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Communication
Access Needs

What is included in communication access needs?[1]

This pamphlet discusses:
- Speech and language disabilities
- Alternative and Augmentative Communication (AAC)

Persona Highlights include:
- P1: Surussation (Grunk Sign Language & Nonverbal Communication)
- P4: Beebul (AAC & Morse Code)
- P5: Maeve (AAC)
- P7: Robit & rorobytes (Plain Language & Tone indicators)

Each section has some basic information around conditions, then some **DISCO-Do's** (accessibility practices that will help make an environment more inclusive to folks with a given condition) and **DISCO-Don'ts** (common barriers that exist on Earth that we don't repeat in our spaceships).

Each section ends with a couple social media accounts, projects, or books that center perspectives of disability community members that share one or more of the conditions in that section. Where information is relevant to a crew member in the crew persona deck, there may be a **persona highlight** added with information about a species, particularly relevant adaptive designs that would fit their bodies, etc.

Facilitators are welcome to share this information to help guide participants in researching adaptive design to inform their spaceships, especially the disabled-authored sources. **We strongly encourage you to share at least the persona highlights with your participants.**

The most important thing to stress during the research-about-access-needs phase is that **some things pitched as solutions are not actually desired by a disabled person**. Technology can also function imperfectly compared to how it is advertised. **Look for disabled-centered articles when considering real-world research.** What do disabled people seem to prefer? What flaws do they point out with current tech, and can you use that to iterate or improve your designs?

[1] *The outline of conditions and barriers/adaptations to consider largely stems from the **Certified Professional in Accessibility Core Competencies (CPACC) certification exam's Body of Knowledge**, written by the International Association of Accessibility Professionals (IAAP).*

We have chosen to cluster some categories together, summarizing considerations to a list of highlights (unless directly quoted), and have added in disabled centered sources/information in attempts to keep holistic accessibility at the forefront, rather than checklist/compliance based accessibility.

If any information is sourced from outside of the CPACC Body of Knowledge, there is a direct link to that source.

Speech and Language

[**A note on Common**, since it is referred to across many personas. In the DISCO galaxy, Common is a language that most beings learn to some degree of fluency if they intend to do work that interfaces with other planets. Common serves as a base spoken/written language for crews with a wide mix of native languages, and is rarely someone's only or first language. Some folks do end up using it so predominantly in work though, that it can become someone's preferred language.]

Speech and Language Disabilities

Language disorders affect a wider portion of communication (they can affect speech, writing, reading, and comprehension). **Aphasia**, for example, is a language disorder that affects all use of language (including reading, writing, and/or comprehension– not just speech).

Speech disorders, on the other hand, focus on specifically production of speech sounds and words. "**Speech sound disorders** is an umbrella term for difficulties **ranging from mild slurred speech to a complete inability to move the mouth to speak. The ability to physically speak may be completely unrelated to the person's language capabilities**; they may be able to read, write, and understand language" **(CPACC BoK, p. 15)**. **So offering Alternative and Augmentative Communication modes is important to make sure everyone is able to communicate what is on their mind!**
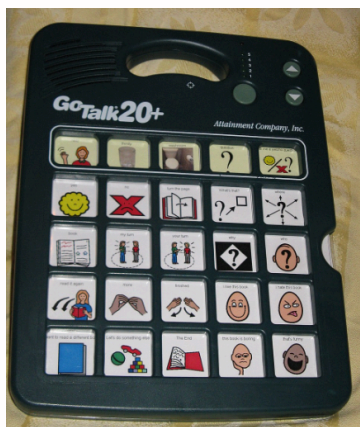
Having no speech, or mutism, can be caused by neurological, speech muscle and/or psychological issues. It can range in terms of being elective, situational, or complete inability to speak.

Alternative and Augmentative Communication (AAC)

Alternative and Augmentative Communication, or AAC, refers to modes of communication other than speech. AAC can be unaided (using no tech: sign language, body language, facial expressions, etc.) or **aided** (which includes low tech options like cardboard communication boards or high tech options like iPads).

Communication access needs and sensory access needs often go hand-in-hand, so you may notice some overlap in adaptations and barriers mentioned.

Persona highlight - Surussation

Place PH1 Communication bookmark here!

[Refer to footnote for licensing information on photos of Go Talk Static communication device[2] and Ghanaian Sign Language interpreter[3] above]

Communication hoodies for neurodivergent folks on Earth are an example of a nonverbal communication tool, which can be especially helpful when an individual may become less or non verbal when overstimulated (too much sensory input can cause emotional/physical distress for some folks, and everyone has different thresholds).

Can you offer **GSL subtitles or remote interpreting?** [Search "Video Remote Interpreting," or VRI to see how this works with ASL on Earth/get ideas. What are the current problems with VRI services you might need to address?]

Adaptive phones and Instant Messaging options over pure verbal phone calls may also be a useful route for Surussation. [Search "TTY phones" to see an example of assistive technology used by d/Deaf and/or Hard of Hearing individuals on Earth]

[Refer to footnote for licensing information on photo of video interpreting in action⁵]

Persona highlight – Beebul

Place PH4 Communication bookmark here!

Persona highlight - Maeve

Place PH5 Communication bookmark here!

Persona highlight - Robit & Rorobytes

Place PH7 Communication bookmark here!

✦ DISCO Do's [what to add]:

- Simple and format-flexible (including text-based) communication methods
- Additional time for communication-based tasks

✦ DISCO Don'ts [barriers to avoid]:

- Complex communication styles
- Requiring quick responses
- Rigidity in communication modes/formats

Disabled-Centered/Led Accounts:

- Jordyn Zimmerman's website
- Adaptive Design Association's work with AAC