Training in Augmentative and Alternative Communication for Professionals in Educational Settings: A Review of the Literature, Family Perspectives, & Ideas to Bridge the Knowledge Gap

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Background & Goal

- Augmentative and alternative communication (AAC) is used by people who cannot rely on their verbal speech some or all of the time.
- AAC incorporates all communication modalities: vocalizations, gestures, manual signs, aided communication, speech generating devices.
- The Individuals with Disabilities Education Act of 1972 requires that assistive technology be considered in the development of an Individualized Education Program (IEP).
- Augmentative and Alternative Communication (AAC) devices fall under the umbrella of assistive technology.
- Over 2 million people in the United States use AAC (ASHA, N.D.).
- 71.2% of school-based speech-language pathologists (SLPs) regularly serve clients who use AAC (ASHA, 2022).
- **Goal:** Identify what the literature currently supports as barriers to successful AAC implementation and training ideas to bridge this gap in knowledge.

Methods

Databases
- InfoHawk+ (University of Iowa Libraries)
- Google Scholar

Search Terms
- "AAC in general education,"
- "education on AAC"
- "preservice education AAC"
- "AAC preservice training"

Exclusion Criteria
- Publish date prior to 2008
- Article found irrelevant after reading full abstract

Inclusion Process
- Abstracts of relevant articles read
- 11 studies published in 2008 or later selected, read in full, analyzed

Results

Lack of Training
- Many preservice programs offer little to no AAC content within courses and oftentimes these courses are not required.
- Although relevant coursework has increased in the past 15 years, there is still an immense need for an increase of specialized coursework focused on AAC usage and implementation for all preservice professionals who will be working with students who use AAC devices.

Barriers to Implementation
- Lack of interdisciplinary collaboration (e.g., SLPs, special educators, teachers)
- Lack of time (trainings, preparation, collaboration)
- Lack of knowledge/competence (at preservice level, limited hands-on experience, no formal trainings)

Family Perspectives
- Families play integral role in successful AAC implementation.
- Buy-in from all professionals and family members/caretakers is paramount.
- Families reported barriers to learning about AAC and how to use their child's device: Lack of trained professionals, inconsistent device use, difficulty promoting communication in the community, inadequate training on device operation and implementation strategies.

Outcomes after Trainings

Studies that implemented AAC training were reviewed, and the following was discovered:
- Increased self-efficacy after completing both an instructional course and fieldwork focused on AAC device knowledge and implementation (Kim & Choe, 2023)
- Increased confidence in the professionals' abilities to implement AAC strategies and create an inclusive classroom (Hanline et al., 2018)
- Increased quality and quantity of educational professionals' immediate implementation of low-tech AAC protocols (McCoy & McNaughton, 2018)

Concerningly, there were mixed results in the trainings' effectiveness of maintenance and generalization of the skills learned throughout the trainings (Costigan & Light, 2010; McCoy & McNaughton, 2018)

Ideas for AAC Training Implementation

Proposed ideas for AAC training moving forward:
- Training and knowledge of AAC devices should begin at the preservice level to lay a foundation for professionals who will work with students who use AAC devices.
- Fieldwork and/or hands-on training should occur at the preservice level provided by a strong clinical model (Brittlebank & Sowers, 2023).
- Training on AAC devices in the classroom should include foundational knowledge about AAC devices and different programs, and strategies for collaboration and communication skill development (Da Fonte & Boesch, 2016).
- Provide avenues and ideas to allow for regular collaboration with all members of students' educational team.
- Trainings should be ongoing for all individuals that work with students who use AAC to prevent loss of skills after training.

References available upon request.