Systematic Review of the Impact of Professional Development/Education for Paraprofessionals to Learn the Essential Skills to Support Elementary School-Aged Children with High-Tech Touch Screen AAC Devices

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ABSTRACT

This study explores the impact of professional development programs on paraprofessionals supporting elementary school-aged children using high-tech AAC devices. Through a systematic review, it identifies key skills required for effective AAC support and evaluates program outcomes. Findings highlight promising interventions but underscore challenges in paraprofessional training and support. Strategies for improvement are discussed, emphasizing the need for ongoing research to ensure equitable access to education for all students.

INTRODUCTION

Augmentative and Alternative Communication (AAC) devices are essential for individuals with speech and language impairments, especially elementary school-aged children.

AAC devices refer to tools and strategies utilized by individuals with communication impairments to supplement or replace verbal speech. These devices encompass a wide range of technologies and techniques designed to support expressive and receptive communication for individuals with various needs.

High-tech AAC devices like Proloquo2Go and PredictableTM offer innovative solutions. Paraprofessionals play a vital role in supporting AAC users, but their proficiency remains an area of inquiry.

This study explores the impact of professional development programs for paraprofessionals in AAC support.

Figure 1. Low-Tech AAC Device
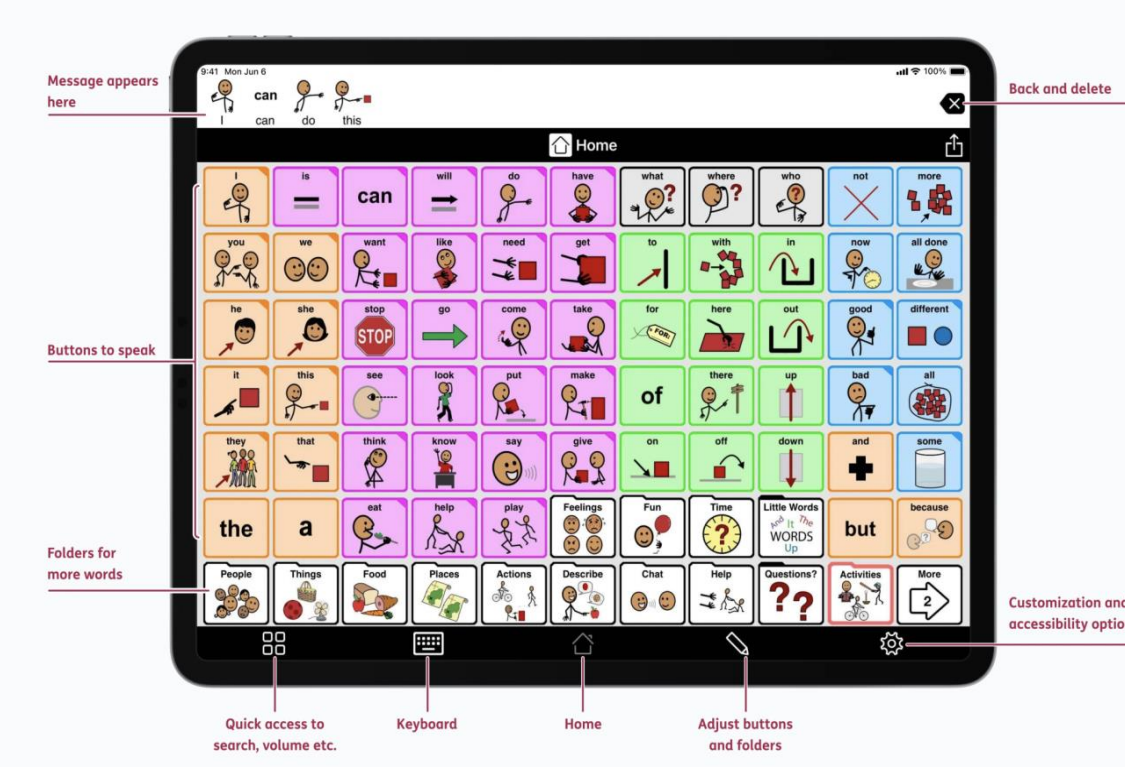Communication Book Image. (n.d.).
Pyramid Educational Consultants.

Figure 2. High-Tech AAC Device
Proloquo2Go Image. (n.d.-b).
AssistiveWare.

APPROACH

Data Collection:
o Qualitative data collected through systematic review of peer-reviewed articles.
o Comprehensive search across databases such as AshaWire, EBSCO, and Google Scholar using specific search terms.
o In total, twelve articles selected based on predefined inclusion and exclusion criteria.

Data Analysis:
o Thematic analysis employed to identify recurring patterns, themes, and key concepts.
o Precise coding of key concepts and themes across selected studies followed by iterative refinement.

Justification of Methodology:
o Qualitative synthesis chosen for its ability to examine diverse perspectives and identify gaps in knowledge.
o Methodology deemed appropriate for critically evaluating existing research and generating recommendations.

Limitations:
o Risk of publication bias and sampling bias acknowledged.
o Contextual factors such as geographic location and cultural differences may influence findings.

FINDINGS

Finding 1: AAC Interventions
AAC interventions utilizing speech-generating devices (SGDs) show promise in fostering communication skills among children with severe autism spectrum disorder (ASD). Systematic reviews suggest positive outcomes for students with significant intellectual disabilities and complex communication needs (CCNs) following AAC interventions in inclusive school settings.

Finding 2: Well-Tested AAC Interventions
AAC modeling interventions and coaching programs demonstrate effectiveness in fostering vocabulary, pragmatics, and syntax development among AAC users.

Finding 3: Lack of Paraprofessional Education
Paraprofessionals lack sufficient training and resources to effectively support AAC users in educational settings.

Finding 4: AAC Device Training for Paraprofessionals
Performance feedback and structured training methods improve paraprofessional proficiency in supporting individuals using AAC devices. On-site, in-service training by AAC experts is crucial for equipping educators and SLPs with necessary skills for AAC implementation.

CONCLUSIONS & RECOMMENDATIONS

• Professional development programs are essential for paraprofessionals supporting AAC users in elementary education.

• Further research is needed to refine AAC interventions and enhance training programs.

• Advocacy for comprehensive training initiatives is crucial for inclusive education practices

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