Question: "What does the research say about practices to train paraeducators, especially in the areas of early literacy, culturally responsive teaching, social and emotional learning, and behavioral/mental health?"

Response:
Thank you for your request to our Regional Educational Laboratory (REL) Reference Desk regarding evidence-based research on practices to train paraeducators, especially in the areas of early literacy, culturally responsive teaching, social and emotional learning, and behavioral/mental health. Ask A REL is a collaborative reference desk service provided by the 10 RELs that, by design, functions much in the same way as a technical reference library. Ask A REL provides references, referrals, and brief responses in the form of citations in response to questions about available education research.

Following an established REL Northwest research protocol, we conducted a search for evidence-based research on practices to train paraeducators, especially in the areas of early literacy, culturally responsive teaching, social and emotional learning, and behavioral/mental health. The sources included ERIC and other federally funded databases and organizations, research institutions, academic research databases, Google Scholar, and general Internet search engines. For more details, please see the methods section at the end of this document.

The research team has not evaluated the quality of the references and resources provided in this response; we offer them only for your reference. The search included the most commonly used research databases and search engines to produce the references presented here. References are listed in alphabetical order, not necessarily in order of relevance. The research references are not necessarily comprehensive and other relevant research references may exist. In addition to evidence-based, peer-reviewed research references, we have also included other resources that you may find useful. We provide only publicly available resources, unless there is a lack of such resources or an article is considered seminal in the topic area. If links to resources do not automatically open when clicked, copy the URL and paste it directly into a browser to access.

Research References
https://eric.ed.gov/?id=EJ1085667
From the abstract: “Schools serving communities with high rates of poverty face the profound challenge of meeting the needs of students who are often exposed to significant family and environmental stressors and trauma. Classroom staff are vital members of school communities who often work closely with students with the highest needs, but they are typically not provided with professional development opportunities to develop skills for social-emotional learning intervention. This study, conducted in three parts, describes (1) a needs assessment with classroom staff to determine their learning needs, (2) the development and implementation of a series of professional development workshops that incorporated findings from the needs assessment, and (3) post-workshop surveys and focus groups to assess the impact of the workshops and identify ongoing professional development needs. Findings include themes of continuing concern regarding learning, school climate, and the need to address stress and trauma in students' lives. Additionally, findings point to the workplace environment as creating barriers for classroom staff to implement new strategies and make use of the knowledge and skills gained in the workshops. Implications for building or enhancing a trauma-informed school community are discussed.”

Full text available at [https://journals.sagepub.com/doi/abs/10.1177/8756870517721693](https://journals.sagepub.com/doi/abs/10.1177/8756870517721693)

From the abstract: “The literature reveals that paraprofessionals are responsible for supporting students at risk of/with disabilities in a variety of academic and nonacademic tasks, yet they often lack appropriate training. Recent studies demonstrated the effectiveness of training for paraprofessionals to support students with disabilities in a meaningful way. In rural communities, such professional development and training opportunities are often unavailable despite the need. The purpose of this study was to explore the effects of a Universal Design for Learning (UDL)--based ongoing professional development model for paraprofessionals in rural general and special education classrooms. Specifically, this study sought to first examine the professional development needs among paraprofessionals in rural communities in the inland Northwest United States and second to provide effective and ongoing professional development opportunities. Findings from this study suggest that ongoing professional development models for paraprofessionals working with students with disabilities, based on needs assessments and consistent with UDL framework, have positive effects. Discussions of implications for future research and practice are included.”

From the abstract: “Federal law allows for paraprofessionals to provide instruction to students with developmental disabilities if they are adequately trained and supervised, but how to best provide this training and support remains unclear. In this paper, we update a systematic review of experimental studies that test the efficacy of paraprofessional-implemented interventions for students with developmental disabilities. We identified 36 studies published 2012–2019. An exciting development is that some researchers are shifting to testing teacher-implemented training, therefore beginning to address important questions about the feasibility of widespread implementation under real-world conditions. Based on findings across studies, recommendations for practice include that (a) paraprofessional roles be well-defined and focused on the implementation of evidence-based practices; (b) paraprofessional training should feature modeling, an implementation checklist, and performance feedback that is sustained over time; and (c) administrators should ensure that teachers have the time and support that are required for effective paraprofessional training and supervision.”

Retrieved from https://remix.berklee.edu/cgi/viewcontent.cgi?article=1071&context=able-articles

From the abstract: “Although paraprofessionals have become an increasingly integral part of special education services, most paraprofessionals lack training in evidence-based instructional strategies. We used a randomized controlled experimental design to examine the efficacy of a professional development training package and its individual components to equip 25 paraprofessionals to implement constant time delay. The effect of the training package on implementation fidelity was statistically significant and large in magnitude (d = 2.67; p < 0.001). Video modeling and coaching components were effective, although the effect of coaching alone (d = 2.23; p < 0.01) was larger than video modeling alone (d = 0.55; p = 0.18). Recommendations for further refining effective professional development opportunities for special education paraprofessionals are offered along with discussion of future research needs.”


From the abstract: “Many paraprofessionals provide instructional support to English Learners (ELs), yet little research exists regarding their preparedness. Research on paraprofessionals in special education suggests that paraprofessionals are often under-prepared for their responsibilities. This paper explores ongoing professional development (PD) for paraprofessionals using findings from a study of the first year of a 5-year PD initiative for 109 paraprofessionals who worked with ELs in a high-poverty, high-
minority urban district. Study findings are derived from the analysis of 57 participant reflection journals, interviews with 12 paraprofessional participants, a focus group with six PD providers, and de-identified observation and focus group data provided by the project’s external evaluator. We found that paraprofessionals wanted to be valued for their skills and were often frustrated by inconsistent work schedules. We also found that paraprofessionals learned useful strategies for working with ELs, yet few paraprofessionals actually reported implementing these strategies with students, suggesting the need for ongoing PD that includes teachers with paraprofessionals. Our findings have implications for any system that utilizes the services of paraprofessionals of ELs.”


*From the abstract:* “Paraeducators are on the front lines in special education settings, providing support to teachers and students with significant disabilities and specific health-care needs. The important role they play demands efficient and cost-effective training in core skills. This study utilized a multiple-baseline across behaviors design to evaluate a module-based training program for paraeducators targeting three instructional strategies that are commonly used in the education of students with a wide range of disabilities: praise, pause, and prompts. Results demonstrated variability in accurate and consistent use of these practices across participants after completion of the modules. Implications for future research and practice are discussed.”


Retrieved from https://journals.sagepub.com/eprint/DRQwfXPxp4v5rgBPiWmQ/full

*From the abstract:* “Paraprofessional training is essential for high quality special education services. Yet, educators may struggle to select appropriate materials for paraprofessional training. A review was conducted of 26 paraprofessional training materials using a rubric designed to evaluate the alignment with federal legislation and professional standards, and use of research-based adult learning methods. Results indicate many training materials aligned with federal legislation, but varied in their content focus, alignment with paraprofessional standards, and use of adult learning methods. Based on results of the review, three paraprofessional training materials reflected high quality training. Features of paraprofessional training materials, recommendations for practice, suggested improvements to training materials, limitations, and future research directions are discussed.”

From the abstract: “Although the literature suggests that it is feasible to train paraprofessionals to effectively implement social interventions for students with Autism Spectrum Disorders (ASD), there is a paucity of research that addresses the social validity of these programs. The present study replicated and extended previous research on paraprofessional training, as well as assessed social validity. Our results suggest that (a) paraprofessionals can be trained to fidelity using a package consisting of lecture and performance feedback, (b) there are collateral gains for paraprofessionals following the training, (c) the social interactions between students with ASD and typically developing peers improve following paraprofessional training, and (d) there is strong social validity in regard to acceptability of the training program. Limitations and future directions are discussed.”


From the abstract: “Coaching has been shown to improve the use of evidence-based instructional practices (EBIPs), but relatively few studies have been conducted to assess the effectiveness of coaching for adults belonging to minority groups and paraprofessionals in public elementary school settings. In this study, a multiple probe design across participants was used to assess the effectiveness of coaching and the provision of feedback on the use of prompting procedures and associated practices for three adults supporting three young students with autism in a self-contained elementary school setting. Results showed improved use of target practices and increased student engagement. More research is needed regarding the training and coaching of teaching teams and the use of evidence-based coaching and feedback practices to assist paraprofessionals in implementing EBIPs with small groups of students and in a variety of educational settings. [At time of submission to ERIC, this article was in press with "Focus on Autism and Other Developmental Disabilities.”]


From the abstract: “Inner-city schools located in high poverty communities often operate with insufficient resources to meet the educational needs of students. Community residents serving as paraeducators offer the dual benefits of expanding instructional capacity and fostering family-school relationships, provided they are appropriately prepared and incorporated with professional staff. This paper introduces a community partnership model for preparing members of the local community to serve as paraeducators and for fostering their working partnerships with professional school staff. A theoretical rationale demonstrating the significance of this model for students from
low-income and ethnic minority backgrounds is presented, and key elements in establishing it are discussed. The application of the community partnership model for preparing paraeducators is illustrated through a case example, the Reading Partners program. Future directions to empirically advance the community partnership model are presented."


*From the abstract:* “The present paper serves as the first systematic review of the training, methodologies, and outcomes reported in the professional development (PD) literature for paraprofessionals working with students with or at risk for externalizing behavior disorders. A total of 16 investigations including 332 paraprofessionals and 852 children and adolescents were reviewed and coded on 44 variables across four dimensions (i.e., PD components, intervention components, methodologies used, and outcomes reported). Strengths of the literature were inclusion of multicomponent PD, training on implementation, paraprofessional characteristics, and inter-rater reliability estimates. All studies reported paraprofessional and/or student outcomes; however, the details of PD components and interventions delivered varied. The majority of the studies used single-case designs or descriptive case studies to evaluate effectiveness. Weaknesses were lack of inclusion and exclusion criteria, student characteristics, adult experiential learning methods, monitoring of implementation fidelity, and use of statistical testing. Implications for research and practice are offered.”


*From the abstract:* “One-on-one reading interventions have long been supported in the research literature; however, research on effective use of paraprofessionals to deliver remedial reading tutoring in early elementary grades is limited. This best-evidence synthesis of the literature was conducted to identify key components associated with effective use of paraprofessionals as reading tutoring in grades K-3. Empirical studies were reviewed to identify best practices for administrators who are seeking to use paraprofessionals to improve students' reading outcomes. Our findings suggested that effective use of paraprofessionals was associated with: (1) extensive training in the delivery of a research-based reading intervention, (2) close and ongoing supervision of tutors and (3) access to scripted lessons with a strong phonics component.”

*From the abstract:* “Within middle school classrooms a diverse body of students require specialized instruction and science teachers with unique abilities to implement a reform-based science curriculum. To achieve the goal of success for all, students who are English language learners and with exceptionalities, such as learning disabilities, and emotional and behavioral disorders, are often assigned paraeducators to support science learning. However, professional development often focuses on immersing paraeducators through a broad model of curricular modifications and general support strategies. This study reports findings of a three-year professional development project for middle level science teachers and paraeducators designed to increase science conceptual understanding and inquiry skills development. The overarching goals were to: 1) increase middle level science teachers ability to explain science concepts, and 2) develop paraeducator's ability to directly assist in delivering inquiry-based science for students with Individualized Educational Plans identified with learning disabilities and emotional and behavioral disorders. A total of 13 science teachers collaborated with 11 paraeducators to identify practices impeding reform-based science instruction, address misconceptions, and modify delivery of instruction and assessment. The model for collaborating with science teachers enabled paraprofessionals to experience science as inquiry and expand their understanding of the vital role paraeducators have in supporting science learning. This mixed methods research design utilized data collected from the STEBI-A [and modified version for paraeducators], RTOP, and reflective journals to determine project impact. Analyses of the data reveal change in conceptual understanding, perceptions, and methodologies by which teachers and paraeducators collaborate to implement science instruction. The model demonstrates strategies for shifting the paradigm of paraeducators as silent partners to active participants in teaching inquiry-based science in middle schools.”


*From the abstract:* “As paraprofessionals gain more instructional responsibilities for individual students, feasible training strategies must be established to promote effective delivery of instruction. This train-the-trainer study was designed to teach paraprofessionals how to implement an evidence-based instructional practice under the direction of the classroom teacher. After receiving training from a university researcher, a special education teacher trained three paraprofessionals to implement constant time delay while teaching three students with multiple disabilities. The paraprofessional
training consisted of a workshop, video modeling, and coaching with performance feedback. A single-case multiple baseline across paraprofessionals design was used to evaluate the effectiveness of the teacher-delivered training package. All paraprofessionals implemented the systematic instructional procedures with high levels of fidelity and accuracy after training. The special education teacher and paraprofessionals shared their perceptions on the highly effective training and value of the study through social validity surveys. Implications and limitations of the study are discussed.”

http://eric.ed.gov/?id=EJ1070778  
Full text available at  
https://www.tandfonline.com/doi/abs/10.1080/09362835.2014.986606

*From the abstract:* “The purpose of this literature review is to describe intervention research studies in which paraprofessionals received training applicable to student with disabilities. Thirty studies were systematically reviewed to identify (a) characteristics of study participants and settings, (b) characteristics of paraprofessional training and paraprofessional-implemented intervention evaluated within these studies, (c) quality of the studies, and (d) implications for practice and areas for future research. Overall, paraprofessional training and subsequent intervention with students yielded positive outcomes. Training sessions typically were delivered by workshops, lectures, or classes and classroom-based training. However, numerous studies failed to demonstrate characteristics of study quality.”

**Additional Ask A RELs to Consult**

Ask A REL West at WestEd. (2015). *Could you provide information on the relationship between paraeducator training and student outcomes?* Retrieved from  
https://ies.ed.gov/ncee/edlabs/regions/west/Ask/Details/46

Ask A REL West at WestEd. (2019). *Could you provide research on the relationship between the use of paraprofessionals in K–3 reading instruction and student performance?* Retrieved from  
https://ies.ed.gov/ncee/edlabs/regions/west/Ask/Details/89

**Methods**

**Keywords and Search Strings**
The following keywords, subject headings, and search strings were used to search reference databases and other sources:

(Paraeducator OR paraprofessional OR “instructional aide” OR “teacher aide” OR “teacher assistant”)
“Professional development”

“Culturally responsive”

(“Social-emotional learning” OR “social and emotional learning”)

Behavioral

“Mental Health”

**Databases and Resources**
We searched ERIC for relevant resources. ERIC is a free online library of more than 1.6 million citations of education research sponsored by the Institute of Education Sciences (IES). Additionally, we searched Google Scholar and EBSCO databases (Academic Search Premier, Education Research Complete, and Professional Development Collection).

**Reference Search and Selection Criteria**
When we were searching and reviewing resources, we considered the following criteria:

*Date of publications:* This search and review included references and resources published in the last 11 years (since 2010).

*Search priorities of reference sources:* Search priority was given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, as well as academic databases, including ERIC, EBSCO databases, and Google Scholar.

*Methodology:* The following methodological priorities/considerations were given in the review and selection of the references:

- Study types: randomized control trials, quasi experiments, surveys, descriptive data analyses, literature reviews, and policy briefs, generally in this order
- Target population and samples: representativeness of the target population, sample size, and whether participants volunteered or were randomly selected
- Study duration
- Limitations and generalizability of the findings and conclusions