5.

Available at: <https://scholarworks.lib.csusb.edu/josea/vol11/iss1/5>

This Article is brought to you for free and open access by CSUSB ScholarWorks. It has been accepted for inclusion in The Journal of Special Education Apprenticeship by an authorized editor of CSUSB ScholarWorks. For more information, please contact [scholarworks@csusb.edu](mailto:scholarworks@csusb.edu).

**Vol. 11(1) January 2022**

## **Exploration of Training Needs of Paraprofessionals to Support Students with Disabilities**

**Amy Lichte, M.Ed.**

Palouse Prairie Charter School, Moscow, ID

**Andrew R. Scheef, Ph.D.**

University of Idaho

Paraprofessionals are often hired to conduct one-on-one or small group support to students with disabilities within the K-12 school system. Existing literature illustrates a limited expectation that paraprofessionals in school districts receive training surrounding their job requirements. With the rise of students being identified for special education services and the lack of training often received by paraprofessionals, questions arise related to the training backgrounds and needs necessary for professionals to support students with disabilities in the classroom. This study sought to better understand the extent to which paraprofessionals believe they are trained to performed requisite job duties. In addition, participants identified the specific types of training they have received and would like to receive to improve their ability to support students with disabilities. Quantitative and qualitative data were collected through a cross-sectional survey. Findings show that most participants reporting general understanding of working with students with disabilities, but a split response on whether these participants had this knowledge prior to employment. Also, the results of the training section of the survey demonstrated that paraprofessionals would be interested in further training related to job requirements. Participants expressed a desire for training in a variety of areas, including culturally responsive pedagogy, evidence-based practices, and inclusive education.

*Keywords:* paraprofessionals, training, special education

Students with disabilities or those who demonstrate difficulties with learning have always been in schools, but the way school professionals address these needs have changed over the years. After Public Law 94-142 was passed in 1975, paraprofessionals started to spend more time with students in the classroom (Friend & Cook, 2017). With no nationwide requirement for paraprofessional education level (outside of Title I schools), some of these individuals may not have the understanding of how to effectively support these students in the classroom. Training opportunities can fill the void in paraprofessionals ability to engage in appropriate evidence-based practices.

Originally, paraprofessionals served as teacher assistants who carried out the clerical and housekeeping duties within the classroom (French & Pickett, 1997). Schools have been hiring additional paraprofessionals in recent years due to increased numbers of students with disabilities, many of whom require in-class supports to meet the Least Restrictive Environment provision included in the Individuals with Disabilities Education Act (IDEA; Douglas et al., 2016). According to the Bureau of Labor Statistics, nearly 1.4 million teacher assistants (i.e., paraprofessionals) were employed in the year of 2018 across the United States (United States Department of Labor, 2020). Paraprofessionals provide essential support to students with disabilities. The No Child Left Behind Act (NCLB) of 2001 outlined supports such as one-on-one tutoring, classroom management, organizing instructional materials, assisting in computer laboratories or libraries, conducting activities with parent involvement, translating, or providing instructional services under the direct supervision of a special education teacher or other professionals. No Child Left Behind (NCLB, 2002) refers to the education and activities of paraprofessionals' within Title I schools but also states that all schools, regardless of Title I status, should strive to have high-quality staff members assisting students with disabilities to have the best educational outcomes (Austin, 2013). The legislation states paraprofessionals "should receive

ongoing professional development regarding the areas of core curriculum and instructional strategies” (NCLB, 2001).

The federal government has mandated paraprofessionals to hold an Associates degree or pass a specific assessment to hold a position in Title I schools across the nation (Friend & Cook, 2017). Regulations on education requirements for paraprofessionals hired for positions outside of Title I schools have not yet been set. Research also found special education teachers did not receive the necessary training through their preservice learning to effectively supervise paraprofessionals (Douglas et al., 2016).

### **Benefits of Paraprofessionals**

Since 2001, when NCLB was enacted, some paraprofessionals may have continued to perform the above tasks but are often asked to “provide direct support and instruction to students” with disabilities (Austin, 2013, p. 16). Fisher and Pleasant (2011) conducted a survey study of 1,867 paraprofessionals regarding job tasks and whether the paraprofessional felt that the individual tasks were appropriate based on their job description. Major results from the study indicated that more than half of respondents reported that their primary role was to work with students displaying behavioral and social support needs, and nearly half reported they implement teacher-planned instruction. Other activities that participants characterized as job tasks included supervising students, engaging in personal care routines, adapting lessons designed by general education teachers, and developing lesson plans for students. The report of some paraprofessionals adapting general education lessons or creating lessons on their own is concerning. With the typical paraprofessional entering the workforce with some college, no degree or successfully passing a professional competency assessment, many do not have the extensive education required to effectively carry out tasks related to adapting or creating lesson plans for students with disabilities (Fisher & Pleasant, 2011; Friend & Cook, 2017; United States Department of Labor, 2020). With the proper training, paraprofessionals have been found to implement evidence-

based practices with school-aged children with educational benefits being cited (Brock & Carter, 2013).

### **Need for Paraprofessional Training and Support**

Existing literature suggests that special education teachers receive very little training, if at all, regarding supervising paraprofessionals during pre-service learning (Douglas et al., 2016; Ghere & York-Barr, 2007; Giangreco et al., 2003). Also, some paraprofessionals often do not receive continuous training opportunities throughout their career to better understand job tasks that are asked of them or to increase their knowledge of students with disabilities (Austin, 2013; Douglas et al., 2016; Ramos, 2017). With the little to no education requirements of paraprofessionals for hiring, training opportunities are imperative for continuous growth and understanding of working with students who have disabilities (Brown & Stanton-Chapman, 2014). Among the numerous studies related to training of paraprofessionals, Ramos (2017) distributed a survey to evaluate paraprofessional education and knowledge level and training opportunities within their position. The survey results found that 67 percent of the participants reported that they had an Associate's degree or less for their education.

Within a study completed by Austin (2013), paraprofessionals were asked to rate themselves on qualifications and training. Those who said they were untrained also reported that there were no training opportunities to attend. Another finding from this study was that the training of the special education teacher on supervising paraprofessionals was key in how effective the participant was at completing their required duties. Themes of teachers having had little to no formal training in supervising paraprofessionals arose from a study designed to explore the practices demonstrated by special education teachers while supervising paraprofessionals (Douglas et al., 2016). However, many teachers reported that there is some form of training for paraprofessionals throughout the year, more so in the beginning of the school year. The interviews Douglas et al. (2016) completed demonstrated

the need for effective programming among all team members (special education teacher, paraprofessional, administration, etc.) to work together for the good of the students' needs and growth. To foster success, there needed to be a sense of mutual respect and open communication among all members.

Through duties and responsibilities, as supported by the Collaborative Classroom Support Plan, paraprofessionals can learn their designated tasks assigned by the supervising teacher to promote positive working relationships (Capizzi & Da Fonte, 2012). Ongoing communication between the paraprofessional and teacher allows for better teaming and professional development opportunities increase the paraprofessional's skill set to handle various situations when working with students with disabilities. With increased knowledge and understanding of effective practices, paraprofessionals will be better equipped to support student students.

Furthermore, Brown and Stanton-Chapman (2014) explored the experiences of paraprofessionals by using mixed-methods study involving interviews and a survey. Qualitative data collected demonstrated three main themes. The first theme that arose was "responsibilities and context" and demonstrated that paraprofessionals and teachers had similar classroom interactions, but the execution of the interactions varied. The next theme was the relationship between paraprofessionals and teachers along with job tasks and carry through with students and classroom tasks. The final theme was satisfaction relation to salary and appreciation from other teachers and/or staff members. Paraprofessionals were asked if they felt comfortable to address concerns with the supervising teacher. Most paraprofessionals said they disagreed and further said they disagreed that their supervising teacher provided appropriate leadership. Overall, the review of the Brown and Stanton-Chapman (2014) study demonstrates that there is concern for the overall experiences of paraprofessionals in the workplace. The uniqueness of this study by including both the qualitative and quantitative pieces allowed

the researchers to explore additional experiences of paraprofessionals through interviews with both paraprofessionals and teachers.

The conclusion of this review demonstrates the lack of quality training materials available for supervisors to provide as training opportunities to paraprofessionals, if the opportunity arises at all. The purpose of this study was to determine paraprofessional experience in the field of special education prior to hiring and if any formal training has been, or will be, offered to the employees by their school district in order to increase their knowledge of special education and best practices. The following questions guided this study:

1. To what extent do paraprofessionals feel they are being trained to perform the tasks required of their job?
2. To what extent have paraprofessionals received training related to job requirements?
3. To what extent would paraprofessionals access training opportunities offered by their employer?

### **Methods**

In order to answer the research questions above, a survey was distributed to paraprofessionals to better understand the perspectives of paraprofessionals regarding their knowledge of working with students in special education, their training level, and willingness to complete future training.

### **Participants**

An invitation for paraprofessionals to complete the survey for this study was shared via email with staff members (e.g., special education teachers, school administrators) from public schools. In two of the districts, the superintendent requested to review the survey prior to distribution to staff members. As a convenience sample was collected, these solicitations were sent to people known by the researcher and included a request that it be shared with other interested parties (snowball recruitment). Upon receiving the invitation (and link to the survey instrument) in the

participant's email, they were asked to share the link with their paraprofessionals.

Thirty-two participants consented to and completed the survey. The age range of students the participants work with range from preschool to high school aged children. Demographic information was collected about the participants in the areas of personal education level, experience as a professional, and age group of the students. Of the 32 responses, eight reported receiving a high school diploma or GED, seven completed some college, two received an associate's degree, 14 received a bachelor's degree, and one received a master's degree or higher. Eighteen participants had 0-3 years experience as a paraprofessional, six had 4-6 years experiences, one had 7-9 years experience, and seven paraprofessionals had 10+ years experience in the position. Finally, the participants reported working across the district with a range of age groups. Two participants worked with preschool aged children, 20 worked at the elementary level, one worked in a middle school/junior high, and nine worked at the high school area. Five of the districts were in the Northwest of the U.S. and the sixth district was in New England. Participant responses represented voices from three different states in the U.S.

### **Procedure**

This survey was shared with paraprofessionals through their supervisors via online form (Google Forms) accessed through email according to the procedures approved by the university's institutional review board. Within the survey, the participants were informed about the purpose of this study and reminded that they were not required to complete the survey and may opt out at any point. If the participant agreed to the survey, they completed demographic responses. This included their employed school district, which was only included in order to identify the number of school districts and regions in which participants worked. Completed surveys were made available to the researcher through Google Forms.

### **Instrument**



A survey was created after a review of literature of current research surrounding paraprofessionals knowledge and training in school districts working with children ages Pre-K-12th grade. The survey was distributed and made available for completion for the first three weeks of May 2020. This survey was based on a study completed by Brown and Stanton-Chapman (2014) and adapted to answer the research question related to this study. Although the study conducted by Brown and Stanton-Chapman (2014) explored many topics related to a paraprofessional position within a school district, the instrument used in this study focused primarily on paraprofessional knowledge of working with students with disabilities, additional training opportunities provided, and willingness to complete additional training.

The beginning portion of the survey asked participants to provide demographic information (e.g., employed school district, years in profession, etc.). The second portion of the survey provided statements related to knowledge and professional development and participants responded by selecting an option on the 4-point Likert-type scale, ranging from “strongly agree” to “strongly disagree”. These survey items can be found in Table 1. The study also included an 8-item section allowing participants to declare areas of previous training or interested areas of additional training. These items can be found in Table 2. In order to provide an opportunity for participants to identify additional items not represented on the instrument, respondents were given the opportunity to provide qualitative information using the “other” option within this section.

### **Research Design and Data Analysis**

This survey collected quantitative data through a cross-sectional survey design. Cross-sectional designs are viewed as taking information from a specific population during a set period of time (Creswell & Guetterman, 2019). The sampling began as convenience sampling, but had the potential for snowball sampling as the survey was shared among special education teachers and their paraprofessionals across districts and states. Data

analysis was completed by the researchers looking at the raw data collected through a survey via Google Forms. During the review of responses, the researcher created percentages based on the responses per statement. Also, evaluation of the questions regarding additional training was completed at this time.

### **Results**

Thirty-two participants completed the survey that included a variety of questions related to their position as paraprofessionals. Table 1 illustrates the questions that were included in the survey along with the percentage of responses to each question based on the 32 participants who gave consent for their responses to be collected. Each of the participants stated they agreed to some degree with having adequate understanding of working with students with disabilities.

**Table 1**  
*Results of the Paraprofessional Survey*

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
I have an adequate understanding of how to work with students with disabilities	28%	72%	--	--
I received one on one training with my supervisor upon hiring	9%	34%	41%	16%
I had knowledge/training about children with disabilities before being employed as a paraprofessional	19%	31%	44%	6%
I have received professional development opportunities through my employer in the last two years	41%	31%	16%	6%
I learned new information from the training I attended during the last two years	38%	34%	16%	6%
I am offered the opportunity for electronic-based (computer-led) formal training during my hourly workday	16%	25%	50%	6%
I am offered the opportunity for face-to-face formal training during my hourly workday	3%	28%	53%	16%
I would attend a training if it was outside of my hourly workday (unpaid)	25%	25%	41%	6%
I would attend a training if it was within my hourly workday	60%	34%	3%	--

*Note.* Rows do not equal 100% due to incomplete responses.

**Table 2***Results of Paraprofessional Survey Related to Training Opportunities*

Training area	I have received training	I would like training (or more training)	Both
Typical Development	44%	50%	6%
Evidence Based Practices	28%	59%	13%
Behavior	47%	37%	16%
Culturally Responsive Pedagogy	19%	78%	3%
Inclusive Practices	38%	56%	6%
training about disabilities (i.e. Autism, ADHD, general information about a variety, etc.)	47%	44%	9%
Collaboration with other professionals (i.e. Special Education teacher, general education teacher, etc.)	56%	38%	6%
Other*	44%	44%	12%

*\*Note.* The column for both is for participants who reported they received training and would like training/more training in a given area.

Although results indicated that participants had knowledge of working with students at the time of the survey completion, over 50 percent reported not having received individualized training with their supervisor when they were hired. Greater than 50 percent of paraprofessionals reported being offered in person or online training opportunities in the last two years. Fifty percent reported they would attend a training during unpaid hours and 94 percent reported interested in training during paid hours.

### **Training Opportunities or Interests**

Along with the Likert-type scale statements, the paraprofessionals identified training they had received or would like to receive training within

pre-populated areas with the opportunity to add other training areas. Table 2 illustrates the responses related to training areas. In all but one training area (Collaboration with Professionals), the participants reported 50 percent or higher in a combination of wanting initial or additional training. The most frequently identified desired training area was Culturally Responsive Pedagogy, which 81 percent of paraprofessionals selected as an area of need. The lowest area participants reported wanting initial or additional training was Collaboration with Professionals. The second lowest area participants reported needing additional or initial training was in behavior. However, four participants wrote under the “other” section as wanting more behavior training.

Participants stated other training opportunities were completed or there were additional training areas to explore. Additional training areas completed by paraprofessionals included: classroom safety (e.g., fire, health, CPR, safe schools training;  $n = 7$ ), de-escalation training (e.g., Mandt;  $n = 6$ ) instruction strategies/data collection ( $n = 2$ ), and behavior and ASD ( $n = 2$ ). Fourteen participants did not specify other training completed. Training areas in which participants were interested included: creative ways to work with students with disabilities ( $n = 3$ ), behavior ( $n = 3$ ), trauma and family resources ( $n = 2$ ), helping more with children who have communication delays ( $n = 2$ ), and de-escalation and restraint ( $n = 2$ ). In addition, five participants wrote something related to “anything to help current position” and 12 participants did not specify other areas of interest for training.

### **Discussion**

Paraprofessionals are crucial for student success within the general education classroom when properly trained (Brock & Carter, 2013). After a review of the literature, it is evident that the job expectations of paraprofessionals have changed significantly from the beginning when the job was focused more on clerical and housekeeping duties in the classroom (French & Pickett, 1997). This study was conducted to better understand paraprofessional perceptions regarding the training they have had and would

like to receive to better support students with disabilities in the classroom. Based on results from this study, the participants reported having a general understanding of working with students with disabilities at the time of the survey. This could be due to past training completed by the participants versus when they were 50 percent split on the question about understanding how to work with students with disabilities prior to being hired. The results were split between having training or knowledge about children with disabilities prior to being employed as a paraprofessional. This indicates that there might be a need for training with newly hired paraprofessionals prior to interaction with the students in schools.

Paraprofessionals desire training to better support students with disabilities. Nearly all survey respondents would be open to receiving training during their regular working hours. Moreover, half of paraprofessionals surveyed expressed an interest in receiving unpaid training outside of their workday. However, over 50 percent of participants reported not receiving regular support from supervisors, the questions arose as to how the participants learned the skills for working with students with disabilities and what might their definition of “adequate” entail when answering the statement. Having regular meetings can allow for better teaming between paraprofessionals and supervisors in addition to necessary training interests to emerge through conversations (Capizzi & Da Fonte, 2012). Seven participants reported having received training in Mandt or behavior within the last two years. This could contribute to the lower percentage of participants wanting additional behavior training within this small population size.

One of the most noteworthy findings from this study was the interest paraprofessionals showed in receiving training in Culturally Responsive Pedagogy (CRP); this was the most commonly identified area of training identified by survey respondents. CRP has become an important topic for those working with students in the schools of the United States. Gay (2010) defines CRP as teaching “to and through [students’] personal and cultural

strengths, their intellectual capabilities, and their prior accomplishments” (p. 26). The 2010 Census reported the top three races as White, Black, and Hispanic, with the Hispanic growth between the 2000 and 2010 Census being 43 percent (United States Census Bureau, 2011). This statistic could contribute to the 81 percent of participants reporting that they would like initial or additional training regarding CRP.

Paraprofessionals are often supporting student’s behavioral and social emotional needs within the classroom without the necessary knowledge or training of evidence-based practices to do so effectively (Brock & Carter, 2013; Brown & Stanton-Chapman, 2014). Paraprofessionals are on the front lines of student success in the general education classroom and require ongoing support from supervising teachers and administration to seek professional development to increase skills to better complete required job tasks. From reviewing the survey results, the majority of responses reported not having training opportunities throughout their workday, whether that was electronic-based or face-to-face. When asked about training opportunities, the responses were split regarding attendance to training that was unpaid for the paraprofessionals. Alternatively, responses were mainly in favor of attending training if it was completed during the individual’s workday and therefore, they were being paid.

The number of paraprofessionals in schools is only growing each year and the needs of the students are changing as well (United States Department of Labor, 2020). Research supports the need for special education teachers to understand how to collaborate and delegate more effectively with paraprofessionals and paraprofessionals need further training to understand effective strategies for working with students with disabilities. Paraprofessionals are integral pieces to the special education services we see in the United States today. These individuals are constantly working with the most vulnerable population in school systems across the nation and work to increase each student’s knowledge and skills alongside special education teachers. With paraprofessionals working so much with

students in special education, they should have the resources and support to effectively work with these students.

### **Limitations**

Limitations to this study include the small sample size. Low response rates could be attributed to the format, respondent computer accessibility, or school closures due to COVID-19. Four of the six school districts with paraprofessionals who participated in the survey were from the same state which can limit results based on individual states requirements for paraprofessional employment. Another limitation to this study involved data collection. Data were compiled from self-reported answers of paraprofessionals. All self-reported data has inherent limitations due to the lack of oversight by the researcher; it is the hope that sufficient attention has been made to ensure that respondents are providing genuine responses and impacted by outside influences. For example, some district superintendents were concerned about answers being traced back to their specific districts. For this reason, some paraprofessionals could have answered questions based on what they thought supervisors would approve of versus true responses based on experiences.

### **Implications for Practice**

Professionals in the education field can take the data collected as a guideline for future district professional development opportunities for all members of the special education team. Findings from this study illustrate that paraprofessionals have a mixed baseline knowledge of working with students with disabilities. Also, participants reported 50 percent or higher interest in six of the seven predetermined training areas and 56 percent reported interest in another training area not already specified in Table 2. Significantly high response of participants reporting they would like initial or additional training related to CRP indicates a deficit area in training among paraprofessionals. Schools may consider implementing many of the same strategies to teach CRP to paraprofessionals as they would use for faculty training. Some of these practices to develop a personal appreciation of



diversity may include: (a) opportunities for reflective thinking and writing, (b) exploring one's own cultural background to help identify and acknowledge memberships of different cultural groups, (c) learning about experience and history of diverse groups, (d) visiting the diverse communities of the students in the school, and (e) learning about strategies that have been successful in teaching diverse student populations (Richards et al., 2007). Conducting paraprofessional training through a year-long book club seminar may provide a forum for a meaningful discussion of issues faced by paraprofessionals (Burbank et al., 2009). Districts should take this knowledge and the possible interest in receiving future training to address possible training needs within local schools and districts.

### **Implications for Future Research**

The number of paraprofessionals has been increasing each year to address the needs of students in special education (United States Department of Labor, 2020). Having a strong understanding of paraprofessional knowledge and continued training is important to support students effectively. Having a small sample size limits the ability to generalize the results across paraprofessionals in different districts across the nation. A replication study with a wider range of participants and larger response population would provide a better sense of the extent to which the findings from the current study are valid. Also, with a larger population, correlations between demographics can emerge and might determine further areas of need. Such as, "Do elementary school paraprofessionals want more training in discrete trial training versus reading intervention?" A larger sample would also allow for researchers to include inferential statistics as part of the analysis to determine the extent to which demographic variables may influence the extent to which paraprofessionals are trained. Future research can further determine content areas needed for training among the paraprofessional population across the nation and age groups of students. Questions such as, "Can a national or state level pre-employment training course be created for newly hired paraprofessionals?" or "Should there be

pre-employment or continued education courses offered to paraprofessionals?" can be addressed in future research.

### **Conclusion**

With the rise of students being identified for special education services and the need for paraprofessionals to work with these students, quality training is needed for paraprofessionals to be effective. This study sought to explore the training level and opportunity for additional training of paraprofessionals in public school districts. Results of the study demonstrated a lack of regular meetings between paraprofessionals and supervisors, an overwhelming interest in attending additional training (both during a paid day and outside of a paid day), and many content areas of interest for future training. Overall, results of this study supported the literature demonstrating a need for paraprofessionals to have ongoing training and communication with supervisors to be effective when working with students with disabilities.

### **References**

- Austin, K. (2013). *Training needs of paraprofessionals supporting students with autism spectrum disorders*. [Doctoral dissertation, Virginia Commonwealth University]. ProQuest Dissertations Publishing. Retrieved from <http://search.proquest.com/docview/1369849422/>
- Brock, M. E., & Carter, E. W. (2013). A systematic review of paraprofessional-delivered educational practices to improve outcomes for students with intellectual and developmental disabilities. *Research and Practice for Persons with Severe Disabilities, 38*(4), 211-221. <https://doi.org/10.1177/154079691303800401>
- Brown, T. S., & Stanton-Chapman, T. L. (2014). Experiences of paraprofessionals in US preschool special education and general education classrooms. *Journal of Research in Special Educational Needs, 17*(1), 18-30. <https://doi.org/10.1111/1471-3802.12095>
- Burbank, M. D., Bates, A. J., & Schrum, L. (2009). Expanding teacher preparation pathways for paraprofessionals: a recruiting seminar series. *Teacher Education Quarterly, 36*(2), 199-216. Retrieved from <https://www.jstor.org/stable/23479260>
- Capizzi, A. M., & Da Fonte, M. A. (2012). Supporting paraeducators through a collaborative classroom support plan. *Focus on Exceptional Children, 44*(6), 1-16.

- Council for Exceptional Children. (2015). Specialty Set: Special Education Paraeducator. Retrieved June 21, 2020, from [https://exceptionalchildren.org/sites/default/files/2020-07/Specialty\\_Set\\_Special\\_Education\\_Paraeducator\\_Intervener\\_for\\_Individuals\\_With\\_Deaf\\_blindness\\_PDBI.pdf](https://exceptionalchildren.org/sites/default/files/2020-07/Specialty_Set_Special_Education_Paraeducator_Intervener_for_Individuals_With_Deaf_blindness_PDBI.pdf)
- Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. (pp. 384-432). Pearson.
- Douglas, S. N., Chapin, S. E., & Nolan, J. F. (2016). Special education teachers' experiences supporting and supervising paraeducators: Implications for special and general education settings. *Teacher Education and Special Education, 39*(1), 60-74. <https://doi.org/10.1177/0888406415616443>
- Douglas, S. N., Uitto, D. J., Reinfields, C.L., & D'agostino, S. (2019). A systematic review of paraprofessional training materials. *The Journal of Special Education, 52*(4), 195-207. <https://doi.org/10.1177/0022466918771707>
- Fisher, M., & Pleasants, S. L. (2011). Roles, responsibilities, and concerns of paraeducators. *Remedial and Special Education, 33*(5), 287-297. <https://doi.org/10.1177/0741932510397762>
- Friend, M. P., & Cook, L. (2017). Teams. *Interactions: Collaboration skills for school professionals* (pp. 238-259).
- French, N. K., & Pickett, A. L. (1997). Paraprofessionals in special education: Issues for teacher educators. *Teacher Education and Special Education, 20*(1), 61-73. <https://doi.org/10.1177/088840649702000107>
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). New York, NY: Teachers College Press.
- Ghere, G., & York-Barr, J. (2007). Paraprofessional turnover and retention in inclusive programs: Hidden costs and promising practices. *Remedial and Special Education, 28* (1), 21-32.
- Giangreco, M. F., Edelman, S. W., & Broer, S. M. (2003). Schoolwide planning to improve paraeducator supports. *Exceptional Children, 70*(1), 63-78. <https://doi.org/10.1177/001440290307000104>
- Idol, L. (1997). Key questions related to building collaborative and inclusive schools. *Journal of Learning Disabilities, 30*(4), 384-394. <https://doi.org/10.1177/002221949703000405>
- Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 et. seq. (2004).
- Klingner, J. K., & Boardman, A. G. (2011). Addressing the "research gap" in special education through mixed methods. *Learning Disability Quarterly, 34*(3), 208-218. <https://doi.org/10.1177/07319487111417559>
- No Child Left Behind Act of 2001. P.L. 107-110, 20 U.S.C. § 6319 (2002).
- Public Law 94-142, 20 USC § 1400 et. seq. (1975)
- Ramos, M. (2017). *Training for paraprofessionals working with special education students*. [Doctoral dissertation, California State University].

ProQuest Dissertations Publishing. Retrieved from <http://search.proquest.com/docview/1904509424/>

Richards, H. V., Brown, A. F., & Forde, T. B. (2007). Addressing diversity in schools: Culturally responsive pedagogy. *Teaching Exceptional Children, 39*(3), 64-68.

Thurlow, M. (2014). Instructional and assessment accommodations in the 21st century. In L. Florian *The SAGE handbook of special education* (Vol. 2, pp. 597-612). SAGE Publications Ltd.  
<http://dx.doi.org/10.4135/9781446282236.n37>

United States Census Bureau (2011). Race and Hispanic Origin and the 2010 Census. Retrieved July 12, 2020, from <https://www.census.gov/newsroom/blogs/random-samplings/2011/03/race-and-hispanic-origin-and-the-2010-census.html>

United States Department of Labor. (2020). *Teacher assistants*. U.S. Bureau of Labor Statistics. Retrieved from <https://www.bls.gov/ooh/education-training-and-library/teacher-assistants.htm>

U.S. Department of Education. (n.d.). *About IDEA*.  
<https://sites.ed.gov/idea/about-idea/>

Walker, V. L., Douglas, K. H., & Chung, Y. (2017). An evaluation of paraprofessionals' skills and training needs in supporting students with severe disabilities. *International Journal of Special Education, 32*(3), 460-471. <https://eric.ed.gov/?id=EJ1184152>