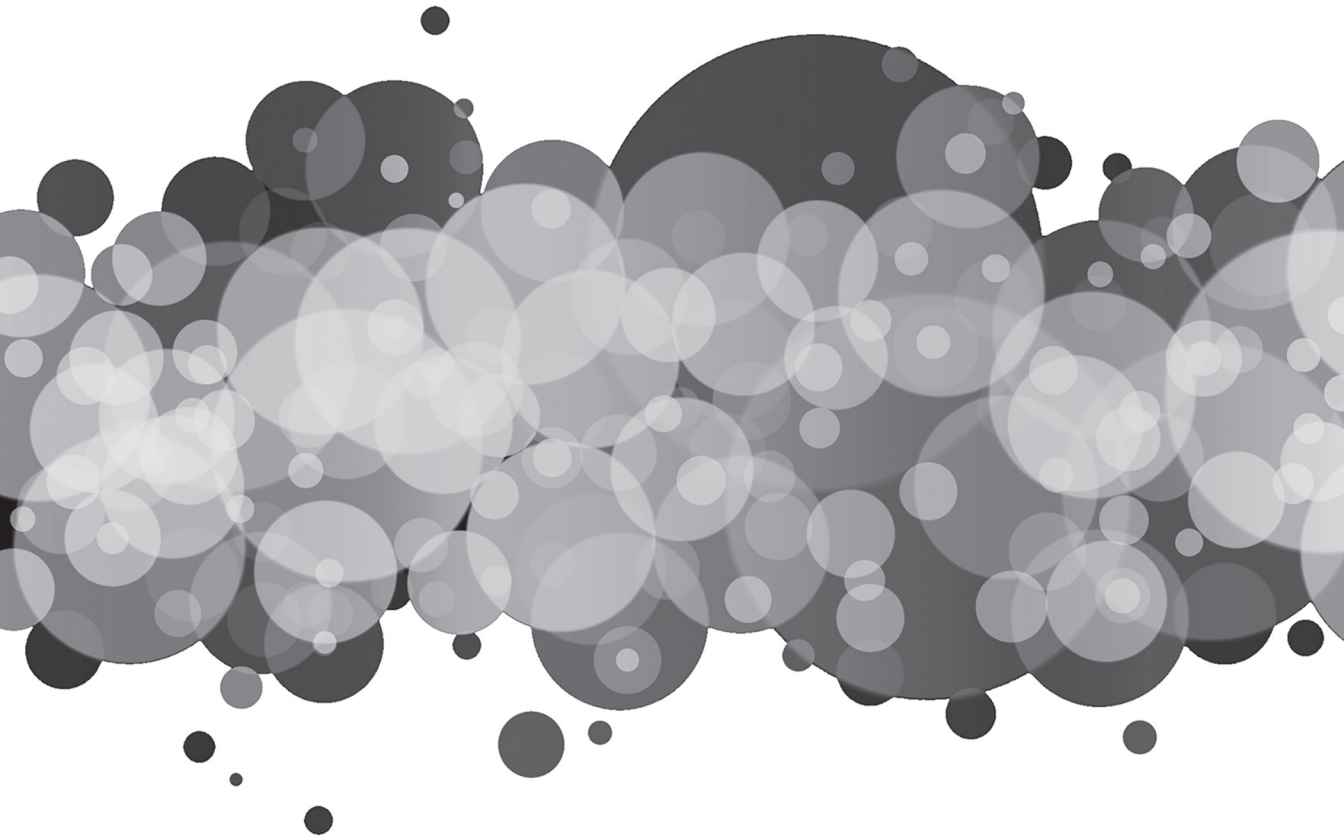
# Augmentative and Alternative Communication

## Challenges and Solutions

**BILLY T. OGLETREE**, PhD, CCC-SLP



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# Contents

# Preface

I met my first nonspeaking person during the summer after my freshman year of college. I was spending long days at a local department store, where I had been assigned the unpleasant job of sidewalk sales, pushing merchandise and running a register. This may not sound too bad as summer jobs go, but I was in south Mississippi, and it was very hot.

One afternoon, I noticed a well-dressed man approaching me from the parking lot. He walked in a determined yet labored manner and held a coat hanger. I was helping other customers but turned to him expecting to answer a quick question. Instead, I realized that he could not speak. He tried to offer a few words but struggled to do so. As his frustration grew, the man motioned with the coat hanger, indicating that his keys were locked in his car. I quickly found someone from the store to assist him, but I could not stop thinking about our encounter.

That brief storefront interaction changed my life forever. I declared my college major the next fall—Speech-Language Pathology. After three more years of undergraduate training and two years of graduate school, I found myself working with children and young adults with intellectual disabilities (ID). Each day, I was face-to-face with people who could not speak intelligibly. Some struggled to form speech sounds or words, others did not speak at all but communicated through conventional or unconventional forms. The field of augmentative and alternative communication (AAC) was in its early years, and I was unprepared to meet the needs of those I served.

I returned to graduate school, where I found myself drawn to populations with the most challenging communicative disorders. This led me to individuals with severe ID and began my interest in AAC. Over the past 30 years, I have worked increasingly in AAC assessment and intervention, serving on AAC teams in medical centers, and providing consultations for schools, institutional settings, and community group homes. I've also taught, published about, and served in the area of AAC in my position as a university professor. My experiences have been both rewarding and trying: rewarding in that I've been a part of AAC solutions that changed the lives of people with complex communication challenges, trying, because I've encountered challenges that have, at times, hindered or prevented positive outcomes.

When the staff at Plural Publishing contacted me about the possibility of a textbook, I was initially reluctant. There are excellent existing general resources on AAC, and I was uncertain about my ability to contribute something either new or meaningful. Then the idea of a book dedicated to challenges and solutions came to mind—a reference in which experts in the field of AAC could share a few of their professional challenges and the solutions they have used or considered in the face of these barriers. A book that also includes voices from individuals who use AAC and their stakeholders.

This effort is the product of authors with prominent reputations as AAC researchers and providers—individuals who

collectively have hundreds of years of professional experience. Most chapters offer voices of those using AAC and of the people in their lives—all propose ideas useful in frontline AAC service delivery.

The book closes with a charge for all involved in AAC to show grit and resilience—to use these attributes to become solution-oriented AAC providers. My experience with the nonspeaking man at that department store years ago sparked a career dedicated to those with severe communication disorders. It is my hope that this book may do the same for you.

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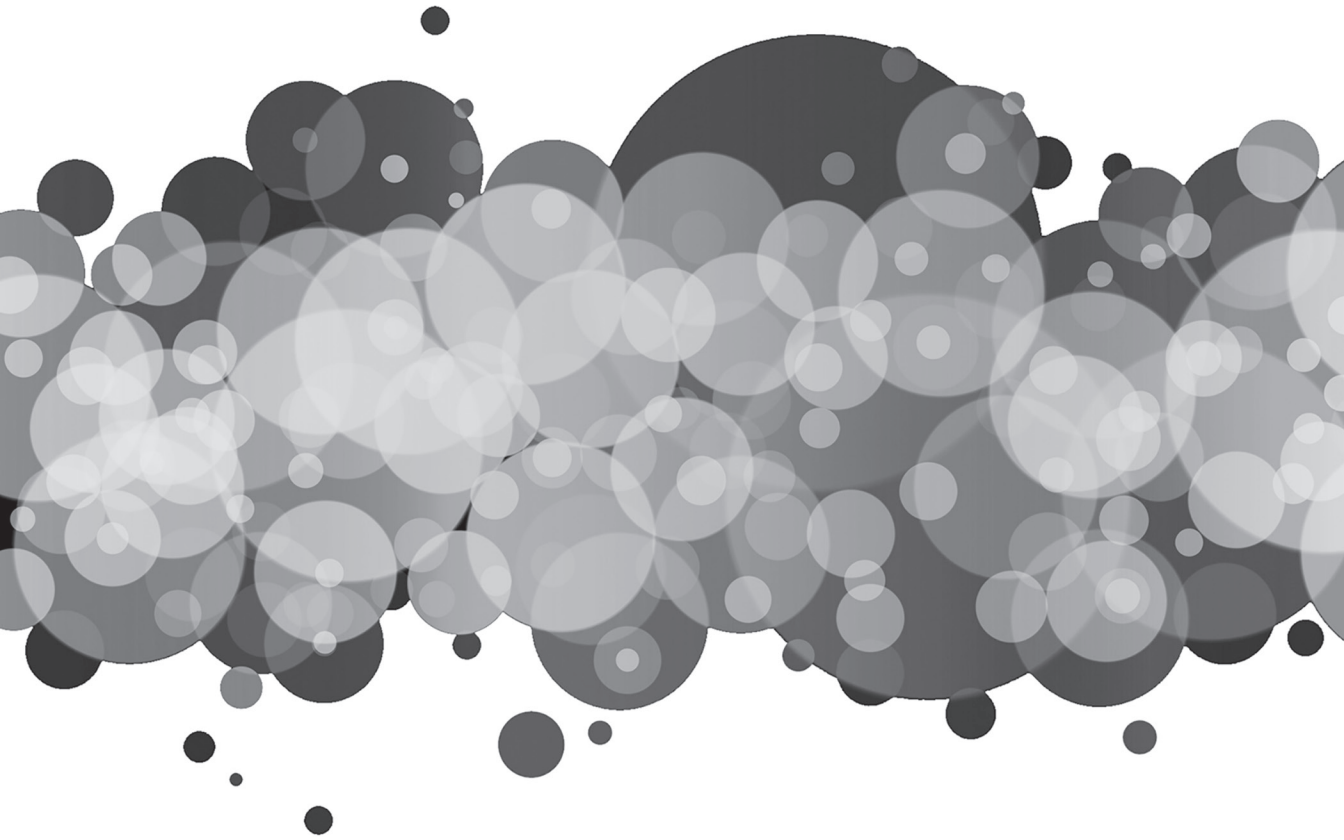
*This book is dedicated to those who use or could benefit from augmentative and alternative communication and the individuals who serve and communicate with them daily.*

# PART I

## Introduction



# Challenges and Solutions in Augmentative and Alternative Communication (AAC)

*Billy T. Ogletree*

This book came to be, in part, because the application of AAC is fraught with challenges. In fact, the process of assisting someone with **complex communication needs (CCN)** is nothing if not challenging. Challenges occur during efforts to understand the potential abilities, needs, and preferences of people who rely on AAC. Challenges extend to complexities related to these individuals' communicative environments and partners. Challenges can even emerge specific to interpersonal or ideological differences within an AAC care team. If this is not enough, individual **AAC solutions** often unfold over years, creating ongoing challenges related to life changes.

In addition to these specific assessment and intervention challenges, researchers have been increasingly frustrated by the lack of evidence behind long-held AAC-practice assumptions. Questions have arisen specific to what **symbol forms** are best for children and adults and how these symbols should be arrayed on devices (Fried-Oken & Light, 2012). More questions have been posed about variables confounding AAC use, such as cognitive and visual-processing abilities and preferences (Fried-Oken & Light, 2012; Wilkinson, Light, & Drager, 2012). Researchers have even found themselves challenged by evolving societal issues such as the ubiquitous presence of technology and the increasing diversity of people who rely on AAC with respect to language and culture (Higginbotham & Fager, 2012; Ogletree, McMurry, Schmidt, & Evans, 2018).

In sum, **AAC practitioners** and **researchers** frequently find themselves grappling with challenges. As individuals charged with serving those with CCN, we can be either deterred or motivated by this fact. If deterred, people who rely on AAC may never enjoy optimal AAC solutions. In contrast, the provider or stakeholder motivated to overcome challenges will often find him- or herself at the center of processes resulting in creative and innovative AAC applications.

This introductory chapter briefly describes AAC as a dynamic, team-based practice that requires the following of providers: knowledge of a rapidly changing

field, competence with myriad disabilities impacting communication, and a personal commitment that transcends inevitable setbacks and disappointments. It also sets the stage for subsequent chapters by discussing the reality of challenges in one's professional life and the need to demonstrate professional grit and resilience. This chapter ends by introducing the book's chapter authors, commenting on challenges presented in this text, and foreshadowing future content by encouraging solution-driven AAC practices.

Although AAC is a field addressed by many professional disciplines, this book is primarily written by speech-language pathologists (SLPs). Therefore, much of what follows in this chapter and beyond will address challenges specific to that discipline and its participation in AAC services. It should be noted, however, that AAC challenges cross disciplinary boundaries, and solutions rely upon the expertise of dedicated, collaborative teams.

## AAC Basics: Knowledge Assumed by the Authors of This Text

This book provides a platform for established AAC researchers/practitioners, people who rely on AAC, and other stakeholders to discuss challenges they have encountered in the field. Some draw from decades of AAC service provision or scholarship; others address challenges from very personal perspectives. All assume a level of reader knowledge that exceeds that of entry-level providers. This section serves as a simple review for many readers and an introduction to AAC for others. It is written to set the stage for the chapters that follow. Critical AAC terms are highlighted in the text and defined in a glossary provided at the end of the book.

## Defining AAC

The American Speech-Language Hearing Association's Practice Portal (ASHA, 2019) defines Augmentative and Alternative Communication (AAC) as "an area of clinical practice that addresses the needs of individuals with significant and complex communication disorders characterized by impairments in speech-language production and/or comprehension, including spoken and written modes of communication." Four things can be gleaned from this definition.

First, AAC is but one area of clinical practice. There are many subspecialties available to today's educational and allied health care providers. Of these areas, AAC may be the broadest in terms of services rendered and populations served. The ideal practice of **AAC assessment and intervention** requires a diverse range of **stakeholders** and professionals (team members) who possess unique contributions yet are dedicated to a singular outcome—the establishment and growth of effective communication for people who rely on AAC, leading to everyday inclusion and participation across all realms of life. The AAC team members include, but are not limited to, people who rely on AAC, family representatives, peers, medical personnel, educators, rehabilitation specialists, occupational therapists, physical therapists, psychologists, visual-impairment specialists, social workers, and speech-language pathologists. The composition of AAC teams is driven by

the needs of the person who relies on AAC, and AAC teams can choose to function within more or less collaborative team structures (e.g., **multidisciplinary**, **interdisciplinary**, or **transdisciplinary teams**). AAC, as an area of clinical practice, then, is team driven. It's also incredibly expansive with respect to individuals served. That is, AAC has applications for both children and adults, and for individuals with a variety of developmental and acquired conditions.

Our second takeaway is that AAC is applied with myriad individuals presenting CCN. Beukelman and Light (2020) noted that there is no typical person who relies on AAC, but a group that crosses all age, socioeconomic, ethnic, and racial backgrounds and shares the need for "adaptive assistance for speaking and/or writing because their gestural, spoken, and/or written communication is temporarily or permanently inadequate to meet all of their communication needs" (p. 4). The communication needs of this group are often described as complex because their communicative efforts can be challenged by concomitant impairments in motor, sensory, intellectual, and other areas.

The third thing we learn from the portal definition (ASHA, 2019) is that AAC can be applied to address the needs of people who rely on AAC in both communication/language expression and comprehension. Too often, AAC has been highlighted for its remediation of expressive deficits. Whereas expression grabs attention due to its obvious visibility, many AAC applications relate to comprehension. For decades, AAC has been used as a means of communication and language input to promote receptive abilities and encourage communication success. In fact, some researchers have used a primary AAC focus on comprehension as a bridge to gains in communication and language production (Sevcik, 2009).

Finally, ASHA's definition (ASHA, 2019) broadens the focus of AAC team members by including written modes of communication. This includes early attention to **emergent literacy** and a lifelong emphasis upon access to print wherever it may be found. For some, AAC efforts in the area of literacy may be limited to acquiring and using basic **sight words** associated with daily environments (Erickson, 2017). For others, there may be a significant focus upon writing and reading in varied contexts for complex purposes. In fact, today's AAC team member must be prepared to assist people who rely on AAC with access to expanding print experiences through growing social-media outlets (Caron & Light, 2015; McNaughton & Light, 2013; Paterson, 2017).

Where does this all leave us in terms of defining AAC? Let's sum it up by saying AAC is a team-based area of clinical practice (i.e., assessment and intervention) that has applications for many individuals with CCN. It addresses both communication/language expression and comprehension in all modalities, including writing. As stated earlier, AAC's primary focus is the establishment and growth of effective communication for people who rely on AAC, leading to everyday inclusion and participation across all realms of life.

## Moving Past a Definition: Describing AAC Practices

So, what is involved in the frontline, day-to-day practice of AAC? AAC services have been described as a circular process

involving assessment, **feature matching**, **device** or **system** procurement, implementation, and **follow-up** (Ogletree & Oren, 2006) (Figure 1–1). Each aspect of circular AAC service delivery is considered below.

The traditional AAC assessment process focuses on the consideration of current and future communication needs of people who rely on AAC and a critical review of their environments and partners (Beukelman & Light, 2020). This broad-based effort relies on the expertise of multiple team members. Ogletree and Oren (2006) suggest that assessments should involve the review of "physical competence" (e.g., vision, hearing, positioning, and seating), **access** to systems and devices (e.g., the ability to move in a way that allows for direct or alternative access), cognitive functioning, and communication and language abilities" (p. 2). The communication and language assessment focus should include attention to residual speech capacity and potential (Beukelman & Light, 2020). Clearly, an assessment addressing targets mentioned thus far might involve physical and occupational therapists, psychologists, educators, and speech-language pathologists. This assessment will also involve the client him- or herself and stakeholders such as family members, peers, and other professionals (e.g., medical specialists, visual impairment (VI) experts, audiologists, social workers, rehabilitation engineers, and administrators).

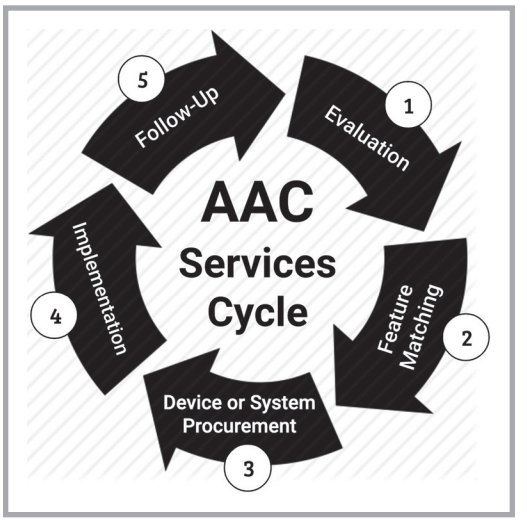



**Figure 1–1.** The Circular Process of AAC Services. Figure 1 From *Pro-Ed Series on Autism Spectrum Disorders: How to Use Augmentative and Alternative Communication* (p. 2), by Billy T. Ogletree and Thomas Oren, 2006, Austin, TX: Pro-Ed. Copyright 2006 by Pro-Ed, Inc. Reprinted with permission.

It is worth noting that assessments for people who rely on AAC have more than one purpose. Frequently, the primary assessment question simply relates to the "in the moment" appropriateness of AAC for the client. This could be an initial evaluation or follow-up testing after an earlier team decision against AAC. The AAC assessment can also be conducted to determine if current AAC solutions remain effective or need to be changed. This type of assessment may involve the entire team, or subsets of team members critical to the question at hand. For example, a reevaluation due to an evolving visual impairment may involve a VI expert, an occupational therapist, and a speech-language pathologist, rather than the complete team.

Assessments for people who rely on AAC can be conducted in centers or in the various daily environments of the client. Most often, the assessment will, at least in part, extend beyond a specific center to natural environments. Conducting assessments in more than one context allows AAC teams to gather socially valid "real world" data on both the client and his/her life environment and partners. Envi-

ronmental and partner data collection may focus on communicative demands and opportunities, as well as any existing barriers to success (Beukelman & Light, 2020). Depending upon the AAC team's model of functioning, assessments can occur over one or several sessions. For example, a transdisciplinary team may involve all team members in one large collaborative assessment session, whereas a multi- or interdisciplinary team may assess over several discipline-specific sessions and offer a final team meeting for decision-making and sharing. Regardless of the team model, assessment of people who rely on AAC will typically depend on nonstandardized data collected via **informancy** and **observation**, although standardized, norm-referenced assessment measures can be useful (Beukelman & Light, 2020). **AAC environmental and partner assessment** will also rely more on informancy and observational data, although structured guidelines in this area are increasingly available (Blackstone & Hunt-Berg, 2012).

As the AAC assessment process moves past the data collection and sharing stage, the team shifts to feature matching. This is an action phase in which team members work to match client needs to possible AAC solutions. Several decision matrices have been developed to assist with feature matching (ASHA Practice Portal, 2019). Matched features can include, among other things, a device's **symbol capacity**, **vocabulary organization**, **linguistic features**, **voice options**, access possibilities, **display capacity**, **rate enhancement features**, and **operational demands** (ASHA Practice Portal, 2019; Beukelman & Light, 2020). As client needs and available solutions are compared, one or more AAC options can be selected for a **trial run** prior to procurement. Eventually, AAC teams may assist with the purchase of a chosen device or system. The procurement process can be time consuming, involving report writing for myriad funding sources.

The AAC implementation and team follow-up (see Figure 1–1) shift AAC services to intervention. Implementation involves all activities required to place a device or system, make it functional, and assure that it is responsive to changing needs. Implementation can be a protracted stage of AAC services and usually involves more than one team member (e.g., speech-language pathologists, occupational/physical therapists, educators, rehabilitation specialists) offering discipline-specific or cotreatment sessions (Sylvester, Ogletree, & Lunnen, 2017). Implementation will likely entail some initial training with the client and his or her stakeholders to troubleshoot operational competence, issues of access, and initial **message management** (e.g., the generation and use of messages to support communication in all its forms; Beukelman & Light, 2020). Once a device or system is in use, there will be inevitable follow-up with part or all of the AAC assessment team to address small adjustments or complete overhauls of initial assessment recommendations. These follow-up actions are often a first step to additional, broader team-based assessments, completing and reinitiating the AAC services circle (see Figure 1–1).

## The Evolving Nature of AAC Service Delivery

Current factors such as the ubiquitous nature of technology, the increasing heterogeneity of world populations, and