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Dismantling societal barriers that limit people who need or use AAC: lived experiences, key research findings, and future directions

Janice Light^a , Susan K. Fager^b , Jessica Gormley^b , Glenda Watson Hyatt^c  and Erik Jakobs^a 

^aThe Pennsylvania State University, University Park, PA, USA; ^bThe University of Nebraska Medical Center, Munroe Meyer Institute, Omaha, NE, USA; ^cQueen's University, Kingston, ON, Canada

ABSTRACT

Society generally, and communication partners specifically, wield substantial power in determining access to augmentative and alternative communication (AAC) tools and controlling the opportunities for participation afforded to people who cannot rely on speech alone to be heard and understood. This paper integrates the lived experiences of people who need or use AAC with key research findings related to policy, practice, technology, attitude, knowledge, and skill barriers in society that limit people who need or use AAC. Future research and technology development is urgently required to dismantle societal barriers to ensure access to AAC and meaningful opportunities to participate in all aspects of society – education, employment, healthcare, leisure, family, and community.

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AAC; societal barriers; policy; attitudes; technology; partner training

By estimate, more than 97 million people worldwide are unable to rely on speech alone to be heard and understood¹ including children and adults with autism, cerebral palsy, intellectual and developmental disabilities (IDD), amyotrophic lateral sclerosis (ALS), cerebral vascular accident, traumatic brain injury, and dementia, for example (Beukelman & Light, 2020). Without access to effective means of communication, these individuals are severely restricted from participation in all aspects of society: education, employment, healthcare, leisure, family, and community. Augmentative and alternative communication (AAC, e.g., gestures, body language, manual signs, communication boards with graphic symbols, mobile technologies with AAC apps) offers significant potential to enhance communication and increase participation. The research clearly documents the benefits of AAC and the successful participation of people who use AAC in a wide range of valued, meaningful activities, including: literacy learning (e.g., Koppenhaver et al., 1991); inclusive education (e.g., Iacono et al., 2022); higher education (e.g., Atanasoff et al., 1999); employment (e.g., McNaughton et al., 2001; 2002); volunteer community service (e.g., Babb et al., 2020; Trembath et al., 2010); leisure (e.g., Hajjar & McCarthy, 2022; King et al., 2014); and community living (e.g., Babb, Jung et al., 2021). However, this potential can only be realized if people who cannot rely on speech alone to be heard and understood have access to effective AAC and have meaningful opportunities to participate (Beukelman & Light, 2020).

Society generally, and communication partners specifically, wield substantial power in determining access to AAC tools and controlling opportunities for participation by people who need or use AAC. Too often people who cannot rely on speech alone are deprived of access to AAC with the argument that they are too young, too old, too disabled, or “too something” to benefit, thus depriving them of the power of communication (Light & McNaughton, 2012). Even when they have access to appropriate AAC, they may be deprived of meaningful opportunities to participate by their communication partners who may underestimate them, preempt them from opportunities to communicate, and dominate interactions when they do occur. Lack of access to AAC and meaningful opportunities to communicate has devastating effects for people who cannot rely on speech, jeopardizing outcomes in education, employment, healthcare, and community activities (e.g., Erickson & Geist, 2016; Hiersteiner et al., 2014; Hurtig et al., 2018; McNaughton & Bryen, 2002). Moreover, lack of access to AAC puts people at risk for adverse medical events (e.g., Sullivan & Harding, 2019) and crime, maltreatment, and neglect (Bryen et al., 2003) as well as social isolation and associated stress and trauma (e.g., Blasko, 2025, Crisp-Cooper, 2025; Koloni, 2025). These negative outcomes are not inevitable consequences of disability; rather they are examples of the devastating impact when people who cannot rely on speech to be heard and understood face barriers in society that limit their access to AAC and to meaningful opportunities

CONTACT Janice Light  JCL4@psu.edu  308 Ford Building, Penn State University, University Park, PA 16802, USA.

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¹We recognize the power and importance of the language that we use to talk about people who use AAC. We respect the right of every person to describe themselves in the ways that they choose. In this paper, we have used the terms proposed by CommunicationFIRST, a nonprofit organization in the United States with the mission to protect and advance the civil rights of people who use AAC. Specifically, we use the terms, people who need or use AAC, AAC users, and people who cannot rely on speech alone to be heard and understood. Please see <https://communicationfirst.org>.

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Table 1. Societal barriers and potential techniques to dismantle these barriers.

Societal barriers	Potential techniques to dismantle these barriers
Policy and practice barriers	<ul style="list-style-type: none"> • Collect demographic data across settings (e.g., education, healthcare); use data to track outcomes and policy compliance • Provide input to government and organizations on legislation, policies, and regulations • Educate judicial system • Provide training in disability rights • Advocate for change as required • Share advocacy toolkits • Bring litigation as required to ensure enforcement of policies and protections • Improve personnel preparation to improve AAC services
Technology barriers	<ul style="list-style-type: none"> • Advocate with mainstream technology developers for improved accessibility; demonstrate how accessibility benefits everyone • Ensure that people who use AAC are at the table when technologies are designed • Ensure AAC technologies are driven by the needs and skills of those who need AAC • Provide easy personalization of AAC technologies to support expression of individuality
Attitude barriers	<ul style="list-style-type: none"> • Increase public awareness • Increase visibility of people who use AAC in marketing • Promote inclusion of people who use AAC in all aspects of society • Facilitate opportunities to interact with people who use AAC in meaningful roles • Support opportunities to develop friendships • Provide mental health supports to deal with isolation and trauma
Knowledge and skill barriers	<ul style="list-style-type: none"> • Provide training for communication partners • Provide access to AAC toolkits and ensure opportunities for communication partners to practice skills • Empower AAC users to train their communication partners as desired; actively involve AAC users in developing training • Simplify demands of AAC technologies; integrate technology supports for partners • Support AAC mentor and peer support programs

Note: The societal barriers listed are those described by Beukelman and Light (2020) with the addition of technology barriers. The potential techniques to dismantle these barriers are drawn from the lived experiences of people who need or use AAC and the research literature as referenced in this paper; future research is required to evaluate these suggestions.

to communicate and participate. Dismantling these barriers must be a priority to effect meaningful change.

Although there have been studies that describe the societal barriers experienced by people who need or use AAC, there has been only limited research to investigate ways to dismantle these barriers. Several systematic reviews have found that most research in AAC focuses on intervention directed only at the individual who uses AAC; in comparison, only a small percentage of AAC studies focus on communication partners (e.g., Brittlebank et al., 2024; Holyfield et al., 2017) and, to our knowledge, none have focused on societal change. Given the substantial impact of communication partners specifically and society generally on the communication and participation of people who need or use AAC, the goals of this paper are: (1) to provide a narrative summary of societal barriers that integrates the lived experiences of people who need or use AAC with key research findings; and (2) to consider priorities for future research and technology development to dismantle societal barriers and better support the communication and participation of individuals who need or use AAC. This paper grew out of wide-ranging discussions among stakeholders (e.g., AAC users, families, service providers, researchers, technology developers, AAC manufacturers, policy makers) at the Future of AAC Research Summit² held

in May 2024 in Arlington, VA, US. In writing this paper, we started with the lived experiences of people who need or use AAC and integrated key research findings to further elucidate these experiences. The paper considers the five types of societal barriers described by Beukelman and Light (2020): policy, practice, attitude, knowledge, and skill barriers. To this list, we add technology barriers as well. The following sections describe each of the barriers based on lived experiences and research findings followed by discussion of potential techniques to dismantle the barrier. See Table 1 for a summary.

Policy and practice barriers and techniques to reduce these barriers

Policy barriers

Policy barriers are systemic barriers resulting from laws and regulations or the lack thereof (Beukelman & Light, 2020). Many countries have enacted policies and regulations to protect the rights of people with disabilities generally, including those who need or use AAC. It is beyond the scope of this paper to provide a comprehensive summary of the regulations around the globe; rather we note a few examples that ensure rights across different societal domains in various countries. For instance, in Australia, the Disability Discrimination Act Australia: Act No. 135 of 1992 prohibits discrimination and promotes equal rights, equal opportunity, and equal access in many areas of public life, including employment. In the United Kingdom (UK), the 2001 Special Educational Needs and Disability Act outlaws discrimination against students with disabilities in schools and colleges. In the US, the Americans with Disabilities Act (ADA) of 1990 requires health-care entities to provide full and equitable access to people with disabilities, among other protections. These regulations offer general protections to people with disabilities, but they typically fail to include specific protections for AAC. In 2006,

²The Future of AAC Research Summit was co-sponsored by the Rehabilitation Engineering Research Center on Augmentative and Alternative Communication (The RERC on AAC, funded by the National Institute on Disability, Independent Living, and Rehabilitation Research [NIDILRR]) in the United States (US) in collaboration with CommunicationFIRST, a US-based, disability-led, nonprofit organization run by AAC users to protect and advance the civil rights of people who cannot rely on speech alone to be heard and understood. The Future of AAC Research Summit was historic as it was the first conference that was planned, organized, and realized through the equitable, shared leadership of people who use AAC, a community advocate, and university-based researchers. More than half of the presenters at the Future of AAC Research Summit were people who use AAC; more than half of the two-day meeting was devoted to their perspectives, experiences, and priorities for future AAC research, technology development, professional training, and systems change.

the United Nations recognized the rights of people with disabilities internationally and specifically acknowledged the right to communication via augmentative and alternative modes, means, and formats and the right to reasonable accommodation to support communication and participation (Convention on the Rights of Persons with Disabilities [CRPD], United Nations, 2006). As of 2025, the CRPD has been ratified by 192 countries worldwide; however, the CRPD is not directly enforceable through the UN system.

Not all countries have protections for people with disabilities and, unfortunately, those that do have legal protections often do not enforce them. For example, Bob Williams (2023), Policy Director for CommunicationFIRST and a life-long AAC user, highlighted the lack of enforcement in his remarks to the US Department of Education: “laws ... are not now and have never been enforced to secure the full rights of students and others who require, yet are typically denied, access to effective, language-based AAC. This must change.” Unfortunately, many people who use AAC, their families, and service providers may not be familiar with the legal protections afforded to them or the avenues of recourse when these protections are not enforced; even if they are aware, they may not have the time and resources to pursue recourse. As a result, practices that circumvent or negate these protections persist. Alice Wong (2019), disability activist and an AAC user, emphasized the very real impact of policy barriers: “The struggle is REAL when it comes to surviving and remaining in the community. I feel very vulnerable and know that I’m one crisis or policy change away from institutionalization. This is the lived reality of a lot of disabled people like myself.”

Practice barriers

Much more common than actual policy barriers are practice barriers. Practice barriers are common procedures or conventions (not official policies) in education, employment, healthcare, etc. that restrict the communication and participation of individuals who use AAC (Beukelman & Light, 2020). Because of practice barriers, some individuals do not receive the AAC services that they require, negatively impacting their communication and participation. For example, data from the state of New Mexico in the US show that 78% of school-aged children with “highly unintelligible speech” have not been seen by a professional with expertise in AAC (Binger et al., 2021). Marginalized populations who need AAC may be particularly vulnerable to systemic barriers as they are subject to the compounding effects of multiple forms of inequality and oppression resulting from the intersectionality of race, gender, socioeconomic class, geographic isolation, disability status, and other factors. For example, a study in Canada reported that individuals in rural and remote areas faced greater barriers accessing AAC services than those in urban areas (Lackey et al., 2024). Post hoc analysis of a data set from the US found that Black preschoolers were reported to receive significantly less AAC intervention per week than their white peers (Pope et al., 2022). Cassandro Medrano, a Black mother of a son with autism who uses AAC, described her experience:

I can't help but think that race has something to do with why my voice is not listened to, even if I ask for something that's ordinary, like using the iPad at school. ...I wonder if I was another parent of a different race, if it would be addressed sooner. ...I don't know why African Americans, or minorities, or people with economic disadvantages get low priority when it comes to services. ...I'm a mom who loves my children. And so, I say please provide me with equal services, but it's just not happening. (Gevarter et al., 2023; p. 71)

Research to address policy and practice barriers

Despite the persistence of policy and practice barriers and their pervasive impact on the lives of people who need or use AAC, to our knowledge, there has been no research to investigate these barriers at a systemic level, to evaluate their effects on the lives of people who need or use AAC, and to explore the most effective approaches to realize system change. One factor that contributes to the persistence of policy and practice barriers is the lack of data on people who need or use AAC and limitations in the ways data are collected and aggregated. There have been some attempts to collect data on the prevalence, incidence, and demographics of people who need AAC in some areas of the world (e.g., Binger et al., 2021; Creer et al., 2016), but the available data are very limited. Without more precise, consistent, and comprehensive data, it is difficult to track the effects of policies and practices and to evaluate the impact of attempts to effect system change. Bob Williams (2023) explained the problem:

... [N]o uniform data is collected on the number and characteristics of young children, school students, and transition-age young people who need AAC. The practical reason for this is that youth who need AAC for effective communication ...have a vast range of significant, often multiple disabilities that are classified and subsumed under several ... disability categories that [the government] uses to collect data. Consequently, it is impossible to identify or track anything about kids who need AAC: whether they have or lack access to it, their demographics, the extent to which they are segregated, institutionalized, restrained, expelled, secluded, and abused. Nor is there any accurate, valid way to know what some school districts are doing in order to do right by them.

Glenda Watson Hyatt (2024), a researcher who uses AAC, explained: “Without statistics on how many people actually use AAC ..., it is extremely difficult to justify the need for further AAC research, or the need for funding for AAC-related programs and services.” Until AAC users are counted, they will not “count.”

Directions to reduce policy and practice barriers

Many people who use AAC have highlighted the urgent need for research and advocacy to ensure equitable and timely access to AAC services and opportunities to participate and exert autonomy (e.g., Williams, 2025; Zimmerman, 2025). Overcoming policy and practice barriers requires significant public education, advocacy, and, in some cases, litigation to enforce civil rights. Ironically, efforts to effect system change often need to extend to the justice system itself – the very

system that is intended to protect human rights. Law enforcement officers, lawyers, judges, and courts have minimal, if any, experience or training in AAC; concerted education is required to ensure that people who need or use AAC have equitable access to the justice system and that they are treated justly and fairly (e.g., refer to work by Bornman et al., 2018 and White et al., 2020, in South Africa).

Although changing and enforcing policies and practices is challenging, doing so has the potential to significantly impact the lives of many people who need AAC and their families, not only one individual. A range of organizations worldwide are focused on advocacy to protect the rights of people who need or use AAC (e.g., International Society for Augmentative and Alternative Communication, ISAAC, and its chapters in 17 countries and regions worldwide). Watson Hyatt (2024) highlighted the challenges of advocacy for people who use AAC and argued for collaborative efforts to amplify voices and maximize impact:

In our society, it is the loudest voices that get the resources. Yet, when communication or speech is the disability, advocacy is difficult. There is a desperate need to increase our volume so that our voices are heard. This is where allies are essential. And being an ally can be as simple as always asking, "Are AAC users at the table?" Are people who use AAC at the table when determining priorities for future research and development...? Are AAC users included in data-collecting surveys? In marketing and awareness campaigns? In funding for programs and services? In trainings for doctors, teachers, employers? Just ask, "How will AAC users be included?"

In these comments, Watson Hyatt underscored how important it is for all professionals to stand up with AAC users as allies to close the opportunity gap for people who need or use AAC. Preservice and inservice training in AAC must encompass not only AAC knowledge and skills, but also broader issues of disability justice to prepare professionals to serve as advocates as well as service providers (Blasko et al., 2025). People who use AAC need to lead the way in efforts to dismantle policy and practice barriers and it is essential to build capacity within the community of AAC users so that they are prepared to assume these leadership roles. Sellwood, McLeod, and Williams (AAC users) and their colleagues (2024) explained: "AAC as a cultural group is still young and we are finding our own voice that is separate and sometimes opposed to the now standard voices in the AAC community which are predominantly well-meaning researchers and clinicians" (p. 622). As McLeod (2025) concluded, "The only way we can have an anti-ableist future is for disabled people to lead the way."

Practice barriers related to professionals' lack of AAC competencies

One factor that contributes significantly to practice barriers is the lack of AAC competencies among service providers, leaving them ill-prepared to provide high-quality AAC services in a timely manner (Flores & Dada, 2025; McNaughton et al., 2019). This problem is a global one. For example, Tönsing and Dada (2016) reported that 92% of surveyed classroom teachers in special schools in South

Africa wanted more training in AAC. Freeman-Sanderson et al. (2023) reported AAC training was largely absent from most intensive care units in Australia and New Zealand, even though approximately three quarters of patients were not able to rely on speech to communicate. In a survey of practicing speech language pathologists (SLPs) in the US, almost 75% reported that they did not feel adequately prepared to provide AAC services (Assistive Technology Industry Association (ATIA), 2019). These data are especially troublesome since these professionals are charged with making decisions about AAC services and supports (Zimmerman, 2022).

Directions to improve professional training in AAC

Concerted attention is required to improve preservice and inservice training and build greater capacity in AAC among service providers. As one step to address these problems, the RERC on AAC has developed a wide range of online instructional materials (AAC Learning Center, 2025) on a wide range of topics (e.g., Alternative Access, Family-centered AAC Services, Literacy and AAC, Patient-Provider Communication). To date, more than 15,000 students at more than 105 universities across more than 15 countries worldwide have completed training through the AAC Learning Center (McNaughton et al., 2024). Preservice students who have completed the online training have demonstrated increased knowledge and skills in AAC and reported high levels of satisfaction (e.g., Mandak et al., 2020).

Beyond these efforts at the preservice level, there has also been research at the inservice level to increase competencies in AAC among practicing professionals around the world (e.g., Flores & Dada, 2025). For example, Caron et al. (2022) developed, implemented and evaluated the effects of an online module designed to prepare service providers to teach literacy skills (specifically, letter-sound correspondences) to children who use AAC; outcomes were very positive with more than 90% of the professionals demonstrating positive gains in the fidelity of instruction and 89% of the children who used AAC demonstrating increases in their letter sound knowledge as a result. Improving AAC practice in educational and healthcare settings is a daunting task given the breadth of knowledge and skills that must be acquired by service providers, the time constraints for doing so, and the challenges of changing entrenched myths and practices. Implementation science provides a key methodology to determine barriers to current AAC services and to identify strategies to support the uptake and implementation of evidence-based AAC in educational and healthcare settings (Binger et al., 2022).

Research is required to investigate the most effective instructional content, techniques, and delivery to build capacity in AAC services. People who use AAC must be actively involved in developing and implementing professional training as they have valuable expertise to share through their lived experiences (Blasko et al., 2025). In a study by Rackensperger et al. (2023), people who use AAC underscored the importance of sharing their lived experience and expertise with preservice students and service providers. One participant explained,

I present to professionals and, seriously, so many say that they have never actually interacted with someone who uses AAC except for their clients! I can't imagine trying to teach people to, I don't know, play the piano, if I'd never seen someone decent at playing piano before. And that metaphor doesn't begin to account for all the cultural nuance and ableism factoring in.

The United States Society for Augmentative and Alternative Communication (USSAAC) established the AAC Speaker Connection to connect people who use AAC with universities, schools, and conference organizers to share their stories and insights (Altschuler & Rackensperger, 2024) and to thus provide preservice and inservice professionals with insight into the lived experiences of people who need or use AAC.

Technology barriers and techniques to reduce these barriers

Access to mainstream and assistive technology is critical to full participation in society for people who need or use AAC. Technology barriers occur when access is limited due to cost, operational requirements, or learning demands, excluding people who need or use AAC from the potential benefits (e.g., Lackey et al., 2023; Williams & Holyfield, 2025).

Mainstream technology barriers

Technological advances have offered the potential for people who use AAC to participate more fully in education, employment, healthcare, e-commerce, leisure, and community life. Yet this potential cannot be fully realized unless people who use AAC actually have access to mainstream technologies. Unfortunately, many people struggle to access current technologies due to motor, sensory, perceptual, cognitive, linguistic, educational, and financial needs, resulting in a rapidly growing digital divide that further restricts the participation of people who need or use AAC. As Bob Williams (2025) explained: "Technology is never neutral. It can liberate, or isolate and exclude."

In recent years, mainstream technology developers worldwide have increased their attention to accessibility for people with disabilities³ (e.g., touch accommodation, speak selection, screen reader, live captioning, eye control, head tracking; see Apple, 2024; Google, 2024; Microsoft, 2024). Yet this work has not addressed the needs of those with high disability-related support needs, especially those with IDD (Treviranus, 2023). Recent developments in artificial intelligence (AI) offer tremendous potential for people with disabilities, but only if AI is built with the diversity of human experience in mind. Rua Williams (2023) explained that large language models depend on databases that reflect the artifacts of a biased culture. If AI models reflect ableist attitudes of the world, they will further isolate and exclude those who use AAC.

When the needs of people who use AAC are not supported by mainstream technology development, then retrofitting of these technologies is required to ensure accessibility,

resulting in significant delays in access for those who need or use AAC. This vicious cycle of retrofitting is unsustainable – especially as the rate of technology development accelerates, resulting in a vast and ever-changing array of user interfaces each with different operational requirements (e.g., more than 3 million apps on the Google store alone; Statistica, 2024) and a dizzying array of discrete motor acts required for operation (e.g., double click, click & hold, swipe left or right, scroll up or down, pinch), making access prohibitive for many who need or use AAC (e.g., Koester et al., 2025). The problem of retrofitting mainstream technology is compounded because only an extremely limited number of developers are working specifically to ensure access for people who need or use AAC (Light et al., 2019); they simply cannot keep up with demand.

Directions to reduce mainstream technology barriers

Equity in the future of technology depends heavily on moving accessibility features into the mainstream. Concerted advocacy with mainstream technology developers is required to ensure accessibility for people who need or use AAC. People who need or use AAC must be fully involved in new technology development to ensure that their needs are met and they are not further isolated from society (Blasko et al., 2025; Williams & Holyfield, 2025). Accessibility must be the default during development, considered from the start, not an afterthought to the process (Zhao, 2023). The most persuasive argument is that accommodations for people with disabilities can support greater ease of learning and use of technologies by all.

AAC assistive technology barriers

The challenge of equitable access is not limited to mainstream technologies – these challenges are also evident in the development of AAC assistive technologies. The advent of mobile technologies such as the iPad and the development of a wide array of AAC apps has brought AAC into the mainstream, reducing financial cost and social stigma, and resulting in greater democratization of access to AAC (McNaughton & Light, 2013). AAC manufacturers have made substantial strides in the development of a wide array of AAC tools with different vocabularies, representations, organizations, layouts, selection techniques, and outputs, yet these tools still impose substantial learning demands on the end users. A panel of AAC users and nondisabled designers summed up the problem: "While AAC technologies are often promoted as a miracle cure for speech disabilities, the substantial effort required to learn and use them effectively is often overlooked" (Sellwood et al., 2024, p. 622).

AAC technology developments have met the needs of some people who need AAC – but not all. Some people cannot make effective and efficient use of current AAC technologies due to design barriers. Furthermore, some AAC users have cautioned against the overemphasis on technology as a solution and the failure to recognize, respect, and support the diversity of communication strategies and techniques developed and used effectively by people who need AAC (Blasko et al., 2025). Sellwood, McLeod, and Williams (AAC

³These mainstream manufacturers note that not all accessibility features may be available in all regions worldwide.

users) and their colleagues (2024) cautioned against techno-ableism where technologies are positioned as a cure for the so-called problem of disability, rather than as assistive tools that may be useful to people with disabilities: “Disabled people need to be the ultimate authority in what technology works for them and what does not” (p.621).

Directions to address assistive technology barriers

Concerted research and development is required to ensure that all people have access to the fundamental right to communication, including work to develop and evaluate (a) alternative approaches that allow access for those who have restricted movement (e.g., Jin, 2025; Koester et al., 2025; Regan, 2025); (b) user interfaces that offer improved interaction for those who have vision, hearing, and/or motor disabilities (e.g., Koloni, 2025); (c) user interface designs that reduce learning demands and support ease of visual cognitive processing (e.g., Holyfield et al., 2025); (d) AAC systems that support multimodal communication (e.g., Blasko et al., 2025); and, (e) systems that support communication of emotion, code switching, and expression of identity across diverse languages and cultures (e.g., Koloni, 2025; King & Soto, 2022). People who need or use AAC must be the ones to lead the way in future technology development to ensure that it is inclusive and person-centered (Blasko et al., 2025). Sellwood et al. (2024) concluded: “...the future of AAC should not be dictated by new technologies but by principles of social inclusion and equity, ensuring that augmented communicators have a say in shaping their own futures” (p. 622).

Attitude barriers and techniques to reduce these barriers

Underlying the policy, practice, and technology barriers that are pervasive in society are what Beukelman and Light (2020) refer to as attitude barriers. Attitude barriers occur when people (either collectively or individually) are predisposed to act in ways that limit the communication and participation of people who use AAC (Beukelman & Light, 2020). Attitude barriers not only manifest themselves at a systemic level, but also at the level of individual communication partners encountered in daily life. Attitude barriers reflect ableism. Bob Williams argued:

When I got involved in the disability civil rights movement in the 1970s, folks used the term “attitudinal barriers.” It always struck me as trying to make nice. What we face every day is more than attitude barriers. We have to say the words and call it out for exactly what it is, deep and systemic prejudice and discrimination. All of which is grounded in the still widely held notion that those of us with little to no understandable speech have little intelligence, little understanding, little to say, and little to give. (McLeod et al., 2023, p. 192).

Most service providers and communication partners do not set out to impose ableist attitudes intentionally, but ableism is pervasive within society, and it is easy to adopt paternalistic attitudes. According to Jordyn Zimmerman (2022), an AAC user, ableism occurs “...when we pathologize people, and we assign them value. And then we decide if

they should communicate, *how* they should communicate, and if they are *worthy*, based on how we have just pathologized them.” As Zimmerman implied, ableism may manifest itself specifically as speechism, that is, prejudice and discrimination based on how, as well as whether, someone uses speech to express themselves (CommunicationFIRST, 2022). Speechism unfairly privileges the use of oral language over all other methods of communication.

Glenda Watson Hyatt (2024) recounted the following experience that illustrates societal attitudes toward people with disabilities generally and those who need or use AAC specifically:

One morning in high school forty-two years ago ... , the boys’ guidance counsellor, Mr. Kilpatrick, happened to be in the hallway and asked me, “Glenda, would you rather be able to walk or to talk?” ... The question I accepted as genuine interest and... benign. But then it hit me. That question pitted the two main aspects of my disability, my cerebral palsy, against one another. Which did I want least? Which is more tolerable? Which is more socially acceptable? In that moment of clarity, I realized I had been struggling with this internal battle my entire life. Surprisingly, my inability to walk and my inability to talk are not created equal. They are not equally understood, acknowledged, and accommodated. I am puzzled by society’s obsession with the ability to walk. That not being able to move about upright, on my own two feet, makes me less of a person, less worthy, or valuable. And worse, it is something that needs fixing or curing. A lack of physical access is frustrating and inconvenient. And, in 2024, there is no excuse for it. However, I find the inability to clearly communicate verbally, far more disabling. For some reason, which continues to baffle me, the majority of our society links the ability to speak with the ability to hear and to understand. Forty-two years ago to Mr. Kirkpatrick’s question, I immediately responded, “Talk”... and scooted off to class unfazed. Today, forty-two years later, my response would still be, “Talk.” However, this time I am far from unfazed. Today, I am no longer that somewhat naïve teenager. Today, I am extremely concerned and frustrated. I now know how people who use AAC face pervasive attitude barriers in society, and how these attitudes are like hitting brick walls throughout our lives. These barriers are caused by deeply rooted assumptions about us, that we can’t hear, that we don’t understand, that we have nothing to say, that we have nothing to contribute to society, to name but a few. ...These attitudinal barriers exist in every sector of our society, including education, healthcare, employment, retail, transportation, government, and the list continues. These widely held assumptions result from a lack of public awareness and knowledge. Without public awareness and understanding of AAC users, this results in us being systemically ignored and excluded.

Attitude barriers lead to what Blasko (2025), a college student who uses AAC, referred to as systemic isolation of people who use AAC. Given the fundamental human longing for connection with others, this isolation in turn can result in trauma, especially when people are denied access to AAC (Koloni, 2025). “This problem is not just about disabled individuals feeling lonely and seeking more social interaction ... We now know that social isolation and loneliness significantly impact both physical and mental health.” (Blasko, 2024).

Exclusion and discrimination are not inevitable consequences of disability; rather they are the result of pervasive attitude barriers in society generally and within communication partners specifically. As Bob Williams (2000) wrote:

Why are so many people consigned to lead lives of needless dependence and silence? Not because we lack the funds, nor because we lack the federal policy mandates needed to gain access to those funds. Rather many people lead lives of silence because many others still find it difficult to believe that people with speech disabilities like my own have anything to say or contributions to make. (p. 250).

Exclusion occurs in countless ways, some of which are subtle and others of which are more overt, but ultimately the cumulative effects perpetuate the cycle (e.g., Watson Hyatt, 2024).

Research on attitude barriers

The research on attitudes toward people who use AAC and/or AAC systems has largely reported positive or neutral attitudes toward AAC and people who use AAC (e.g., McCarthy & Light, 2005); however, the studies have relied on self-report, and such measures are notoriously vulnerable to social expectations. Ultimately, what is most important is the relationship between attitudes and actual actions directed toward people who need or use AAC – as it is these actions that may isolate people who use AAC, impact their access to AAC, and define their opportunities to communicate. A vicious cycle persists: negative attitudes in society may breed social isolation of people who need AAC, which in turn may perpetuate negative attitudes because of the limited opportunities for meaningful interactions (Blasko, 2025).

Only a few studies have investigated the relationship between attitudes and the actions of communication partners. For example, a recent study by Murray and Hopf (2022) found that the attitudes of patients, families, and healthcare providers toward AAC impacted its use in acute care settings. Only a few studies have considered techniques to change attitudes; for example, McCarthy et al. (2010) found that people who had read personal narratives written by people who use AAC demonstrated more positive attitudes toward AAC users than those who had not. Sevcik et al. (2021) focused on research and practice strategies for discrediting the myths surrounding AAC services and supports with very young children including quotes and examples from families of young children with disabilities.

To date, there has also been limited research to address the social isolation that may result from attitude barriers. Many people who need or use AAC report that making and keeping friends is one of the greatest challenges of their lives (e.g., Batorowicz et al., 2014; Blasko, 2025; Cooper et al., 2009). For example, Andzik et al. (2016) found that, on average, only 3% of the interactions of children who used AAC at school were with peers and 35% of the children who used AAC never interacted with peers. These problems persist into adulthood: for example, 45% of adults with developmental disabilities who need AAC in the US reported that they do not have friends (Hiersteiner et al., 2014). Adults with acquired conditions also report social isolation (e.g., Lanyon et al., 2018). Despite the critical importance of reducing social isolation and building meaningful relationships, research shows that most SLPs do not consider friendship outcomes in their practice (Therrien et al., 2023).

Directions to reduce attitude barriers

Research is urgently required to determine effective techniques to reduce attitudinal barriers at both the systemic level and the individual level. The most promising technique for changing attitudes appears to be providing meaningful opportunities for people to interact with those who have disabilities (e.g., Armstrong et al., 2017), underscoring the importance of the inclusion of people who use AAC in all life activities. To date, there has been only minimal research to investigate factors that support successful inclusion of children and adults who need or use AAC (McNaughton et al., 2025). Simply including them physically is not sufficient; inclusion must foster positive, meaningful, social relationships to reduce isolation and support belonging (McNaughton et al., 2025). Future research is also urgently required to address the profound social isolation experienced by people who use AAC and the resulting trauma.

Knowledge and skill barriers and techniques to reduce these barriers

Knowledge and skill barriers⁴ refer to limitations that arise when communication partners lack information about AAC and use interaction strategies that limit the communication of individuals who need or use AAC (Beukelman & Light, 2020). Most communication partners have limited training and experience in AAC. Without training, adult communication partners often underestimate individuals who need or use AAC, fail to recognize their communication attempts, dominate interactions, and preempt communication opportunities; as a result, people who need or use AAC often have difficulty getting into the interaction, staying in, and participating in meaningful ways (e.g., Kent-Walsh et al., 2015; Simmons-Mackie et al., 2010, 2016). Furthermore, many individuals who use AAC must rely on others to set up their AAC technology; however, most partners are not trained to do so correctly (Koester et al., 2025). The lack of knowledge and skills among communication partners can have profound negative consequences for people who need or use AAC, restricting their access to AAC, undermining their communication effectiveness, and limiting their overall participation.

“Communication is a collaboration – a two-way street – where we work together to exchange, express, receive, and understand information. When we view communication like this, telling one member of the conversation that they have a “deficit” doesn’t make much sense” (CommunicationFIRST, 2023). The success or failure of any interaction is dependent upon not only the person who needs or uses AAC, but also the communication partner (Kent-Walsh et al., 2015). Yet, despite the critical role of communication partners in determining the success (or failure) of communication, as noted earlier, most research has focused on intervention directed to

⁴Knowledge and skill barriers are grouped together for discussion as they are closely related; they typically have similar sources and potential solutions. This section focuses specifically on knowledge and skills barriers related to communication partners that are not AAC service providers; barriers resulting from service providers’ lack of AAC competencies are discussed earlier under practice barriers.

the individual who uses AAC with only a small percentage of studies that have focused on communication partners (e.g., Brittlebank et al., 2024; Holyfield et al., 2017). However, when research targets communication partners, results are very powerful.

Research on instruction for communication partners

The research consistently demonstrates that: (a) communication partners can be taught to use effective interaction strategies (e.g., waiting to allow the individual time to communicate); (b) doing so significantly increases the communication of individuals who need or use AAC, reduces frustration, and improves the success of interactions (e.g., Kent-Walsh et al., 2015); and (c) training communication partners requires only minimal time (e.g., Gormley et al., 2023; McCarty & Light, 2025a, 2025b).

Communication partners

The positive effects of instruction for communication partners have been demonstrated across a wide range of partners, including family (e.g., Douglas et al., 2021; Kent-Walsh et al., 2010), paraprofessionals (e.g., Binger et al., 2010; Douglas et al., 2013), teachers (e.g., Muttiah et al., 2018), volunteers (e.g., Hajjar et al., 2020), and healthcare providers (e.g., Gormley et al., 2023; Happ et al., 2014) who interact with children or adults with a range of developmental or acquired conditions (e.g., autism, IDD, cerebral palsy, multiple disabilities, aphasia, ALS, dementia) who use a variety of AAC systems (e.g., mobile technology with AAC apps, communication boards with graphic symbols, manual signs) within a range of environments, including home, school, community, or healthcare settings (e.g., see scoping reviews, systematic reviews, & meta-analyses by Burton et al., 2025; Eggenberger et al., 2013; Kent-Walsh et al., 2015; LaValley et al., 2024; Shire & Jones, 2015; Simmons-Mackie et al., 2010, 2016).

Most research has focused on training adult partners, typically ones in higher status relationships. However, there are a number of studies that have evaluated the effects of teaching peers to interact with children who use AAC, and these studies demonstrate positive results (e.g., Chung & Carter, 2013; Ronski et al., 1994; Therrien et al., 2016; Thiemann-Bourque et al., 2018). Recently, some researchers have focused on fostering equal status relationships between children who use AAC and their peers. These studies have leveraged shared activities (e.g., books, videos) with accessible communication supports to promote social interaction and have focused on teaching both the peer and the individual who uses AAC together with positive results on communication and satisfaction (e.g., Babb et al., 2021; Therrien & Light, 2016, 2018).

In contrast to children with developmental disabilities, adults with acquired conditions usually have a prior history of friendships. To date, there has been limited research to support adults with acquired conditions in building relationships with new or existing friends, although several approaches (e.g., peer befriending, community groups) have been suggested as targets for future research (e.g., Azios et al., 2022; Lanyon et al., 2018).

Knowledge and skills targeted in partner instruction

Some trainings focus on teaching communication partners about disability and AAC systems. Although these trainings may increase knowledge, they do not necessarily result in more successful communication with people who use AAC. As a result, partner trainings often target skills to support positive interactions (e.g., providing access to AAC, modeling AAC, providing time to communicate, responding contingently; e.g., Happ et al., 2014; Kent-Walsh et al., 2015). Sometimes studies target a sequence of partner skills, known as a strategy (Kent-Walsh & McNaughton, 2005), typically represented by an acronym to facilitate recall. For example, Binger et al. (2010) successfully taught the RAAP strategy (read, ask questions, answer, prompt) and Douglas et al. (2013) taught the PoWR strategy (i.e., provide opportunities for communication, wait, respond) to support the communication of children who need or use AAC. Partner training is also effective to support adults with acquired conditions: for example, Happ et al. (2014) developed the SPEACS (Study of Patient-Nurse Effectiveness with Assisted Communication Strategies) program to support nurse-patient communication in intensive care; and Burns et al. (2017) developed the FRAME strategy (i.e., familiarize, reduce rate, assist with message construction, mixed communication modalities, engage the patient first) to support patient-provider communication with individuals with aphasia or dysarthria.

Some trainings for communication partners have incorporated checklists of the skills targeted (e.g., Gormley et al., 2023; McCarty & Light, 2025a, 2025b). Checklists have been implemented successfully in healthcare settings to enhance memory for key procedures, thereby increasing compliance and decreasing error (e.g., Gormley et al., 2023). They appear to be very beneficial for communication partners as well to remind them of skills to be used with people who need or use AAC (e.g., Gormley et al., 2023; McCarty & Light, 2025a, 2025b).

Instructional techniques

To date, there has been no comparative research to determine the most effective instructional techniques to teach communication partners. Strategy instruction is one approach that has been found to be effective with a range of partners (e.g., parents, educational assistants, peers, healthcare providers). It incorporates the following components: (1) describe the target strategy and explain its benefits; (2) model (demonstrate) the steps of the strategy; (3) rehearse the steps orally; (4) practice the steps during role plays with feedback; and (5) practice using the strategy with the AAC user in daily activities with feedback and gradual fading of instructor cues (Kent-Walsh & McNaughton, 2005). Ultimately, different techniques may be required depending on the context and the specific communication partners.

Instructional formats and technology supports to teach communication partners

Sometimes training for communication partners is delivered via a lecture format and may incorporate discussion, practical

exercises, or video examples. More recently, with the increased focus on teaching interaction strategies, instruction has been delivered using a range of instructional formats including one-on-one in-person instruction, synchronous teletraining, asynchronous online training, mobile training, or short, just-in-time (JIT) trainings.

In-person, one-on-one instruction or coaching is effective in teaching the use of a range of strategies (e.g., Binger et al., 2010; Hansen et al., 2022; Holm et al., 2020). With this approach, instruction can be easily personalized and opportunities provided to practice with immediate feedback to enhance learning and retention. In recent years, there has been increased interest in telepractice (i.e., remote delivery of services using Internet technology), and evidence is emerging of the effectiveness and efficiency of telepractice to teach communication partners, including parents, paraprofessionals, and service providers (e.g., Douglas et al., 2021; McCarty & Light, 2025a). This approach reduces the time and cost of travel, making it more accessible to families and other communication partners. Moreover, it allows partners to practice within the natural environments in which they will need to use the strategies. Telepractice may be especially powerful in AAC since many may reside in areas that are not in close proximity to specialized AAC services, thus limiting in-person training opportunities. Unfortunately, with both in-person and telepractice, training is only available when the service provider is accessible, and the provider must repeat the training with each new communication partner.

To overcome these limitations, there has been increased interest in developing online asynchronous training for communication partners, sometimes supplemented with in-person coaching. For example, Douglas et al. (2013) developed and evaluated online instruction to teach paraprofessionals to use the PoWR strategy with young children; Trotta et al. (2020) evaluated the effects of the SPEACS-2 program, delivered online to nurses in five intensive care units. Online asynchronous instruction endures long term so that it can be accessed repeatedly as communication partners change or need refreshers. However, by necessity, online asynchronous training is not personalized, and opportunities to practice strategies may be more limited. Moreover, it can be time-consuming to create online instructional modules, and many service providers may not have the expertise in instructional design to do so effectively.

In recent years, researchers have started to investigate the effects of mobile technologies to deliver instruction and support to communication partners. Bornman et al. (2020) found that both caregivers and service providers were positive about the potential of mobile technology to support early communication skills for children with developmental disabilities in South Africa, with caregivers highlighting the potential for increased knowledge and skills, greater empowerment, and reduced costs for intervention while service providers highlighted the potential for enhanced family involvement, increased intervention intensity, and expanded reach of services. Ronski et al. (2023) explored the effects of such an app in South Africa and found that more than 80% of the caregivers used the app over an extended number of sessions and of these caregivers, more than half reported that

their children moved from presymbolic to symbolic forms of communication.

Recently, AAC researchers have also investigated the effects of just-in-time (JIT) training (i.e., mobile training designed to deliver short, focused instruction in specific skills so that they are immediately implementable at the point of need; Wylie, 2022). Unfortunately, most individuals who need or use AAC, their families, and service providers lack expertise in designing effective JIT training. To address this unmet need, the RERC on AAC is developing and evaluating an app (INSTRUCT) to support the quick and easy creation of JIT trainings and their deployment to teach communication partners skills at the point of need (Light et al., 2024). The app guides the user to: (1) identify the communication partners to be trained; (2) describe the strategy for these partners to learn and state why it is important; (3) make a checklist of the steps of the strategy; (4) provide a video demonstration of each step; and (5) review the entire strategy and describe when it should be used by communication partners. Several studies have established the positive benefits of the INSTRUCT app: for example, McCarty and Light (2025b) used the app to teach elementary school-aged peers to provide opportunities for students with multiple disabilities including cortical visual impairment to communicate choices during play activities; and Sowers et al. (2025) used the app to teach school staff to support communication with students with cerebral palsy using AAC systems with eye tracking (refer to the AAC Learning Center, 2025, for a library of freely available INSTRUCT trainings).

Ultimately, communication partner training is intended to address the barriers confronted by people who need or use AAC and it is essential that they are empowered to lead these trainings based on their own experiences, preferences, and needs. The recent development of the INSTRUCT app is intended to overcome technology barriers and provide accessible tools to support individuals who need or use AAC in developing personalized trainings for use in home, school, work, healthcare, or community settings.

Mentoring of AAC users by AAC users to address societal barriers

Another powerful way to prepare individuals who use AAC to deal with societal barriers is through mentoring by other AAC users. There are several examples of mentoring programs that have linked children, adolescents, or adults who have developmental disabilities with adult mentors who also use AAC with positive outcomes (e.g., Ballin et al., 2012; Grace et al., 2019; Light et al., 2007), typically via some form of digital communication (e.g., email, social media, teleconferencing). Adults who use AAC may be particularly well positioned to provide mentoring support given their extensive lived experiences negotiating societal barriers. For example, proteges in the study by Light et al. (2007) discussed a wide range of societal barriers with their mentors, including attitude barriers in society, lack of knowledgeable service providers, low expectations of others, and social isolation. Both mentors and proteges reported high levels of satisfaction (Light et al., 2007).

Research suggests that mentoring and peer support may also be effective with adults with acquired conditions such as ALS or aphasia (e.g., Gerritzen et al., 2024; Kurfess et al., 2023), although none of the studies to date have focused specifically on individuals who need or use AAC. Overall, mentoring and peer support may be effective for individuals with developmental or acquired conditions and may help in easing transitions, overcoming barriers, solving problems, and building confidence and resilience. Michael Williams (1996), an AAC user and member of the AAC Mentor Project research team, concluded: "Falling in love, starting a new school, starting a new job, changing communities or homes, mastering a skill, learning a new piece of assistive technology – all are easier and more fun if the experience can be shared with and guided by someone who has 'been there.'"

Priorities for future research and technology development

Given the prevalence of societal barriers, their profound impact on people who use AAC, and the lack of research to date, future research and technology development to combat ableism and dismantle these barriers must be a priority. Ironically, many current approaches to research and development have limited, if any, involvement of people who use AAC, resulting in a serious disconnect between their lived experiences and funded research and development (Walsh et al., 2024). Future R&D must be inclusive; it must involve people who need or use AAC as leaders and equitable partners if we are to effectively reduce societal barriers (Blasko et al., 2025). As a field, we need to dedicate resources to build greater leadership capacity in the community of AAC users to lead inclusive research, technology development, training, and advocacy activities and we need to build competencies in inclusive research methods among graduate students and current AAC researchers, technology developers, and university faculty.

Future research priorities

Future research priorities include studies to reduce systemic policy and practice barriers, including studies to (a) investigate the impact of policies and practices on the lives of those who need AAC and their families; (b) evaluate effective techniques to effect positive system change; (c) determine strategies to reduce disparities in AAC services; and (d) collect system-wide data to identify those who need AAC, track their access to AAC services and supports, and monitor outcomes. Studies are also required to specifically address the practice barriers that result from service providers' lack of AAC competencies, including studies to (a) investigate techniques to improve AAC preservice and inservice training of service providers; (b) explore alternative models to ensure the timely delivery of effective evidence-based AAC services; and (c) evaluate the effects of inclusive training that includes people who need or use AAC as partners in personnel preparation. Research is also required to (a) investigate the effects of attitude barriers at a systemic and individual level; (b)

determine techniques to reduce ableism; (c) investigate the impact of social isolation on the physical and mental health of people who use AAC; (d) determine strategies to reduce social isolation and support community belonging; and (e) evaluate the effects of mentor programs to support people who need or use AAC in addressing societal barriers. Finally, research is required to reduce knowledge and skill barriers, including studies to (a) evaluate the most effective techniques to teach communication partners the necessary skills to interact effectively with people who use AAC; (b) conduct scaled up evaluation of these programs across settings (e.g., education, healthcare, community); and (c) use implementation science to ensure uptake and close the gap between what we know is possible and what typically occurs in the lives of those who use AAC.

This research agenda requires realignment to consider not only the individual who needs or uses AAC but also the profound impact of the social system at all levels, from the immediate microsystem of daily interactions to the broader macrosystem of societal values, customs, and beliefs (e.g., Mandak et al., 2017). Attaining these research goals will require a range of methodologies, including both qualitative and quantitative designs across the continuum from basic research to intervention studies to implementation science. This work should carefully consider the effects on both short-term and long-term outcomes. Ultimately, this research must consider real-world outcomes valued by those who use AAC and their families.

Priorities for future technology development

Future research and development are also required to reduce technology barriers and improve technology solutions, specifically to: (a) increase awareness among mainstream technology developers of the needs of people who use AAC, especially those with high support needs; (b) improve accessibility of mainstream technologies to reduce the need for retrofitting; (c) develop federal standards to ensure equitable access to technology; and (d) reduce the operational demands of AAC technologies and increase the ease of use for AAC users and communication partners. Future R&D is also required to improve training of communication partners and service providers to reduce knowledge and skill barriers, including studies to (a) investigate applications of virtual, augmented, and extended reality (VR, AR, and XR) to provide simulation opportunities to practice strategies; (b) develop accessible tools to empower people who use AAC to develop their own trainings for communication partners and service providers; and (c) leverage artificial intelligence (AI) to learn from people who use AAC and their partners, personalize trainings based on their unique needs, and adapt over time as needs and skills change.

Conclusion

For far too long, research has focused primarily on individuals who need or use AAC; yet this research has ignored the greatest problem – the pervasive societal barriers that limit access to AAC and to meaningful opportunities to

communicate and participate in society. It is well past time to shift the paradigm of AAC research, technology development, and training and to adopt inclusive approaches that focus on the priorities of people who need or use AAC and involve them as equitable partners every step of the way (Blasko et al., 2025). After re-reading this paper, Glenda Watson Hyatt, an AAC user, researcher, and coauthor of this paper, explained: "I had to "take a moment" because it was hard seeing it all spelled out in black and white. Seeing the stats ... and reading through all of the barriers explain why some days, some weeks, are so hard as an AAC user" (personal communication, July 15, 2024). Future research and development must focus on dismantling the societal barriers that limit the lives of people who need or use AAC. As Bob Williams, a lifelong AAC user, explained: "Our disabilities, of course, limit and modify the ways we live. Deep rooted societal and professional biases, however, can and do cripple our lives far more" (Williams, 2025).

Author note

This paper is a collaborative effort, conceptualized and written by an international team including a researcher who uses AAC (GWH), technology developers (EJ), and nondisabled researchers (SF, JG, JL). As such, we hope it is an example of the power of collaboration. Portions of this paper were presented at the Future of AAC Research Summit on May 13, 2024, in Arlington, VA, USA.

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ORCID

Janice Light  <http://orcid.org/0000-0003-4449-798X>
 Susan K. Fager  <http://orcid.org/0000-0001-8125-5977>
 Jessica Gormley  <http://orcid.org/0000-0001-5141-8421>
 Glenda Watson Hyatt  <http://orcid.org/0000-0003-0235-3873>
 Erik Jakobs  <http://orcid.org/0000-0001-9196-9914>

References

- AAC Learning Center. (2025, April 1). AAC learning center. <https://aac-learning-center.psu.edu/>
- Altschuler, T., & Rackensperger, T. (2024, January 26). USSAAC speaker connection update. *Annual Convention of the Assistive Technology Industry Association (ATIA)*, Orlando, FL.
- Americans with Disabilities Act of 1990. (1990). 42 U.S.C. § 12101 et seq.
- Andzik, N. R., Chung, Y. C., & Kranak, M. P. (2016). Communication opportunities for elementary school students who use augmentative and alternative communication. *Augmentative and Alternative Communication*, 32(4), 272–281. <https://doi.org/10.1080/07434618.2016.1241299>
- Apple. (2024). *Accessibility*. <https://www.apple.com/accessibility/>
- Armstrong, M., Morris, C., Abraham, C., & Tarrant, M. (2017). Interventions utilising contact with people with disabilities to improve children's attitudes towards disability: A systematic review and meta-analysis. *Disability and Health Journal*, 10(1), 11–22. <https://doi.org/10.1016/j.dhjo.2016.10.003>
- Assistive Technology Industry Association (ATIA). (2019). *The critical need for knowledge and usage of AT and AAC among speech-language pathologists* [Survey White Paper]. Assistive Technology Industry Association. <https://www.atia.org/home/at-resources/at-research/atia-slp-survey-2011-2/>
- Atanasoff, L., McNaughton, D., Wolfe, P., & Light, J. (1999). Communication demands of university settings for students using augmentative and alternative communication. *Journal of Postsecondary Education*, 13, 32–47.
- Australia: Act No. 135 of 1992, Disability Discrimination Act 1992. (5 November, 1992). Retrieved March 29, 2025, from <https://www.refworld.org/legal/legislation/natlegbod/1992/en/71499>
- Azios, J. H., Strong, K. A., Archer, B., Douglas, N. F., Simmons-Mackie, N., & Worrall, L. (2022). Friendship matters: A research agenda for aphasia. *Aphasiology*, 36(3), 317–336. <https://doi.org/10.1080/02687038.2021.1873908>
- Babb, S., Jung, S., Ousley, C., McNaughton, D., & Light, J. (2021). Personalized AAC intervention to increase participation and communication for an adult with Down syndrome. *Topics in Language Disorders*, 41(3), 232–248. <https://doi.org/10.1097/TLD.0000000000000240>
- Babb, S., McNaughton, D., Light, J., & Caron, J. (2021). "Two friends spending time together": The impact of video visual scene displays on peer social interaction for adolescents with autism spectrum disorder. *Language, Speech, and Hearing Services in Schools*, 52(4), 1095–1108. https://doi.org/10.1044/2021_LSHSS-21-00016
- Babb, S., McNaughton, D., Light, J., Caron, J., Wydner, K., & Jung, S. (2020). Using AAC video visual scene displays to increase participation and communication within a volunteer activity for adolescents with complex communication needs. *Augmentative and Alternative Communication*, 36(1), 31–42. <https://doi.org/10.1080/07434618.2020.1737966>
- Ballin, L., Balandin, S., & Stancliffe, R. J. (2012). The speech-generating device (SGD) mentoring program: Training adults who use an SGD to mentor. *Augmentative and Alternative Communication*, 28(4), 254–265. <https://doi.org/10.3109/07434618.2012.708880>
- Batorowicz, B., Campbell, F., von Tetzchner, S., King, G., & Missiuna, C. (2014). Social participation of school-aged children who use communication aids: The views of children and parents. *Augmentative and Alternative Communication*, 30(3), 237–251. <https://doi.org/10.3109/07434618.2014.940464>
- Beukelman, D. R., & Light, J. C. (2020). *Augmentative and Alternative Communication: Supporting children and adults with complex communication needs* (5th ed.). Brookes Publishing.
- Binger, C., Douglas, N., & Kent-Walsh, J. (2022). Planning for implementation science in clinical practice research: An augmentative and alternative communication example. *American Journal of Speech-Language Pathology*, 31(3), 1039–1053. https://doi.org/10.1044/2021_AJSLP-21-00085
- Binger, C., Kent-Walsh, J., Ewing, C., & Taylor, S. (2010). Teaching educational assistants to facilitate the multisymbol message productions of young students who require augmentative and alternative communication. *American Journal of Speech-Language Pathology*, 19(2), 108–120. [https://doi.org/10.1044/1058-0360\(2009/09-0015\)](https://doi.org/10.1044/1058-0360(2009/09-0015))
- Binger, C., Renley, N., Babej, E., & Hahs-Vaughn, D. (2021). A survey of school-age children with highly unintelligible speech. *Augmentative and Alternative Communication*, 37(3), 194–205. <https://doi.org/10.1080/07434618.2021.1947370>
- Blasko, G. (2024). *Systemic social isolation of AAC users* [Paper presentation]. Paper Presented at the Future of AAC Research Summit, May 13, Arlington, VA.

- Blasko, G. (2025). Unveiling underlying systemic isolation challenges for AAC users. *Augmentative and Alternative Communication*, 41(3), 215–222. <https://doi.org/10.1080/07434618.2025.2515279>
- Blasko, G., Light, J., McNaughton, D., Williams, B., & Zimmerman, J. (2025). “Nothing about AAC users without AAC users”: A call for inclusive research, technology development, and professional training in AAC. *Augmentative and Alternative Communication*, 41(3), 184–194. <https://doi.org/10.1080/07434618.2025.2514748>
- Bornman, J., Romski, M. A., King, M., Madima, V., & Sevcik, R. (2020). Supporting early communication skills of children with developmental disorders in South Africa: Caregiver and clinician perspectives about mobile health applications. *Infants and Young Children*, 33(4), 313–331. <https://doi.org/10.1097/IYC.000000000000177>
- Bornman, J., White, R., & Johnson, E. (2018). From Silence to Justice: Implications for persons with little or no functional speech accessing the criminal justice system. *Acta Criminologica: African Journal of Criminology & Victimology*, 31(1), 19–33.
- Brittlebank, S., Light, J. C., & Pope, L. (2024). A scoping review of AAC interventions for children and young adults with simultaneous visual and motor impairments: Clinical and research Implications. *Augmentative and Alternative Communication*, 40(3), 219–237. <https://doi.org/10.1080/07434618.2024.2327044>
- Bryen, D. N., Carey, A., & Frantz, B. (2003). Ending the silence: Adults who use augmentative communication and their experiences as victims of crimes. *Augmentative and Alternative Communication*, 19(2), 125–134. <https://doi.org/10.1080/0743461031000080265>
- Burns, M., Baylor, C., & Yorkston, K. (2017). Patient-provider communication training for dysarthria: Lessons learned from student trainees. *Seminars in Speech and Language*, 38(3), 229–238. <https://doi.org/10.1055/s-0037-1602842>
- Burton, B., Shrubsole, K., Manchha, A., King, M., & Wallace, S. J. (2025). Communication partner training for aged-care workers: A scoping review. *International Journal of Language & Communication Disorders*, 60(2), e70016. <https://doi.org/10.1111/1460-6984.70016>
- Caron, J. G., O'Brien, M., & Weintraub, R. (2022). Online training to improve service provider implementation of letter-sound correspondence instruction for individuals who use augmentative and alternative communication. *American Journal of Speech-Language Pathology*, 31(3), 1114–1132. https://doi.org/10.1044/2022_AJSLP-21-00142
- Chung, Y.-C., & Carter, E. W. (2013). Promoting peer interactions in inclusive classrooms for students who use speech-generating devices. *Research and Practice for Persons with Severe Disabilities*, 38(2), 94–109. <https://doi.org/10.2511/027494813807714492>
- CommunicationFIRST. (2022, December 16). *What is speechism?* <https://communicationfirst.org/what-is-speechism/>
- Cooper, L., Balandin, S., & Trembath, D. (2009). The loneliness experiences of young adults with cerebral palsy who use alternative and augmentative communication. *Augmentative and Alternative Communication*, 25(3), 154–164. <https://doi.org/10.1080/07434610903036785>
- Creer, S., Enderby, P., Judge, S., & John, A. (2016). Prevalence of people who could benefit from augmentative and alternative communication (AAC) in the UK: Determining the need. *International Journal of Language & Communication Disorders*, 51(6), 639–653. <https://doi.org/10.1111/1460-6984.12235>
- Crisp-Cooper, M. (2025). Crossing the communication chasm. *Augmentative and Alternative Communication*, 41(3), 223–225. <https://doi.org/10.1080/07434618.2025.2499681>
- Douglas, S. N., Biggs, E. E., Meadan, H., & Bagawan, A. (2021). The effects of telepractice to support family members in modeling a speech-generating device in the home. *American Journal of Speech-Language Pathology*, 30(3), 1157–1169. https://doi.org/10.1044/2021_AJSLP-20-00230
- Douglas, S. N., McNaughton, D., & Light, J. (2013). Online training for paraeducators to support the communication of young children. *Journal of Early Intervention*, 35(3), 223–242. <https://doi.org/10.1177/1053815114526782>
- Eggenberger, E., Heimerl, K., & Bennett, M. I. (2013). Communication skills training in dementia care: A systematic review of effectiveness, training content, and didactic methods in different care settings. *International Psychogeriatrics*, 25(3), 345–358. <https://doi.org/10.1017/S1041610212001664>
- Erickson, K. A., & Geist, L. A. (2016). The profiles of students with significant cognitive disabilities and complex communication needs. *Augmentative and Alternative Communication*, 32(3), 187–197. <https://doi.org/10.1080/07434618.2016.1213312>
- Flores, C., & Dada, S. (2025). The effect of AAC training programs on professionals' knowledge, skills and self-efficacy in AAC: A scoping review. *Augmentative and Alternative Communication*, 41(1), 65–77. <https://doi.org/10.1080/07434618.2024.2381462>
- Freeman-Sanderson, A., Hemsley, B., Thompson, K., Rogers, K. D., Knowles, S., & Hammond, N. E. (2023). Communication functions of adult patients admitted to intensive care: A multicentre, binational point prevalence study. *Australian Critical Care*, 36(6), 1084–1089. <https://doi.org/10.1016/j.aucc.2023.01.009>
- Gerritzen, E. V., Lee, A. R., McDermott, O., Coulson, N., & Orrell, M. (2024). Online peer support for people with Amyotrophic Lateral Sclerosis (ALS): A narrative synthesis systematic review. *Frontiers in Digital Health*, 6, 1138530. <https://doi.org/10.3389/fdgth.2024.1138530>
- Gevarter, C., Medrano, C., & Rivera, T. (2023). Practice barriers: Learning from individuals who use AAC and their families. In S. Johnston, C. Gevarter, S. Sennott, L. McLeod, & E. Sanders (Eds). *Supporting individuals who use augmentative and alternative communication: Breaking down opportunity barriers* (pp. 63–74). Plural Publishing.
- Google. (2024). *Accessibility in our products*. <https://about.google/belonging/disability-inclusion/product-accessibility/>
- Gormley, J., McNaughton, D., & Light, J. (2023). Supporting children's communication of choices during inpatient rehabilitation: Effects of a mobile training for health care providers. *American Journal of Speech-Language Pathology*, 32(2), 545–564. https://doi.org/10.1044/2022_ajslp-22-00200
- Grace, E., Raghavendra, P., McMillan, J. M., & Gunson, J. S. (2019). Exploring participation experiences of youth who use AAC in social media settings: Impact of an e-mentoring intervention. *Augmentative and Alternative Communication*, 35(2), 132–141. <https://doi.org/10.1080/07434618.2018.1557250>
- Hajjar, D. J., McCarthy, J. W., Benigno, J. P., Montgomery, J., & Chabot, J. (2020). Effect of online instruction on volunteers who support people with complex communication needs in active recreation. *Augmentative and Alternative Communication*, 36(4), 214–225. <https://doi.org/10.1080/07434618.2020.1845235>
- Hajjar, D., & McCarthy, J. W. (2022). Individuals who use augmentative and alternative communication and participate in active recreation: Perspectives from adults with developmental disabilities and acquired conditions. *American Journal of Speech-Language Pathology*, 31(1), 375–389. https://doi.org/10.1044/2021_AJSLP-21-00179
- Hansen, D., Kristensen, L. F., Christensen, M. E., Eriksson, K., & Thunberg, G. (2022). They get the opportunity to say what is important for them': Exploring staff's early perceptions of the implementation of a new communicative approach to patients with aphasia. *Disability and Rehabilitation*, 44(13), 3071–3080. <https://doi.org/10.1080/09638288.2020.1853829>
- Happ, M. B., Garrett, K. L., Tate, J. A., DiVirgilio, D., Houze, M. P., Demirci, J. R., George, E., & Sereika, S. S. (2014). Effect of a multi-level intervention on nurse-patient communication in the intensive care unit: Results of the SPEACS trial. *Heart & Lung: The Journal of Critical Care*, 43(2), 89–98. <https://doi.org/10.1016/j.hrtlng.2013.11.010>
- Hiersteiner, D., Engler, J., Bershadsky, J., Bradley, V., Fay, M. L. (2014). What do NCI data reveal about individuals with intellectual and developmental disabilities who communicate nonverbally? *National Core Indicators Brief*. <https://nationalcoreindicators.org>
- Holm, A., Viftrup, A., Karlsson, V., Nikolajsen, L., & Dreyer, P. (2020). Nurses' communication with mechanically ventilated patients in the intensive care unit: Umbrella review. *Journal of Advanced Nursing*, 76(11), 2909–2920. <https://doi.org/10.1111/jan.14524>
- Holyfield, C., Drager, K. D. R., Kremkow, J. M. D., & Light, J. (2017). Systematic review of AAC intervention research for adolescents and adults with autism spectrum disorder. *Augmentative and Alternative Communication*, 33(4), 201–212. <https://doi.org/10.1080/07434618.2017.1370495>

- Holyfield, C., Light, J., Nieder, D., & Preece, J. (2025). External challenges for individuals who need or use AAC who are learning language: Lived experiences, key research findings, and future directions. *Augmentative and Alternative Communication*, 41(3), 267–279. <https://doi.org/10.1080/07434618.2025.2508485>
- Hurtig, R. R., Alper, R. M., & Berkowitz, B. (2018). The cost of not addressing the communication barriers faced by hospitalized patients. *Perspectives of the ASHA Special Interest Groups*, 3(12), 99–112. <https://doi.org/10.1044/persp3.SIG12.99>
- Iacono, T., Goldbart, J., Douglas, S. N., & Garcia-Melgar, A. (2022). A scoping review and appraisal of AAC research in inclusive school settings. *Journal of Developmental and Physical Disabilities*, 34(6), 963–985. <https://doi.org/10.1007/s10882-022-09835-y>
- Jin, T. (2025). Embracing change in AAC technology: The keyboard to my success. *Augmentative and Alternative Communication*, 41(3), 295–296. <https://doi.org/10.1080/07434618.2025.2508484>
- Kent-Walsh, J., & McNaughton, D. (2005). Communication partner instruction in AAC: Present practices and future directions. *Augmentative and Alternative Communication*, 21(3), 195–204. <https://doi.org/10.1080/07434610400006646>
- Kent-Walsh, J., Binger, C., & Hasham, Z. (2010). Effects of parent instruction on the symbolic communication of children using augmentative and alternative communication during storybook reading. *American Journal of Speech-Language Pathology*, 19(2), 97–107. [https://doi.org/10.1044/1058-0360\(2010/09-0014\)](https://doi.org/10.1044/1058-0360(2010/09-0014))
- Kent-Walsh, J., Murza, K. A., Malani, M. D., & Binger, C. (2015). Effects of communication partner instruction on the communication of individuals using AAC: A meta-analysis. *Augmentative and Alternative Communication*, 31(4), 271–284. <https://doi.org/10.3109/07434618.2015.1052153>
- King, G., Gibson, B. E., Mistry, B., Pinto, M., Goh, F., Teachman, G., & Thompson, L. (2014). An integrated methods study of the experiences of youth with severe disabilities in leisure activity settings: The importance of belonging, fun, and control and choice. *Disability and Rehabilitation*, 36(19), 1626–1635. <https://doi.org/10.3109/09638288.2013.863389>
- King, M. R., & Soto, G. (2022). Code-switching using aided AAC: Toward an integrated theoretical framework. *Augmentative and Alternative Communication*, 38(1), 67–76. <https://doi.org/10.1080/07434618.2022.2051603>
- Koester, H., Fager, S. K., Gormley, J., Jakobs, E., Johnsen, K., & Brumberg, J. (2025). Supporting effective alternative access for individuals with physical disabilities: State of the science, emerging technologies, and future research directions. *Augmentative and Alternative Communication*, 41(3), 304–317. <https://doi.org/10.1080/07434618.2025.2499676>
- Koloni, R. (2025). To include us in our own worlds: AAC is not optional. *Augmentative and Alternative Communication*, 41(3), 226–229. <https://doi.org/10.1080/07434618.2025.2515283>
- Koppenhaver, D., Evans, D., & Yoder, D. (1991). Childhood reading and writing experiences of literate adults with severe speech and motor impairments. *Augmentative and Alternative Communication*, 7(1), 20–33. <https://doi.org/10.1080/07434619112331275653>
- Kurfess, C., Corsten, S., Nickel, M. T., Knieriemen, M., Kreiter, D., & Lauer, N. (2023). Peer-to-peer support: Digital networking in aphasia to improve quality of life (PeerPAL). *Frontiers in Communication*, 8, 1–11. <https://doi.org/10.3389/fcomm.2023.1187233>
- Lackey, S., Burnham, S., Watson Hyatt, G., Shepherd, T., Pinder, S., Davies, T. C., & Batorowicz, B. (2024). Voices from the field: Exploring service providers' insights into service delivery and AAC use in Canada. *Augmentative and Alternative Communication*, 40(4), 267–280. <https://doi.org/10.1080/07434618.2023.2295929>
- Lackey, S., Watson Hyatt, G., Batorowicz, B., van Engelen, S., Li, S., Pinder, S., & Davies, T. C. (2023). Barriers and facilitators to accommodations in the workplace for adults who use augmentative and alternative communication (AAC): A systematic review. *Augmentative and Alternative Communication*, 39(3), 181–197. <https://doi.org/10.1080/07434618.2023.2170277>
- Lanyon, L., Worrall, L., & Rose, M. (2018). Combating social isolation for people with severe chronic aphasia through community aphasia groups: Consumer views on getting it right and wrong. *Aphasiology*, 32(5), 493–517. <https://doi.org/10.1080/02687038.2018.1431830>
- LaValley, M., Chavers-Edgar, T., Wu, M., Schlosser, R., & Koul, R. (2024). Augmentative and alternative communication interventions in critical and acute care with mechanically ventilated and tracheostomy patients: A scoping review. *American Journal of Speech-Language Pathology*, 33(5), 2667–2686. https://doi.org/10.1044/2024_AJSLP-23-00310
- Light, J., & McNaughton, D. (2012). The changing face of augmentative and alternative communication: Past, present, and future challenges. *Augmentative and Alternative Communication*, 28(4), 197–204. <https://doi.org/10.3109/07434618.2012.737024>
- Light, J., Jakobs, E., Gormley, J., Fager, S., McNaughton, D. (2024). *mTraining in AAC for communication partners*. RERC on AAC. <https://rerc-aac.psu.edu/development/d3-mtraining-in-aac-for-communication-partners/>
- Light, J., McNaughton, D., Beukelman, D., Fager, S. K., Fried-Oken, M., Jakobs, T., & Jakobs, E. (2019). Challenges and opportunities in augmentative and alternative communication: Research and technology development to enhance communication and participation for individuals with complex communication needs. *Augmentative and Alternative Communication*, 35(1), 1–12. <https://doi.org/10.1080/07434618.2018.1556732>
- Light, J., McNaughton, D., Krezman, C., Williams, M., Gulens, M., Galskoy, A., & Umpleby, M. (2007). The AAC Mentor Project: Web-based instruction in sociorelational skills and collaborative problem solving for adults who use augmentative and alternative communication. *Augmentative and Alternative Communication*, 23(1), 56–75. <https://doi.org/10.1080/07434610600924499>
- Mandak, K., Light, J., & McNaughton, D. (2020). The effects of an online training on preservice speech-language pathologists' use of family-centered skills. *American Journal of Speech-Language Pathology*, 29(3), 1489–1504. https://doi.org/10.1044/2020_AJSLP-19-00057
- Mandak, K., O'Neill, T., Light, J., & Fosco, G. M. (2017). Bridging the gap from values to actions: A family systems framework for family-centered AAC services. *Augmentative and Alternative Communication*, 33(1), 32–41. <https://doi.org/10.1080/07434618.2016.1271453>
- McCarthy, J. W., Donofrio-Horwitz, L. M., & Smucker, L. M. D. (2010). The effects of reading personal narratives written by an individual who uses AAC on the attitudes of pre-professionals in business. *Augmentative and Alternative Communication*, 26(2), 61–74. <https://doi.org/10.3109/07434618.2010.481562>
- McCarthy, J., & Light, J. (2005). Attitudes toward individuals who use augmentative and alternative communication: Research review. *Augmentative and Alternative Communication*, 21(1), 41–55. <https://doi.org/10.1080/07434610410001699753>
- McCarty, T., & Light, J. (2025a). Teletraining to teach communication partners to support students with multiple disabilities including cortical visual impairment and emerging symbolic communication in communicating choices. *American Journal of Speech-Language Pathology*, 34(2), 487–504. https://doi.org/10.1044/2024_AJSLP-24-00146
- McCarty, T., & Light, J. (2025b). Effect of a short mobile training to teach peers to structure opportunities to communicate choices for students with multiple disabilities including cortical visual impairment. Manuscript under review.
- McLeod, L. (2025). How ableism impacts people who use AAC. *Augmentative and Alternative Communication*, 41(3), 200–202. <https://doi.org/10.1080/07434618.2025.2489662>
- McLeod, L., Sanders, E. J., Sennott, S., Ochs, I., & Williams, B. (2023). AAC policy barriers: Learning from individuals who use AAC and their families. In S. Johnston, C. Gevarter, S. Sennott, L. McLeod, & E. Sanders (Eds.), *Supporting individuals who use augmentative and alternative communication: Breaking down opportunity barriers* (pp. 189–199). Plural Publishing.
- McNaughton, D., & Bryen, D. N. (2002). Enhancing participation in employment through AAC technologies. *Assistive Technology: The Official Journal of RESNA*, 14(1)207
- McNaughton, D., & Light, J. (2013). The iPad and mobile technology revolution: Benefits and challenges for individuals who require augmentative and alternative communication. *Augmentative and Alternative Communication*, 29(2), 107–116. <https://doi.org/10.3109/07434618.2013.784930>
- McNaughton, D., Armendariz, K., Galley, K., Liang, Z., Patenaude, D., Redmon, S., Romano, N., & Steffen, K. (2024). *The AAC Learning Center: Sharing knowl-*

- edge, building capacity, & assessing impact [Paper presentation]. Office of Special Education Programs (OSEP) Conference, August 6, Arlington, VA.
- McNaughton, D., Light, J., & Arnold, K. (2002). 'Getting your wheel in the door': successful full-time employment experiences of individuals with cerebral palsy who use Augmentative and Alternative Communication. *Augmentative and Alternative Communication*, 18(2), 59–76. <https://doi.org/10.1080/07434610212331281171>
- McNaughton, D., Light, J., & Groszyk, L. (2001). "Don't give up": Employment experiences of individuals with amyotrophic lateral sclerosis who use augmentative and alternative communication. *Augmentative and Alternative Communication*, 17(3), 179–195. <https://doi.org/10.1080/aac.17.3.179.195>
- McNaughton, D., Light, J., Beukelman, D. R., Klein, C., Nieder, D., & Nazareth, G. (2019). Building capacity in AAC: A person-centered approach to supporting participation by people with complex communication needs. *Augmentative and Alternative Communication*, 35(1), 56–68. <https://doi.org/10.1080/07434618.2018.1556731>
- McNaughton, D., Rackensperger, T., & McLemore, L. (2025). Supporting meaningful participation in society by adults with developmental disabilities who need or use AAC: Lived experiences, key research findings, and future directions. *Augmentative and Alternative Communication*, 41(3), 250–263. <https://doi.org/10.1080/07434618.2025.2504497>
- Microsoft. (2024). *Accessibility for everyone*. <https://www.microsoft.com/en-us/accessibility>
- Murray, S., & Hopf, S. C. (2022). Attitudes toward the use of low-tech AAC in acute settings: A systematized review. *Augmentative and Alternative Communication*, 38(3), 184–195. <https://doi.org/10.1080/07434618.2022.2122870>
- Muttiah, N., Drager, K. D. R., McNaughton, D., & Perera, N. (2018). Evaluating an AAC training for special education teachers in Sri Lanka, a low- and middle-income country. *Augmentative and Alternative Communication*, 34(4), 276–287. <https://doi.org/10.1080/07434618.2018.1512651>
- Pope, L., Light, J., & Franklin, A. (2022). Black children with developmental disabilities receive less AAC intervention than their white peers: Preliminary evidence of racial disparities from a secondary data analysis. *American Journal of Speech-Language Pathology*, 31(5), 2159–2174. https://doi.org/10.1044/2022_AJSLP-22-00079
- Rackensperger, T., Chapple, D., McLemore, L., & McNaughton, D. (2023). *Recognizing experience as expertise* [Paper presentation]. Presentation at the Biennial Conference of the International Society for Augmentative and Alternative Communication, Cancun, Mexico.
- Regan, P. (2025). The first word in accessibility is access. *Augmentative and Alternative Communication*, 41(3), 300–303. <https://doi.org/10.1080/07434618.2025.2513912>
- Romski, M. A., Sevcik, R. A., & Wilkinson, K. M. (1994). Peer-directed communicative interactions of augmented language learners with mental retardation. *American Journal of Mental Retardation: AJMR*, 98(4), 527–538
- Romski, M. A., Sevcik, R. A., King, M., DeLeo, G., Branum-Martin, L., & Bornman, J. (2023). Using a self-guided app to provide communication strategies for caregivers of young children with developmental disorders: A pilot investigation. *Journal of Policy and Practice in Intellectual Disabilities*, 20(1), 73–88. <https://doi.org/10.1111/jppi.12436>
- Sellwood, D., McLeod, L., Williams, K., Brown, K., & Pullin, G. (2024). Imagining alternative futures with augmentative and alternative communication: A manifesto. *Medical Humanities*, 50(4), 620–623. <https://doi.org/10.1136/medhum-2024-013022>
- Sevcik, R. A., Romski, M. A., Walters, C., & Kaldes, G. (2021). Earlier is better: Challenges to implementing AAC during the first years of a child's life. In B. Ogletree (Ed.), *Augmentative and alternative communication challenges and solutions: Improving everyday service delivery* (pp. 21–39). Plural Publishing.
- Shire, S. Y., & Jones, N. (2015). Communication partners supporting children with complex communication needs who use AAC: A systematic review. *Communication Disorders Quarterly*, 37(1), 3–15. <https://doi.org/10.1177/1525740114558254>
- Simmons-Mackie, N., Raymer, A., & Cherney, L. R. (2016). Communication partner training in aphasia: An updated systematic review. *Archives of Physical Medicine and Rehabilitation*, 97(12), 2202–2221.e8. <https://doi.org/10.1016/j.apmr.2016.03.023>
- Simmons-Mackie, N., Raymer, A., Armstrong, E., Holland, A., & Cherney, L. R. (2010). Communication partner training in aphasia: A systematic review. *Archives of Physical Medicine and Rehabilitation*, 91(12), 1814–1837. <https://doi.org/10.1016/j.apmr.2010.08.026>
- Sowers, D., Light, J., Jakobs, E., Olkin, J., Exton, K., Panfil, H., Conway, J., & Lamb, M. (2025). *Short mobile training is effective and efficient in preparing educational personnel to interact with students with cerebral palsy who utilize AAC with eye tracking*. [Manuscript submitted for publication].
- Special Educational Needs and Disability Act. (2001). (c. 10).
- Statistica. (2024). *Average number of new Android app releases via Google Play*. Retrieved April 2024, from <https://www.statista.com/statistics/1020956/android-app-releases-worldwide/>
- Sullivan, R., & Harding, K. (2019). Do patients with severe poststroke communication difficulties have a higher incidence of falls during inpatient rehabilitation? A retrospective cohort study. *Topics in Stroke Rehabilitation*, 26(4), 288–293. <https://doi.org/10.1080/10749357.2019.1591689>
- Therrien, M. C. S., & Light, J. (2018). Promoting peer interaction for preschool children with complex communication needs and autism spectrum disorder. *American Journal of Speech-Language Pathology*, 27(1), 207–221. https://doi.org/10.1044/2017_AJSLP-17-0104
- Therrien, M. C. S., Rossetti, Z., & Østvik, J. (2023). Augmentative and alternative communication and friendships: Considerations for speech-language pathologists. *Perspectives of the ASHA Special Interest Groups*, 8(1), 151–163. https://doi.org/10.1044/2022_PERSP-22-00105
- Therrien, M. C. S. & Light, J. (2016). Using the iPad to facilitate interaction between preschool children who use AAC and their peers. *Augmentative and Alternative Communication*, 32(3), 163–174. <https://doi.org/10.1080/07434618.2016.1205133>
- Therrien, M., C. S., Light, J., & Pope, L. (2016). Systematic review of the effects of interventions to promote peer interactions for children who use aided AAC. *Augmentative and Alternative Communication*, 32(2), 81–93. <https://doi.org/10.3109/07434618.2016.1146331>
- Thiemann-Bourque, K., Feldmiller, S., Hoffman, L., & Johner, S. (2018). Incorporating a peer-mediated approach into speech-generating device intervention: Effects on communication of preschoolers with autism spectrum disorder. *Journal of Speech, Language, and Hearing Research: JSLHR*, 61(8), 2045–2061. https://doi.org/10.1044/2018_JSLHR-L-17-0424
- Tönsing, K. M., & Dada, S. (2016). Teachers' perceptions of implementation of aided AAC to support expressive communication in South African special schools: A pilot investigation. *Augmentative and Alternative Communication*, 32(4), 282–304. <https://doi.org/10.1080/07434618.2016.1246609>
- Trembath, D., Balandin, S., Stancliffe, R. J., & Togher, L. (2010). "Communication is everything:" The experiences of volunteers who use AAC. *Augmentative and Alternative Communication*, 26(2), 75–86. <https://doi.org/10.3109/07434618.2010.481561>
- Treviranus, J. (2023). *Cognitive, language, and learning disabilities*. Panel discussion at the Future of Interface virtual conference. <https://futureofinterface.org/home/>
- Trotta, R. L., Hermann, R. M., Polomano, R. C., & Happ, M. B. (2020). Improving nonvocal critical care patients' ease of communication using a modified SPEACS-2 program. *Journal for Healthcare Quality*, 42(1), e1–e9. <https://doi.org/10.1097/JHQ.0000000000000163>
- United Nations. (2006). Convention on rights of persons with disabilities. *Treaty Series* 2515, 3.
- Walsh, M., Harman, I., Manning, P., Ponza, B., Wong, S., Shaw, B., Sellwood, D., Anderson, K., Reddihough, D., & Wallen, M. (2024). Including people who use augmentative and alternative communication in qualitative research: Can you hear us? *International Journal of Qualitative Methods*, 23. <https://doi.org/10.1177/16094069241234190>
- Watson Hyatt, G. (2024, May 13). *Impact of attitudinal barriers facing people who use AAC* [Paper presentation]. Presentation at the 2024 Future of AAC Research Summit, Arlington, VA.

- White, R. M., Bornman, J., Johnson, E., Tewson, K., & Van Niekerk, J. (2020). Transformative equality: Court accommodations for South African citizens with severe communication disabilities. *African Journal of Disability*, 9, 651. <https://doi.org/10.4102/ajod.v9i0.651>
- Williams, B. (2000). More than an exception to the rule. In M. Fried Oken & H. Bersani (Eds.), *Speaking up and spelling it out: Personal essays on augmentative and alternative communication* (pp. 245–254). Brookes Publishing.
- Williams, B. (2023, August 22). *Unjustly isolated, silenced, and deprived of literacy and freedom of expression*. Remarks to the Office for Civil Rights US Department of Education. <https://communicationfirst.org/unjustly-isolate-d-silenced-and-deprived-of-literacy-and-freedom-of-expression/>
- Williams, B. (2025). AAC and technology: What's communication equity got to do with it? *Augmentative and Alternative Communication*, 41(3), 207–210. <https://doi.org/10.1080/07434618.2025.2504495>
- Williams, K., & Holyfield, C. (2025). Future of AAC technologies: Priorities for inclusive innovation. *Augmentative and Alternative Communication* 41(3), 211–214. <https://doi.org/10.1080/07434618.2025.2513906>
- Williams, M. (1996). Mentoring. *Alternatively Speaking*, 3(2), 1–4.
- Williams, R. (2023). *Cognitive, language, and learning disabilities*. Panel discussion at the Future of Interface virtual conference. <https://futureofinterface.org/home/>
- Wong, A. (2019, June 27). *The Olmstead decision and me*. Disability Visibility Project. <https://disabilityvisibilityproject.com/2019/06/27/the-olmstead-decision-me/>
- Wylie, N. (2022). *Just-in-time training: An implementation guide*. <https://www.ispringsolutions.com/blog/just-in-time-training>
- Zhao, Y. (2023). *XR/VR/AR & virtual worlds – accessibility (challenges & approaches)*. Panel discussion at the Future of Interface virtual conference. <https://futureofinterface.org/home/>
- Zimmerman, J. (2022, December 12). *SLPs as AAC gatekeepers*. Guest blog. <https://communicationfirst.org/slps-as-aac-gatekeepers/>
- Zimmerman, J. (2025). Beyond access: The intersecting role of AAC, literacy, and technology. *Augmentative and Alternative Communication*, 41(3), 264–266. <https://doi.org/10.1080/07434618.2025.2504499>