

Phonak Insight

Fostering hearing success in adults by connecting them to auditory skills training resources

Auditory skills training can complement hearing technology and your audiology services. New resources make referral easy.

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Key highlights

- When using hearing technology, repetitive practice is needed to train the brain to interpret new auditory information (Olson 2015; Ferguson & Henshaw 2015; Anderson, & Kraus 2013).
- Auditory skills training (AST) is the process of improving auditory skills with repetitive practice through the use of structured, targeted listening exercises.
- Studies have shown that various auditory training approaches provide benefit to individuals with hearing loss (Sweetow & Sabes 2006; Sweetow & Sabes 2007; Henderson et al. 2007; Saunders et al., 2016; Stropahl et al., 2019).

Considerations for practice

- Connecting adult clients to AST supports a holistic, comprehensive approach in hearing healthcare.
- The **HearingSuccess** portal is filled with AST resources that are at no cost to you or your clients.
- Recommending the **HearingSuccess** portal for auditory skills training offers added value to your clients and expands the care you offer beyond your clinic.
- Resources in the **HearingSuccess** portal can be used at different stages of the continuum of care (e.g., hearing aids to cochlear implants) to support clients as they move towards acceptance of hearing technology.

Introduction

The social-emotional consequences of untreated hearing loss are well understood and described in the research as “feelings of frustration, anger, embarrassment, inferiority, shame, stigmatization, loss of identity, isolation, and loneliness” (Bennet et al., 2021). Untreated hearing loss causes communication problems and decreases communication confidence. For those who have hearing loss, audiologists are often the first point of contact. They look to the audiologist for guidance on a solution that will reduce the impact of their hearing loss and help them achieve hearing success. The most common solution for treating hearing loss is recommending hearing technology.

Audiologists aim to provide comprehensive aural rehabilitation (AR) to enable individuals to hear and communicate better. A total AR approach has several components routinely addressed by the hearing care professional, including sensory management, counseling, and technology instruction. Perceptual training that focuses on improving the ability to perceive and understand the difference between sounds is often the missing piece in hearing healthcare (Saunders & Chisolm 2015; Chadha et al., 2021).

In the World Report on Hearing, the World Health Organization (WHO) acknowledges the importance of perceptual training in hearing healthcare, stating that auditory training is a tool “to help people better use their enhanced hearing in all situations” (World Health Organization, 2021). Auditory training, referred to as auditory skills training (AST) throughout this article, is one way of providing learning experiences that support the brain’s ability to perceive speech and other auditory stimuli. The goal with AST is not to improve hearing levels, but to help individuals better cope in communication situations.

While hearing technology gives individuals the ability to hear more sounds, our brains need time for acclimatization (Dillon, 2012). Literature suggests that we need to train the brain to interpret new auditory information (Olson 2015; Ferguson & Henshaw 2015; Anderson & Kraus 2013). Yet, “it is estimated that currently, less than 10% of audiologists offer AST to clients with hearing impairment” (Stropahl et al., 2019).

What professionals and clients both want

Behind every hearing aid or cochlear implant is a child, a teenager, an adult, or loved one looking for support and guidance during their hearing journey. Hearing loss challenges often do not stop after fitting a hearing aid or cochlear

implant. The active, working adult might still have challenges understanding global colleagues with accents. The senior grandparent might still struggle when their grandchild whispers to them from the park bench. Individuals want to understand speech with ease and communicate with confidence. Professionals and clients have a common goal; they want the best outcomes from a hearing aid or cochlear implant. Beyond fitting hearing technology, what more can be offered to optimize hearing success?

Benefits of auditory skills training

Auditory skills training for adults is a growing topic of interest. While the auditory training programs mentioned in the literature differ and outcomes can not be generalized, the evidence suggests that AST is a beneficial intervention (Sweetow & Sabes 2006; Sweetow & Sabes 2007; Henderson et al., 2007; Henshaw & Ferguson, 2013; Saunders et al., 2016; Stropahl et al., 2019).

Strengthening clinical outcomes

Specific trainings can improve speech perception in quiet and in noise, (Whitton et al. 2017; Oba et al. 2011; Kuchinsky et al. 2014; Stropahl et al. 2019) help reduce listening effort, (Kuchinsky et al. 2014) and improve understanding of a communication partner’s speech (Tye-Murray et al. 2016).

Facilitating adjustment to technology

Individuals come to their audiologist with unique goals and expectations. Encouraging a client and their family to define individualized, personal communication goals will help define their hearing success (Bennett et al., 2021). Audiologists can play an important role in shaping the expectations of clients and family by letting them know that adjusting to hearing with hearing aids or cochlear implants can be supported with listening practice. Discussing how AST can address reaching personal communication goals and giving them opportunities to practice can help promote the value of dedicating time outside of the clinic for structured listening practice.

Improving quality of life

Although not all training programs are the same and results vary, auditory skills training shows benefits for communication confidence and for reducing overall hearing handicap, anxiety and depression (Castiglione et al. 2016; Thoren et al. 2011; Laplante-Levesque et al. 2006) and can improve quality of life (Thoren et al. 2014). Including subjective quality of life scores is an important consideration in measuring the success of AST. When

subjective measures have been used in combination with objective measures, it has been found that word and sentence recognition may not align with self-perceived benefits from hearing technology (Moberly et al. 2018; Stropahl et al. 2019). Inviting the client and family to share experiences that resulted in improvements in their daily lives is a good way to assess the individual benefits of AST.

Benefits of online AST

Some of the obstacles of providing in-person auditory training can be overcome by recommending online or app based auditory skills training. Online training tools have been found to be beneficial interventions for individuals with hearing loss (Sweetow & Sabes 2006; Sweetow & Sabes 2007; Thorén et al. 2014). Online AST gives individuals the freedom to work at their own pace, customize their practice to their listening goals, and provides opportunities to practice communication skills independently without requiring a communication partner. This may empower client advocacy and support them in taking an active role in their own hearing health care. Self-directed learning has the benefit of improving confidence, ownership and better outcomes (Malmberg et al. 2017; Cullington et al. 2016).

AST resources in HearingSuccess

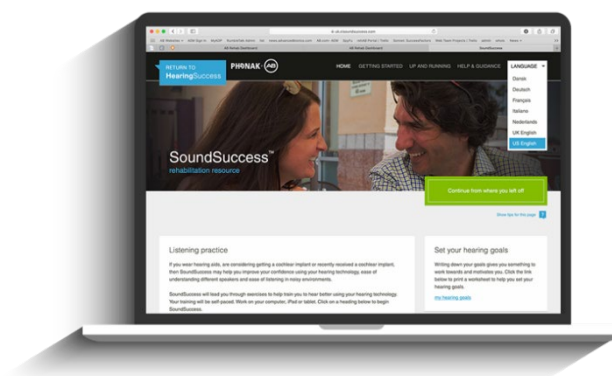
Phonak and Advanced Bionics have come together to offer the **HearingSuccess** portal to support individuals along the whole hearing journey. The portal ([HearingSuccess.com](https://hearing-success.com)) is a comprehensive online resource that contains AST tools that your clients can use independently outside the clinic. It provides families and adults with a place to start auditory skills training before, during and after they get their hearing technology.

Regardless of the level of hearing loss or type of hearing technology used, they can discover online and app-based AST resources. The portal includes other resources, such as educational pieces to learn more about hearing aids, cochlear implants and other hearing assistive technologies and links to online communities for those whose lives have been touched by hearing loss. The single page layout of the portal gives automatic visibility of relevant resources based on the registrant's age (child, adult) and type of hearing technology used (CI, hearing aid). As a professional, you can use **HearingSuccess** as a resource directory to guide in-clinic or at-home practice recommendations for your clients. You will have access to the suite of digital resources in one place, specific to your clients' needs and their technology.

Inside the **HearingSuccess** portal, two programs are specifically designed to provide AST for adults: **WordSuccess™** and **SoundSuccess™**.



WordSuccess is a mobile app available for iOS and Android designed to provide practice with word and phrase discrimination in quiet and noise. Once the app is downloaded, there are over 2,300 recorded stimuli. It offers increasing levels of difficulty, including live voice, recorded voice and noise, allowing users to progress at their own pace. It can be used at home or on the go, and as soon as hearing technology is discussed.



SoundSuccess is an online listening program that contains functional exercises to practice the ability to perceive and understand spoken language. It allows the user to individualize the program with increasing levels of complexity: using speech-reading and listening, listening alone, adding different levels of noise, and choosing between six different speakers with different dialects. It is web-based, allowing listening skills to be practiced at home as soon as hearing technology is discussed.

The program provides immediate feedback, allowing the listener to build confidence as they progress through the exercises in hierarchy.

How to implement AST into your practice

Promoting client use of the AST tools in **HearingSuccess** can easily be integrated into your practice. You can use a needs assessment tool to identify your client's goals and then explain how focused and structured practice can help them achieve their goals. Once you do this, you can recommend the **HearingSuccess** portal for AST programs on the go. You can provide a holistic approach by including goals in each area of your care (Bennett et al., 2021). Below demonstrates how AST can be implemented:

Sensory Management:

- Use a needs assessment tool with clients and their family to establish individualized communication goals prior to fitting.
- Program devices based on the client's communication goals.

Technology Instruction:

- Ask clients to describe day-to-day activities and prioritize listening environments.
- Discuss and create goals that will help to optimize participation in daily living.
- Discuss AST as one approach to gain valuable practice to facilitate adjustment to hearing technology.

Counseling:

- Encourage shared goal setting and decision making to facilitate family involvement (Scarinci et al., 2021).
- Involve communication partners to reduce hearing handicap and reduce third party disability (Timmer, 2019).
- Discuss how AST can provide focused listening practice to help them meet their shared goals and improve communication confidence.

Perceptual training:

- Recommend your clients visit **HearingSuccess.com** and register for free, online AST resources that can support them in reaching their communication goals. Training can be clinician directed or client directed.
- Refer to a Speech-Language Pathologist if appropriate.

Conclusion

Audiologists are ideally positioned to connect clients to resources that address their personal hearing and communication goals. Recommending and offering the AST resources in the **HearingSuccess** portal can help support comprehensive AR to adults with hearing loss. Introducing **HearingSuccess** early in the AR process is easy and at no cost to you or your clients.

Taking this simple step could allow you to differentiate your services, promote individualized care and strengthen clinical outcomes for your clients. Although results vary with different programs, the benefits of including AST in your practice could increase adoption and satisfaction with the services you offer and impact the quality of life of the clients you serve.

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