



## OPEN ACCESS

## EDITED BY

Mats Granlund,  
Jönköping University, Sweden

## REVIEWED BY

Juan Bornman,  
University of Pretoria, South Africa  
Shakila Dada,  
University of Pretoria, South Africa

## \*CORRESPONDENCE

Lisa Erwin-Davidson  
✉ lerwin-davidson@fullerton.edu

RECEIVED 27 August 2024

ACCEPTED 07 October 2024

PUBLISHED 28 October 2024

## CITATION

Erwin-Davidson L, McKee A and  
O’Crowley E (2024) Improving family  
engagement during implementation of  
IEP-aided AAC services: an interdisciplinary  
US-based perspective.  
*Front. Educ.* 9:1487304.  
doi: 10.3389/feduc.2024.1487304

## COPYRIGHT

© 2024 Erwin-Davidson, McKee and  
O’Crowley. This is an open-access article  
distributed under the terms of the [Creative  
Commons Attribution License \(CC BY\)](#). The  
use, distribution or reproduction in other  
forums is permitted, provided the original  
author(s) and the copyright owner(s) are  
credited and that the original publication in  
this journal is cited, in accordance with  
accepted academic practice. No use,  
distribution or reproduction is permitted  
which does not comply with these terms.

# Improving family engagement during implementation of IEP-aided AAC services: an interdisciplinary US-based perspective

Lisa Erwin-Davidson<sup>1\*</sup>, Aja McKee<sup>2</sup> and Erin O’Crowley<sup>3</sup>

<sup>1</sup>Department of Communication Sciences and Disorders, California State University Fullerton, Fullerton, CA, United States, <sup>2</sup>Department of Special Education, California State University Fullerton, Fullerton, CA, United States, <sup>3</sup>Department of Psychology, California State University Fullerton, Fullerton, CA, United States

All IEP team members should find statements pointing to where and when the aided AAC system and accessible learning tools will be used. Classroom-based and research supported AAC learning strategies and teaching practices should be clearly listed, explained, and accessible to all team members. Aided AAC refers to a variety of communication tools that are portable and external to the body. Aided AAC ranges from paper-based picture communication cards, boards, binders, tablets, or digital smartphone applications to multifunctional/high-tech devices offering synthesized and digitized speech. Aided AAC allows students with CCN/ESNs to access speech or writing using any body part capable of performing voluntary and independent movement. Many electronic/high-tech aided AAC systems can store thousands of multilingual words, allowing seamless communication between home and school. Students with CCN/ESNs can also use hightech aided AAC with native keyboards as “alternative pencils” to practice spelling and early writing, thus allowing equitable academic access and opportunities to make progress on emergent literacy skills. High-tech/digital-aided AAC allows for the maturation of linguistic specificity and fuller participation in daily routines required for academic success. It is critical for students with CCN/ESNs to use high-tech aided AAC with ample vocabulary storage to increase opportunities for self-generation of complex and decontextualized messages for varied social interactions. Additionally, digital device platforms (e.g., iPads, other tablets, Smartphones) offer multiple.

## KEYWORDS

augmentative and alternative communication (AAC), families, individualized education program (IEP), special educators, complex communication needs (CCN), extensive support needs (ESN), speech language pathologist (SLP), interdisciplinary

## Introduction

The individualized educational program (IEP) is a foundational aspect of special education, playing a critical role for students with complex communication and extensive support needs (CCN/ESN). The requirement of families to be an integral part of the planning and implementation of the IEP has existed since the federal enactment of Public Law 94-142 in 1975 (Lusthaus et al., 1981; McAfee and Vergason, 1979; Yoshida et al., 1978). In turn, the advancement of assistive technology over the last 50 years, particularly portable/mobile technology (Light et al., 2019), has outpaced many families’ and educators’ knowledge and

skills on how to implement assistive technology to maximize a child's spoken and written communication for daily classroom learning (Quinn et al., 2023a).

For children with CCN/ESNs who are unable to (a) communicate effectively through speech; (b) experiment with letter sounds and easily produce letter-sound correspondences; (c) combine words to generate independent thoughts, ideas, or opinions; (d) interact with others necessary for classroom learning; and (e) access standard curricular materials without adaptations, then the IEP becomes a crucial shared document between family and educators to explicitly detail how both parties will support the child's progress toward more precise communication (Koppenhaver and Williams, 2010).

Thus, as a legal document, the IEP should clearly outline classroom implementation strategies for aided and unaided AAC systems with examples of how multimodal communication will be utilized. Additionally, the IEP should document the instructional time the SLP and educators deem sufficient for explicit language-literacy instruction using aided AAC (Benson-Goldberg and Erickson, 2024). All IEP team members should find statements pointing to where and when the aided AAC system and accessible learning tools will be used. Classroom-based and research-supported AAC learning strategies and teaching practices (Quinn et al., 2023b; Taub et al., 2017) should be clearly listed, explained, and accessible to all team members.

## Terms and definitions

Aided AAC refers to a variety of communication tools that are portable and external to the body. Aided AAC ranges from paper-based picture communication cards, boards, binders, tablets, or digital smartphone applications to multifunctional/high-tech devices offering synthesized and digitized speech. Aided AAC allows students with CCN/ESNs to access speech or writing using any body part capable of performing voluntary and independent movement. Many electronic/high-tech aided AAC systems can store thousands of multilingual words, allowing seamless communication between home and school. Students with CCN/ESNs can also use high-tech aided AAC with native keyboards as "alternative pencils" to practice spelling and early writing, thus allowing equitable academic access and opportunities to make progress on emergent literacy skills (Benson-Goldberg and Erickson, 2024; Light et al., 2021; Light and Kent-Walsh, 2003).

High-tech/digital-aided AAC allows for the maturation of linguistic specificity and fuller participation in daily routines required for academic success. It is critical for students with CCN/ESNs to use high-tech aided AAC with ample vocabulary storage to increase opportunities for self-generation of complex and decontextualized messages for varied social interactions. Additionally, digital device platforms (e.g., iPads, other tablets, Smartphones) offer multiple ways to personalize message options by using photos, videos, and emoticons, supporting peer and sibling interactions. When students can incorporate relevant words, terms, and images, evidence shows it may motivate them to initiate and maintain social interactions (Godzicki et al., 2013; Hynan et al., 2015). Many electronic/digital AAC systems offer features for children, families, and professionals to safely connect to online social messaging communities (e.g., Facebook), online learning communities (e.g., the nonprofit AAC

Academy), or sites that support artistic expression using aided AAC (e.g., Becky, BBC Scotland, Making Art using Eye-Gaze Technology).

Unaided AAC refers to communication that is part of the body, such as manual sign language, facial expressions, gestures, differentiated vocalizations, and verbalizations.

Multimodal communication (aided and unaided AAC) should be encouraged and honored in all interactions, but any communication method's success depends on sociocultural and contextual facilitators and barriers.

## Family and professional perspectives around IEPs and AAC

Despite numerous and historical recommendations for encouraging active parent participation in IEP services (Dabkowski, 2004), parents of students with CCN/ESN continue to report limited classroom placement opportunities, insufficient home-school collaboration, and negligible changes in goals or services when concerns are raised (Kurth et al., 2019). These barriers exist even though educators and speech-language pathologists (SLPs) recognize the benefits of parent participation and family-centered services. Numerous resources exist for helping these professionals run successful IEP meetings and fostering collaborative parent relationships (Diliberto and Brewer, 2012; Dixon, 2015; Smith and Krieg, 2022; Staples and Diliberto, 2010; Williams and Sánchez, 2013). However, evidence suggests that despite a desire for family-centered services for students with CCN/ESNs, there is a mismatch between the ideal and the reality due to family uniqueness, cultural differences, SLP scheduling, and high caseload demands (Mandak and Light, 2018).

Baker et al. (2016) highlight the need for schools to move away from disconnected surface solutions, such as inviting families to scheduled meetings, and instead focus on co-creating solutions for AAC implementation in classrooms. A research-supported conceptual model of family engagement (e.g., Garbacz et al., 2017) guides IEP teams to identify contextual variables, parent-child-teacher-peer relationships, and intrinsic student factors that impact learning outcomes. Schools must establish transparent family engagement models that track progress over time, such as Family-Check-Ups with Motivational Interviewing, which have increased engagement across diverse cultural contexts (Garbacz et al., 2017; Herman et al., 2013).

A family engagement model is particularly relevant for families with multiple languages and cultural contexts. Schools should offer flexible meeting options, such as video conferencing or scheduled participation during daily routines, to allow families to share contextual stressors. These strategies may break down systemic and attitudinal barriers (Kim and Soto, 2024; Romano and Chun, 2018), prevent device abandonment (Moorcroft et al., 2021), and address gaps in knowledge and skills (Biggs and Hacker, 2021).

Families of young children who require aided AAC may experience emotional responses related to AAC use despite agreeing to its inclusion in the IEP. Unexpressed feelings of uncertainty around AAC operation, modeling, or misunderstandings about its purpose may lead to mismatched expectations between school and home. Therefore, it is critical for

families and professionals to learn about AAC implementation together to ensure positive student outcomes (Gevarter et al., 2021).

## Barriers to AAC implementation in the IEP process

Families report facing challenges related to the implementation of aided AAC. In some situations, families were not informed about aided AAC (e.g., speech output devices or aided language applications on tablets) or were only informed about unaided AAC (e.g., basic sign language). In other situations, families were misinformed by educators and SLPs about the purpose of aided AAC. They heard persistent myths that negatively impacted a child's potential for learning language and literacy for school achievement (L. Erwin-Davidson, personal communication, 2021–2024). In addition, the following three key challenges were reported by families of children with CCN/ESNs:

- Zeitlin and Curcic (2014) found that out of 20 parents, most thought the IEP was not parent-friendly and used words such as “deficit-focused,” “overwhelming,” “meaningless,” and “legalistic.” Due to the perceived depersonalization of meetings, some parents did not refer back to the IEP document after their first IEP meeting, thereby missing important details about when and where aided AAC would be used, with whom, and for how much time per day.
- Families of children with moderate-to-severe disabilities whose primary/home language was not English cited challenges to IEP collaboration and school engagement (Lo, 2019; Olivos et al., 2010; Rossetti et al., 2018) due to (a) difficulty understanding spoken language during IEP meetings and the inability to fully understand associated written documentation about parental legal rights and resources (Lo, 2014; Rossetti et al., 2018), (b) intermittent or inaccurate interpretations and translations during IEP meetings (Lo, 2008, 2012), (c) differing views on disability along with various cultural mismatches when recommending home use of aided AAC, creating cultural conflicts (Mindel and John, 2018), (d) misunderstandings around a child's ability to learn and use two languages on an aided AAC system (Yu, 2018), and (e) pervasive AAC myths that were not dispelled by SLPs and educators (Smith et al., 2016). Furthermore, families were not shown how to add their home language to AAC systems or told it was possible.
- Families were not told that ineffective communication could negatively impact their child's academic learning, the formation of peer relationships, or participation in life. These comments are problematic for children whose speech cannot meet their daily communication needs, whether due to a permanent (Ganz et al., 2017) or temporary (Elsahar et al., 2019) condition.

## Detailed recommendations and suggested solutions

An IEP should drive student achievement by clearly delineating team members' goals, roles, and responsibilities as

outlined in federal mandates (Cosier and Ashby, 2016). When families and professionals work together to dispel AAC myths and align on shared goals, trust is built, and AAC implementation becomes more effective (Ko et al., 2021). Schools can support family participation by offering flexible meeting options, sharing recorded classroom videos, or demonstrating AAC strategies remotely.

Equally important is the need to emphasize the student's strengths and interests (Cosier et al., 2016). Families often express more satisfaction with IEPs focusing on strengths rather than deficits (Esquivel et al., 2008). The following strategies can enhance family-professional collaboration:

## Ways to foster and collaborate before the IEP and for planning aided AAC implementation

- Early communication: engage families 6–8 weeks before the IEP meeting to discuss goals and concerns (Diliberto and Brewer, 2012). Offer translation and interpretation services as needed.
- Clarify the IEP process: explain the IEP process clearly, especially for families new to the system. Provide clarity on what to expect from the meeting (Rossetti et al., 2018; Gershwin et al., 2023).
- Build relationships: establish positive partnerships by learning about the child's preferences and interests before the meeting (Zagona et al., 2019).
- Introduce the educational team: ensure that families meet and understand the roles of all staff involved with their child's education.
- Clarify AAC assessment and training: help families understand the AAC assessment process, including the roles of each team member. Offer ongoing training on AAC use and operational competence.
- Address internet connectivity issues: if internet connectivity is poor, resolve it before the IEP meeting to ensure the child can access assistive technology in adherence to federal mandates like the Americans with Disabilities Act (ADA).
- Regularly update the AAC plan: inform families about how and where their child will use AAC. Make updates to ensure features are appropriate for the child's developing academic and communication needs.
- Encourage family input: invite families to share their hopes and goals for their child and help translate these into IEP goals.
- Strength-based approach: encourage families to adopt a strength-based approach, enhancing interactions with peers and fostering communication and learning opportunities.

## Ways to foster collaboration and family education post-IEP and during aided AAC implementation

- Regular AAC demonstrations: schedule regular AAC demonstrations, including role-playing opportunities, to help families become comfortable with AAC systems.
- Avoid compliance-based use: emphasize natural language modeling (e.g., aided language input) during child-centered

activities instead of focusing on compliance or accuracy of AAC button selections.

- Use video recordings: provide video clips of AAC use during classroom sessions to demonstrate functional use (Calder, 2022).
- Culturally relevant customization: conduct assessments to ensure the AAC system reflects the family's cultural context. Assist families in customizing AAC pages with images, phrases, or symbols that align with their culture and preferences.
- Family support: offer empathy to families and support them in understanding that AAC complements spoken communication, providing an additional method of expression, not replacing speech.

## Discussion

Specific actions can be taken toward establishing a collaborative IEP-AAC implementation process. Over 30 years of research offers valuable insights into addressing IEP-AAC concerns when working with children with CCN/ESNs, such as conflict prevention and resolution practices (Mueller and Vick, 2018), family engagement and partnership solutions (Baker et al., 2016; Sweet et al., 2022), practice guidelines (Staples and Diliberto, 2010), and family-centered frameworks (Coburn et al., 2021). The SETT framework (Zabala, 2020) was designed as a capacity-building and family partnership model, helping students achieve communication and academic success.

When IEP team members recommend purchasing decisions for aided AAC systems and any associated mounting equipment, families and schools may benefit from hiring a neutral, third-party IEP meeting facilitator. These facilitators are skilled at promoting collaboration among families and professionals to develop meaningful IEPs that improve students' communication and learning outcomes. Facilitators may help establish meeting goals, set ground rules, create an environment conducive to collaboration, and manage seating placement or communication strategies to mitigate power imbalances. One study found that facilitated IEP meetings positively impacted meeting outcomes (Mueller and Vick, 2018).

## Conclusion

Addressing systemic barriers to implementing aided AAC in schools requires collaboration between educators, speech-language pathologists, and families. When school professionals provide families with precise, culturally and linguistically respectful guidelines for embedding aided AAC into family and school routines and offer regular hands-on learning opportunities, families of children with CCN/ESNs are more fully invested in their child's learning. The

proposed solutions stem from the experiences of both families and school personnel, aiming to establish realistic IEP goals and successful IEP-AAC services. These recommendations for engaging families with children with CCN/ESNs in aided AAC assessment and home-school implementation are designed to motivate and support families and promote their children's academic achievement.

## Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

## Author contributions

LE-D: Conceptualization, Writing – original draft, Writing – review & editing. AM: Conceptualization, Writing – original draft, Writing – review & editing. EOC: Writing – original draft.

## Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

## Acknowledgments

The authors are thankful to Lindsey Katherine Dippold at Heartful for proofreading the manuscript.

## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

## References

- Baker, T. L., Wise, J., Kelley, G., and Skiba, R. J. (2016). Identifying barriers: creating solutions to improve family engagement. *Sch. Community J.* 26, 161–184.
- Benson-Goldberg, S., and Erickson, K. (2024). Reported and enacted emergent literacy instruction: understanding young students with extensive support and complex communication needs opportunity to learn. *Top. Early Child. Spec. Educ.* 44, 6–19. doi: 10.1177/02711214241235404
- Biggs, E. E., and Hacker, R. E. (2021). Ecological systems for students who use AAC: stakeholders' views on factors impacting intervention and outcomes. *Res. Prac. Per. Sev. Disabil.* 46, 259–277. doi: 10.1177/1540796211052309
- Calder, C. (2022). True confessions of an AAC parent: AAC University Club, California State University.
- Coburn, K. L., Jung, S., Ousley, C. L., Sowers, D. J., Wendelken, M., and Wilkinson, K. M. (2021). Centering the family in their system: a framework to promote family-centered AAC services. *Augment. Altern. Commun.* 37, 229–240. doi: 10.1080/07434618.2021.1991471
- Cosier, M., and Ashby, C. (2016). Enacting change from within: Disability studies meets teaching and teacher education. New York: Peter Lang.
- Cosier, M., Gomez, A., McKee, A., and Beggs, S. (2016). "Three ways to use the common Core state standards to increase access to general education contexts for



- students with disabilities” in Enacting change from within: Disability studies meets teaching and teacher education. eds. M. Cosier and C. Ashby (New York, NY: Peter Lang), 61–81.
- Dabkowski, D. M. (2004). Encouraging active parent participation in IEP team meetings. *Teach. Except. Child.* 36, 34–39. doi: 10.1177/004005990403600304
- Diliberto, J. A., and Brewer, D. (2012). Six tips for successful IEP meetings. *Teach. Except. Child.* 44, 30–37. doi: 10.1177/004005991204400403
- Dixon, D. A. (2015). The IEP teachable moment: IEP meetings fly by in a flurry of goals and objectives. Here’s how to make messages to families count in that short window. *ASHA Leader* 20:26. doi: 10.1044/leader.SCM.20112015.26
- Elsahar, Y., Hu, S., Bouazza-Marouf, K., Kerr, D., and Mansor, A. (2019). Augmentative and alternative communication (AAC) advances: a review of configurations for individuals with a speech disability. *Sensors* 19:1911. doi: 10.3390/s19081911
- Esquivel, S. L., Ryan, C. S., and Bonner, M. (2008). Involved parents’ perceptions of their experiences in school-based team meetings. *J. Educ. Psychol. Consult.* 18, 234–258. doi: 10.1080/10474410802022589
- Ganz, J. B., Morin, K. L., Foster, M. J., Vannest, K. J., Genç Tosun, D., Gregori, E. V., et al. (2017). High-technology augmentative and alternative communication for individuals with intellectual and developmental disabilities and complex communication needs: a meta-analysis. *Augment. Altern. Commun.* 33, 224–238. doi: 10.1080/07434618.2017.1373855
- Garbacz, S. A., Herman, K. C., Thompson, A. M., and Reinke, W. M. (2017). Family engagement in education and intervention: implementation and evaluation to maximize family, school, and student outcomes. *J. Sch. Psychol.* 62, 1–10. doi: 10.1016/j.jsp.2017.04.002
- Gershwin, T., McKittrick, L., and Kilpatrick, A. (2023). The importance of following legal requirements: factors that lead to parent satisfaction with the individualized education program meeting process. *J. Educ. Psychol. Consult.* 33, 369–392. doi: 10.1080/10474412.2022.2145290
- Gevarter, C., Groll, M., Stone, E., and Medina Najar, A. (2021). A parent-implemented embedded AAC intervention for teaching navigational requests and other communicative functions to children with autism spectrum disorder. *Augment. Altern. Commun.* 37, 180–193. doi: 10.1080/07434618.2021.1946846
- Godzicki, L., Godzicki, N., Krofel, M., and Michaels, R. (2013). Increasing motivation and engagement in elementary and middle school students through technology-supported learning environments. Available at: <https://eric.ed.gov/?id=ED541343>
- Herman, K. C., Reinke, W. M., Frey, A., and Shepard, S. (2013). Motivational interviewing in schools: Strategies for engaging parents, teachers, and students. New York, NY: Springer.
- Hynan, A., Goldbart, J., and Murray, J. (2015). A grounded theory of internet and social media use by young people who use augmentative and alternative communication (AAC). *Disabil. Rehabil.* 37, 1559–1575. doi: 10.3109/09638288.2015.1056387
- Kim, J., and Soto, G. (2024). A comprehensive scoping review of caregivers’ experiences with augmentative and alternative communication and their collaboration with school professionals. *Lang. Speech Hear. Serv. Sch.* 55, 607–627. doi: 10.1044/2024\_LSHSS-23-00117
- Ko, D., Mawene, D., Roberts, K., and Hong, J. J. (2021). A systematic review of boundary-crossing partnerships in designing equity-oriented special education services for culturally and linguistically diverse students with disabilities. *Remedial Spec. Educ.* 42, 412–425. doi: 10.1177/0741932520983474
- Koppenhaver, D., and Williams, A. (2010). A conceptual review of writing research in augmentative and alternative communication. *Augment. Altern. Commun.* 26, 158–176. doi: 10.3109/07434618.2010.50560
- Kurth, J. A., McQuestion, J. A., Ruppert, A. L., Toews, S. G., Johnston, R., and McCabe, K. M. (2019). A description of parent input in IEP development through analysis IEP documents. *Intellect. Dev. Disabil.* 57, 485–498. doi: 10.1352/1934-9556-57.6.485
- Light, J., Barwise, A., Gardner, A. M., and Flynn, M. (2021). Personalized early AAC intervention to build language and literacy skills: a case study of a 3-year-old with complex communication needs. *Top. Lang. Disord.* 41, 209–231. doi: 10.1097/TL0.0000000000000254
- Light, J. C., and Kent-Walsh, J. (2003). Fostering emergent literacy for children who require AAC. *ASHA Leader* 8, 4–29. doi: 10.1044/leader.FTR1.08102003.4
- Light, J., McNaughton, D., Beukelman, D., Fager, S. K., Fried-Oken, M., Jakobs, T., et al. (2019). Challenges and opportunities in augmentative and alternative communication: research and technology development to enhance communication and participation for individuals with complex communication needs. *Augment. Altern. Commun.* 35, 1–12. doi: 10.1080/07434618.2018.1556732
- Lo, L. (2008). “Interactions between Chinese parents and special education professionals in IEP meetings” in Model minority myth revisited: An interdisciplinary approach to demystifying Asian American educational experiences. eds. G. Li and L. Wang (Scottsdale, Arizona: Information Age Publishing), 195–212.
- Lo, L. (2012). Demystifying the IEP process for diverse parents of children with disabilities. *Teach. Except. Child.* 44, 14–20. doi: 10.1177/004005991204400302
- Lo, L. (2014). Readability of individualized education programs. *Prev. Sch. Fail. Altern. Educ. Child. Youth* 58, 96–102. doi: 10.1080/1045988X.2013.782532
- Lo, L. (2019). “Community involvement: what supports are available for diverse families of students with disabilities?” in Family, school, and community partnerships for students with disabilities. eds. L. Lo and Y. Xu (Princeton NJ: Springer), 29–39.
- Lusthaus, C. S., Lusthaus, E. W., and Gibbs, H. (1981). Parents’ role in the decision process. *Except. Child.* 48, 256–257
- Mandak, K., and Light, J. (2018). Family-centered services for children with complex communication needs: the practices and beliefs of school-based speech-language pathologists. *Augment. Altern. Commun.* 34, 130–142. doi: 10.1080/07434618.2018.1438513
- McAfee, J. K., and Vergason, G. A. (1979). Parent involvement in the process of special education: establishing the new partnership. *Focus. Except. Child.* 11. doi: 10.17161/foec.v11i2.7147
- Mindel, M., and John, J. (2018). Bridging the school and home divide for culturally and linguistically diverse families using augmentative and alternative communication systems. *Perspec. ASHA Spec. Int. Groups* 3, 154–163. doi: 10.1044/persp3.SIG12.154
- Moorcroft, A., Allum, J., and Scarinci, N. (2021). Speech language pathologists’ responses to the rejection or abandonment of AAC systems. *Disabil. Rehabil.* 44, 4257–4265. doi: 10.1080/09638288.2021.1900412
- Mueller, T. G., and Vick, A. M. (2018). Rebuilding the family–professional partnership through facilitated individualized education program meetings: a conflict prevention and resolution practice. *J. Educ. Psychol. Consult.* 29, 99–127. doi: 10.1080/10474412.2018.1470934
- Olivos, E. M., Gallagher, R. J., and Aguilar, J. (2010). Fostering collaboration with culturally and linguistically diverse families of children with moderate to severe disabilities. *J. Educ. Psychol. Consult.* 20, 28–40. doi: 10.1080/10474410903535372
- Quinn, E. D., Atkins, K., and Cook, A. (2023a). Exploring classroom factors and augmentative and alternative communication use in qualitative interviews. *Am. J. Speech Lang. Pathol.* 32, 2158–2177. doi: 10.1044/2023\_AJSLP-23-00041
- Quinn, E. D., Kurin, K., Atkins, K. L., and Cook, A. (2023b). Identifying implementation strategies to increase augmentative and alternative communication adoption in early childhood classrooms: a qualitative study. *Lang. Speech Hear. Serv. Sch.* 54, 1136–1154. doi: 10.1044/2023\_LSHSS-22-00186
- Romano, N., and Chun, R. Y. S. (2018). Augmentative and alternative communication use: family and professionals’ perceptions of facilitators and barriers. *Codas* 30:e20170138. doi: 10.1590/2317-1782/20162017138
- Rossetti, Z., Redash, A., Sauer, J. S., Bui, O., Wen, Y., and Regensburger, D. (2018). Access, accountability, and advocacy: culturally and linguistically diverse families’ participation in IEP meetings. *Exceptionality* 28, 243–258. doi: 10.1080/09362835.2018.1480948
- Smith, A. L., Barton-Hulsey, A., and Nwosu, N. (2016). AAC and families: dispelling myths and empowering parents. *Perspec. ASHA Spec. Int. Groups* 1, 10–20. doi: 10.1044/persp1.SIG12.10
- Smith, Z. R., and Krieg, D. B. (2022). Barriers and recommendations from parents in rural areas: experiences with individualized education programs. *Rural Spec. Educ. Quar.* 41, 153–168. doi: 10.1177/87568705221092764
- Staples, K. E., and Diliberto, J. A. (2010). Guidelines for successful parent involvement: working with parents of students with disabilities. *Teach. Except. Child.* 42, 58–63. doi: 10.1177/004005991004200607
- Sweet, L., Jones, A., and Drummond, C. K. (2022). SETT: a framework for capacity building partnerships. In Proceedings of the North Central Section/annual section meeting. American Society for Engineering Education. North Central Section
- Taub, D. A., McCord, J. A., and Ryndak, D. L. (2017). Opportunities to learn for students with extensive support needs: a context of research-supported practices for all in general education classes. *J. Spec. Educ.* 51, 127–137. doi: 10.1177/0022466917696263
- Williams, T. T., and Sánchez, B. (2013). Identifying and decreasing barriers to parent involvement for inner-city parents. *Youth Soc.* 45, 54–74. doi: 10.1177/0044118X11409066
- Yoshida, R. K., Fenton, K. S., Kaufman, M. J., and Maxwell, J. P. (1978). Parental involvement in the special education pupil planning process: the school’s perspective. *Except. Child.* 44, 531–534. doi: 10.1177/001440297804400706
- Yu, B. (2018). Bilingualism and autism: a summary of current research and implications for augmentative and alternative communication practitioners. *Perspec. ASHA Spec. Int. Groups* 3, 146–153. doi: 10.1044/persp3.SIG12.146
- Zabala, J. S. (2020). “The SETT framework: a model for selection and use of assistive technology tools and more” in Assistive technology to support inclusive education. ed. D. Chambers, vol. 14 (Leeds, England: Emerald Publishing), 17–36.
- Zagona, A. L., Miller, A. L., Kurth, J. A., and Love, H. R. (2019). Parent perspectives on special education services: how do schools implement team decisions? *Sch. Community J.* 29, 105–128.
- Zeitlin, V. M., and Curcic, S. (2014). Parental voices on individualized education programs: ‘oh, IEP meeting tomorrow? Rum tonight!’. *Disabil. Soc.* 29, 373–387. doi: 10.1080/09687599.2013.776493