Assistive Technology Resources for Children and Adults with Disabilities

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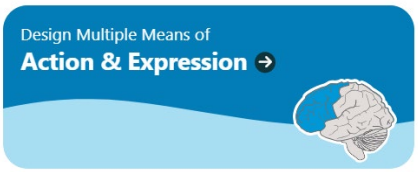

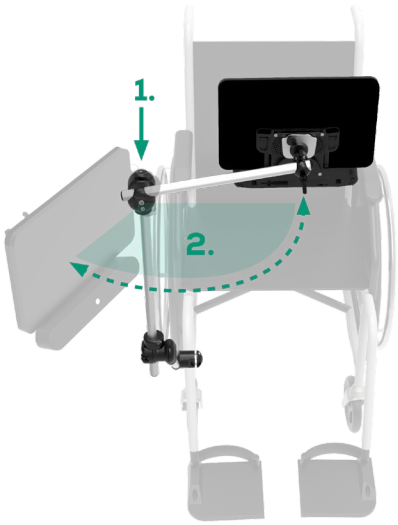

AI for all?

Barriers to AI Use among People Who Use AAC

Summary: A year ago, the first survey of people who use AAC explored attitudes toward artificial intelligence. The present study examined what makes AI difficult to use for AAC users and linked these barriers to the digital divide, computer selfefficacy, and AI literacy. Because access to the target group was limited, the study again used a questionnairebased design (Krstoski & Grandič, 2025). The most important barriers were interoperability and interconnectivity, based especially on the written comments from respondents. The findings suggest that assistive technology manufacturers should continue improving how speechgenerating devices (SGDs) work with AI and with other devices.

INTRODUCTION

Research on inequality examines how resources, opportunities, and skills are distributed and why unequal access persists. In digital media research, this is often described as the "digital divide." OECD (2001, p. 4) defines the digital divide as the gap between individuals, households, businesses, and geographic areas at different socioeconomic levels, particularly in their access to information and communication technologies (ICTs) and in their use of the Internet for a wide range of activities. In practice, this means that some groups have less access to digital tools and fewer opportunities to develop digital skills.

In Germany, several studies in schools for students with intellectual and physical disabilities have shown a secondlevel digital divide, especially in the development of digital skills (Hoffmann & Sponholz, 2025; Keely et al., 2022; Sponholz & Wolf, 2025). Last year, a small survey was conducted with people who use AAC. The participants had access to hardware and the Internet and used AI to varying degrees (Krstoski & Grandič, 2025). However, it was still unclear which barriers limited AI use. This study aimed to identify these barriers more clearly, especially in relation to the digital divide, computer self-efficacy, and AI literacy.

LITERATURE REVIEW

COMPUTER SELFEFFICACY AND THE DIGITAL DIVIDE

One way to describe digital inequality is through the concept of computer self-efficacy (CSE). Digital inequality often begins with unequal access to equipment, but it also includes differences in skills. As Dewan and Riggins (2005) note, differences in computer skill levels are a major aspect of unequal use. „One of the most important aspects of inequality of use has to do with differences in computer skill levels“ (Dewan & Riggins, 2005, p. 310). CSE is therefore an important factor in the socalled "digital capability divide" (Wei et al., 2011, p. 173).

CSE can be general or specific. General CSE refers to a person's belief in their ability to use multiple computer applications, while

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specific CSE refers to confidence in one particular activity (Downey, 2006, p. 1). In this study, CSE helps explain why some people who use AAC may feel competent when using AI to generate images or songs, even though they face other barriers.

SIX BARRIERS TO AI USE

The aim of this survey is to identify types of barriers in using AI for people who use AAC. Ko et al. (2004) identified six barriers that can make it harder for novices to learn enduser programming. Zamfirescu-Pereira et al. (2023) later applied this framework to study how nonexperts design prompts for large language models (LLMs). In the present study, we used these six barrier types as a starting point to identify barriers in AI use among people who use AAC: design, selection, use, understanding, information, and interoperability/interconnectivity.

Design barriers arise when users are unsure what they want to achieve with AI or how AI could help them. In everyday language, this feels like: "I do not know what I want to achieve."

Selection barriers occur when users know what they want but cannot find the right AI application. In that case, the challenge is: "I do not know which tool I need."

Use barriers appear when users have a tool but do not know how to operate it effectively. In AI, this often involves prompting, which can be summarized as: "I do not know how to use this tool."

Understanding barriers refer to difficulties in making sense of AI behavior or results. A person may think, "I do not understand why the result is like this."

Information barriers relate to a lack of guidance on how the AI system arrives at its output. This is closely connected to the "blackbox" problem, where the user suspects something is wrong but cannot check it. In that situation, the user may say, "I think I know why it did not do what I expected, but I do not know how to check."

Interoperability and Interconnectivity

In Ko et al. (2004), a sixth barrier category, "coordination barriers," appears. In the present study, this category was replaced by the barrier that stood out in the first AACuser survey: interoperability and interconnectivity.

Interconnectivity means the ability to link AAC devices with different hardware and software, often from different manufacturers, to perform specific tasks (e.g., using Bluetooth, a cell phone, or Internet services).

Interoperability means that different systems and products can work together without special effort from the user (Caves & DeRyter, 2006, p. 7).

These concepts help us describe the technical difficulties that AAC users face when trying to connect their devices to AI.

METHODOLOGY

RESEARCH AIMS

The study examined the barriers to AI use among people who use AAC and explored how these barriers relate to the digital divide.

QUESTIONNAIRE DESIGN AND ADMINISTRATION

As in the first survey, a fillable PDF questionnaire was used. The questionnaire included 18 yes/no statements plus comment fields. The items were developed with reference to Ko et al. (2004) and covered six barrier types: design, selection, use, understanding, information, and interoperability/interconnectivity. Each barrier was represented by three statements that participants could agree or disagree with.

The statements were presented in random order to reduce orderrelated bias (Carr & Durand, 1985). Plain language was used to make the items easier to understand. The questionnaire was piloted with two AAC users; after revision, the PDF was sent in December 2025 to AAC consultants of the German Society for Augmentative and Alternative Communication.

SAMPLE

In total, 16 completed questionnaires were included in the analysis. The sample therefore overlaps almost entirely with that of the earlier survey (Krstoski & Grandič, 2025). Two participants indicated in emails that they do not use AI.

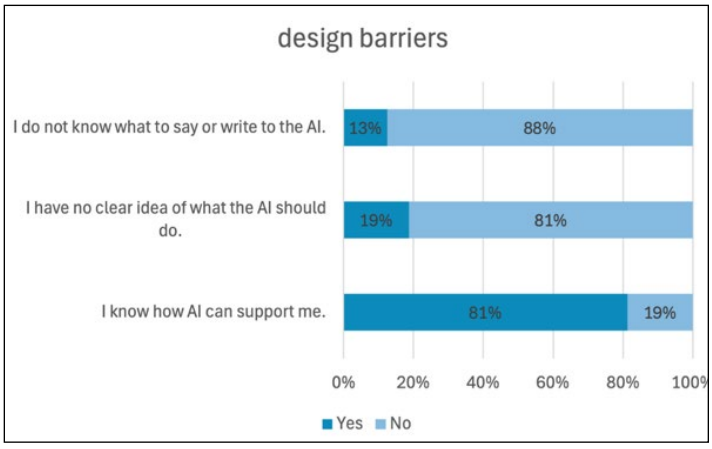
DATA ANALYSIS

The analysis was descriptive and focused on the distribution of affirmative and negative responses across the six barrier categories. It offers a first picture of where people who use AAC may need support in using AI. The data were analyzed in Excel.

RESULTS

DESIGN BARRIERS

The items on design barriers asked whether users had a clear idea of what they wanted to achieve with AI or how AI could help them. Overall, 80% or more of respondents indicated that they had a relatively clear understanding of what AI can do. This suggests that many participants already have a basic idea of how AI might support everyday activities. Some individuals, however, may find it difficult to name specific use cases.



Design Barriers

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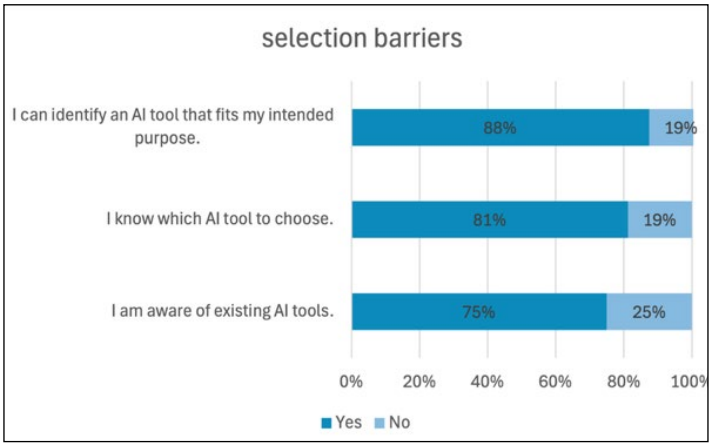
SELECTION BARRIERS

The selectionbarrier items asked whether participants could find a suitable AI application for a given task. As with the design items, more than 80% of participants said they were aware of the AI applications available. Only a small minority expressed uncertainty about finding the right tool for their needs. Awareness of AI applications therefore appears to be relatively high. About 25% of respondents indicated that they would benefit from an overview of different AI tools. One participant commented, "I would like to know more about AI" (Respondent 14).

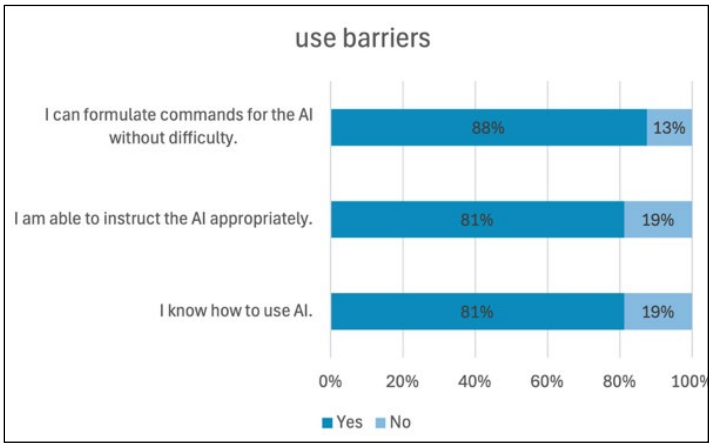


Selection Barriers

USE BARRIERS

Use barriers concern the practical operation of AI. To achieve a desired outcome, users must write effective prompts, which depends on written expression. In this survey, a large share of participants were the same individuals who answered the previous year's questionnaire, and earlier findings suggest relatively strong written language skills among them (Krstoski & Grandič, 2025). More than 80% of respondents stated that they know how to use AI and how to write effective prompts. This connects directly to the concept of computer selfefficacy.

One participant wrote, "Sometimes I do not get a good answer to my queries. I would like to participate in a training course on this" (Respondent 13). Another noted, "You really do need some prior knowledge" (Respondent 16).

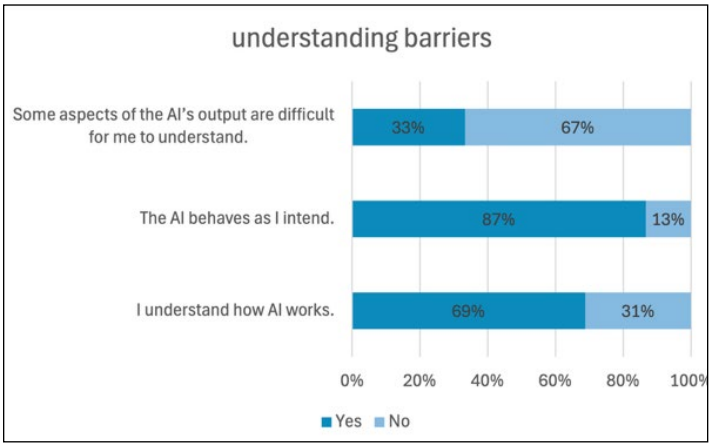


Use Barriers

UNDERSTANDING BARRIERS

The results for understanding barriers were mixed. Sixty nine percent of respondents said they know how AI works. At the same time, 33% reported that there are parts of AI they do not understand, and about one third of participants said they do not understand AI at all. This points to the importance of AI literacy. Without some basic understanding of how AI functions, it can be difficult to evaluate results critically.

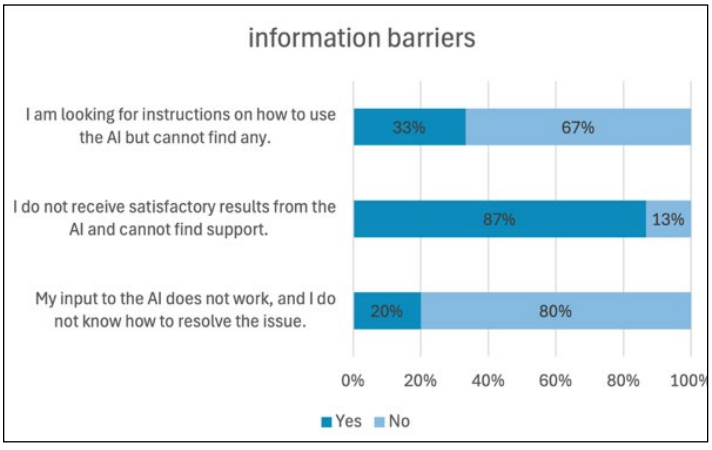
One respondent wrote, "Sometimes the AI does something I do not want it to do. Then I do not know what to tell the AI" (Respondent 6). Another said, "I do not understand AI at all" (Respondent 15).



Understanding Barriers

INFORMATION BARRIERS

Between 13% and 20% of respondents reported difficulty finding suitable guidance and explanations on how to use AI. This suggests that information is not always available in the channels they use, so additional support or clearer documentation may be needed. One participant explained, "I discuss the prompts with my assistant. ... I develop the prompts with my assistant and test



Information Barriers

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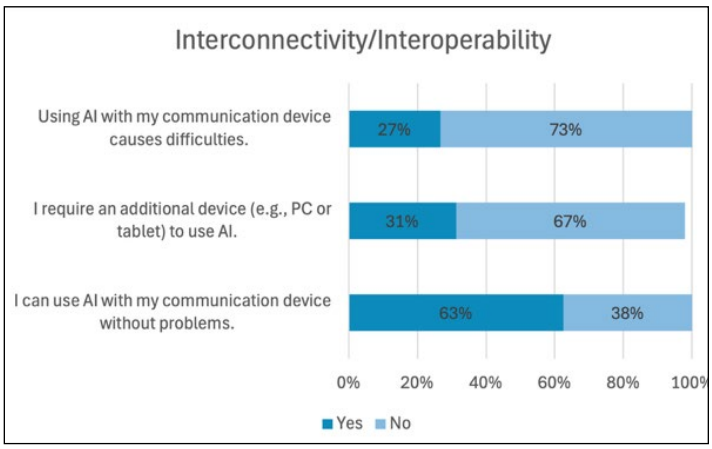
them out" (Respondent 4).

INTERCONNECTIVITY AND INTEROPERABILITY: THE GREATEST BARRIER

Interconnectivity and interoperability represented the most significant barrier to AI use. On the items related to interoperability and interconnectivity, 62.5% of respondents said they could use AI via their own speechgenerating device (SGD) without difficulty, whereas 33% reported needing additional devices (for example, a PC or tablet) or described operating AI on the SGD as problematic.

These findings confirm earlier reports about interface problems between complex electronic communication aids (Krstoski & Grandič, 2025). They highlight that access to AI depends not only on digital skills, but also on the design of the AAC system, motor abilities, and technical requirements.

The written comments illustrate these challenges in detail. One participant noted, "It could be easier with the SGD; the AI could be immediately usable on the pages" (Respondent 6). Another said, "I would like the manufacturer to integrate AI directly into my SGD. Having more AI on the writing interface and being able to access ChatGPT directly via the SGD would be very useful" (Respondent 9).



Interconnectivity/Interoperability

Several comments pointed to interoperability issues. One participant wrote, "I have difficulty copying from the main text into ChatGPT" (Respondent 11). Another remarked, "I think AI could be even more accessible in its application" (Respondent 16).

Among all the barrier categories examined, interconnectivity and interoperability appear to be the most critical obstacles to AI use for people who use AAC.

DISCUSSION

SAMPLE LIMITATIONS

The sample size was small: only 16 participants completed the questionnaire. The group largely overlaps with that of the first survey on AI use among people who use AAC (Krstoski & Grandič, 2025). Although the questionnaire allowed both affirmative and negative responses, some answers may have been influenced by social desirability. Two participants explicitly stated that they do not use AI (Respondents 9 and 15). The open comment fields, however, enabled richer input, especially regarding problems with interconnectivity and interoperability.

COMPUTER SELFEFFICACY AND AI LITERACY

Many respondents described themselves as competent based on the statements they selected, which supports the relevance of computer selfefficacy in understanding AI adoption. At the same time, the data clearly show differences, particularly in relation to understanding barriers and to interconnectivity and interoperability. This suggests that while some AAC users feel confident in their skills, structural and technical barriers may limit their actual use of AI.

THE AI DIVIDE

When AI is not accessible, this can be understood as part of the digital divide. For this reason, some authors also speak of an "AI divide" (Carter et al., 2020). The present findings suggest that, in the case of AAC users, technical barriers—especially interoperability and interconnectivity—play a central role in shaping access to AI. This expands our understanding of the digital divide to include not only the ability to use technology, but the ability to integrate it into assistive communication systems.

CONCLUSION

The number of participants in this survey is too small to allow broad generalizations. However, the study highlights an important research gap, which is partly due to the difficulty of reaching the target group. The AAC users who participated appear to possess relatively strong written language skills, which supports basic AI use. Despite this, clear access barriers and varying levels of digital competence remain, especially in relation to understandability, interoperability, and interconnectivity.

IMPLICATIONS FOR PRACTICE

The findings suggest that manufacturers of assistive technologies should continue to improve the usability of speechgenerating devices and their integration with AI. In particular, smoother interoperability with other devices and more direct access to AI tools from the SGD could reduce key barriers. The ability to use AI through the AAC device itself—rather than through separate computers or tablets—would be a significant step toward genuine access.

IMPLICATIONS FOR RESEARCH AND TEACHING

It may also be useful to develop AIrelated modules in collaboration with people who use AAC. To support such work, the concept of AI literacy becomes important. Several frameworks already exist for how learners can be taught to use AI (UNESCO, 2024). AI will likely remain a central technology, so people need opportunities to learn how to use it. „Like education in general,

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it is not enough to give people a book, we also have to teach them how to read in order to make it useful" (Hargittai, 2002). This includes people who use AAC.

NEXT STEPS

An AI working group has been initiated with the participation of AAC users; two people who use AAC have already led sessions on using AI. Continued involvement of AAC users in the development and testing of AI tools and instruction will be essential to ensuring that AI truly becomes accessible to all who use AAC.

ACKNOWLEDGEMENTS

Thanks to the AAC consultants of the German Society for Augmentative and Alternative Communication for their collaboration and support in conducting this survey.

REFERENCES

Carr, E. G., & Durand, V. M. (1985). Reducing behavior problems through functional communication training. Journal of Applied Behavior Analysis, 18(2), 111–126. https://doi.org/10.1901/jaba.1985.18-111

Carter, L., Liu, D., & Cantrell, C. (2020). Exploring the intersection of the digital divide and artificial intelligence: A hermeneutic literature review. AIS Transactions on Human-Computer Interaction, 12(4), 253–275. https://doi.org/10.17705/1thci.00138

Caves, K., & DeRyter, F. (2006). Interconnectivity: Enhancing AAC connections. Augmentative Communication News, 18(1), 6–8.

Dewan, S., & Riggins, F. (2005). The digital divide: Current and future research directions. Journal of the Association for Information Systems, 6(12), 298–337. https://doi.org/10.17705/1jais.00074

Downey, J. (2006). Measuring general computer selfefficacy: The surprising comparison of three instruments in predicting performance, attitudes, and usage. In Proceedings of the 39th Annual Hawaii International Conference on System Sciences (pp. 210a–210a). IEEE. https://doi.org/10.1109/HICSS.2006.268

Hargittai, E. (2002). Second-Level Digital Divide: Differences in People's Online Skills. First Monday, 7(4). https://doi.org/10.5210/fm.v7i4.942

Hoffmann, A.K., & Sponholz, J. (2025). Digitale Mediennutzung von Jugendlichen und jungen Erwachsenen mit DownSyndrom. Zeitschrift für Heilpädagogik, 76(5), 180–194.

Keely, C., Geuting, J., Stommel, T., Kuhlmann, A., Gollwitzer, M., & Mairhofer, P. (2022). Digitale Teilhabe im sonderpädagogischen Schwerpunkt Geistige Entwicklung. Zeitschrift für Heilpädagogik, 73(10), 464–479.

Ko, A. J., Myers, B. A., & Aung, H. H. (2004). Six learning barriers in enduser programming systems. In 2004 IEEE Symposium on Visual Languages - Human Centric Computing (pp. 199–206). IEEE. https://doi.org/10.1109/VLHCC.2004.47

Krstoski, I., & Grandič, A. (2025). UK und KI. Erste Einblicke in KINutzungsweisen unterstützt kommunizierender Personen. Unterstützte Kommunikation, 30(2), 39–46.

OECD. (2001). Understanding the digital divide. Retrieved from https://www.oecd.org/content/dam/oecd/en/publications/reports/2001/01/understanding-the-digital-divide_g17a1b56/236405667766.pdf

Sponholz, J., & Wolf, K. (2025). Das Ende des Digital Divide? – Digitale Mediennutzung von Jugendlichen mit Beeinträchtigung der körperlichen und motorischen Entwicklung. Zeitschrift für Inklusion, 20(3), 83–109.

UNESCO. (2024). AI competency framework for teachers. UNESCO. https://doi.org/10.54675/ZJTE2084

Wei, K.K., Teo, H.H., Chan, H. C., & Tan, B. C. Y. (2011). Conceptualizing and testing a social cognitive model of the digital divide. Information Systems Research, 22(1), 170–187. https://doi.org/10.1287/isre.1090.0273

Zamfirescu-Pereira, J. D., Wong, R. Y., Hartmann, B., & Yang, Q. (2023). Why Johnny can't prompt: How nonAI experts try (and fail) to design LLM prompts. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (pp. 1–21). ACM. https://doi.org/10.1145/3544548.3581388 ■

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Every Door Open:
UDL for AT and AAC Users

Summary: This article explores how the Universal Design for Learning (UDL) framework creates more inclusive classrooms for students who use Assistive Technology (AT) and Augmentative Alternative Communication (AAC). Readers will learn to identify common classroom barriers, apply practical UDL-based strategies to remove those barriers for all learners, and build collaborative relationships with educators to advocate for the full inclusion of AT and AAC users, including strategies for ensuring that all students can access every available choice, not just one.

Imagine a classroom where every student is a full and valued participant in learning, regardless of how they communicate, move, or access information. This is not a distant ideal. It is an achievable reality when educators embrace the Universal Design for Learning (UDL) framework alongside Assistive Technology (AT) and Augmentative Alternative Communication (AAC).

As content lead specialists with the Open Access Project, a California Statewide System of Support Special Education Resource Lead, we work at the intersection of UDL, AT, and AAC every day. Our foundational belief is simple: with access to quality curriculum and instruction, all students can engage, actively participate, and learn within inclusive settings. This article shares what we have learned about how UDL, AT, and AAC work together to remove barriers and build learner agency for all.

WHAT ARE UDL, AT, AND AAC?

Before we can explore how Universal Design for Learning (UDL), Assistive Technology (AT), and Augmentative Alternative Communication (AAC) connect across design, tools, and communication, it helps to define each one clearly.

EMILY DESJARDINS, M.A., SPECIAL EDUCATION, is a Program Specialist and UDL/AT Content Lead for the Placer County SELPA. Her background is in special education teaching and working as a Program Specialist for school districts. She has seen firsthand the amazing learning opportunities that Universal Design for Learning can create for children on school campuses. Emily believes in the importance of supporting learning variability in our children to help them understand their learning diversity and build their confidence and knowledge that all humans learn differently. When not working, Emily enjoys spending time with her husband and young children, usually outside doing chores on their small budding homestead.

JENNIFER WRIGHT, M.A., CCC-SLP, is a Program Specialist and AAC Content Lead with the Open Access grant. Jennifer's professional career has been focused on AAC and Assistive Technology for over 20 years. Her prior experience includes supporting student's needs with communication across a range of grade spans. Jennifer goes into every situation ready to ignite enthusiasm and build people's confidence in doing this exciting work. Somehow, Jennifer manages to find the time and energy to be the Club Director for the Auburn Aces Volleyball Club while also figuring out how to adjust to an empty nest.

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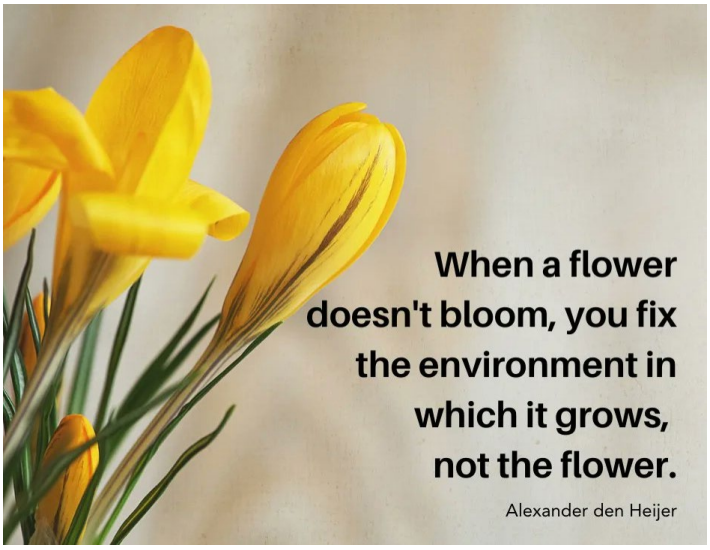
UNIVERSAL DESIGN FOR LEARNING (UDL)

UDL is a teaching framework rooted in the learning sciences. It guides educators in developing flexible methods, materials, and environments that embrace learner variability, minimize barriers, and build learner agency for all students. At its core, UDL does not seek to fix individual students. It seeks to fix the environment.

Universal Design for Learning (UDL) Guidelines



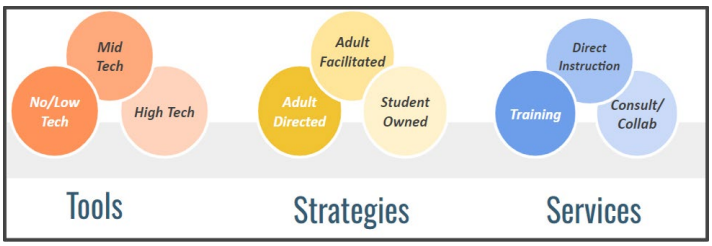
When a flower doesn't grow, we don't fix the flower. We examine the conditions it's growing in. The same is true in education. Barriers are not inherent in learners. They emerge when there is a mismatch between the learner and the design of the learning environment. As Shelley Moore illustrates through her seed packet analogy, which helps us think about the conditions needed for growth, every learner comes with unique needs, and our role is to intentionally design environments and nurture the conditions where each learner can flourish.

The UDL 3.0 Guidelines, developed by CAST, organize this work around three overarching principles: Engagement, Representation, and Action and Expression. Each principle includes guidelines and specific considerations that help educators proactively design for the full range of learners in their classrooms. The ultimate goal is learner agency, producing students who are purposeful and reflective, resourceful and authentic, and strategic and action-oriented.

ASSISTIVE TECHNOLOGY (AT)

Assistive technology is best understood as a continuum, not a single category of devices. It encompasses:

- Tools, ranging from no-tech and low-tech options (e.g., pencil grips, visual schedules) to mid-tech (e.g., digital timers, text-to-speech apps) and high-tech (e.g., speech-generating devices, screen readers)
- Strategies, including adult-directed approaches, adult-facilitated supports, and student-owned strategies that build independence
- Services, such as training, direct instruction, and consultation and collaboration among team members



This broad view of AT is essential. When we see AT as a continuum of tools, strategies, and services, we recognize that most students benefit from some form of AT at some point, and that providing robust support for AT users means building systems, not just issuing devices.

AUGMENTATIVE ALTERNATIVE COMMUNICATION (AAC)

AAC is everything an individual uses to communicate or to enhance communication. This includes unaided strategies such as gestures, facial expressions, and signs, as well as aided strategies such as picture boards, voice output switches, and speech-generating devices such as tablets running communication apps. Different strategies may be needed for different situations and communication partners, and strategies and tools may be combined to meet a variety of communication needs.

For students who use AAC in the classroom, participation is not simply about having a specific tool or using a specific strategy. It is about having the vocabulary, time, and opportunities to use their tools and strategies meaningfully as an engaged member of the learning community.

THE SCIENCE BEHIND LEARNER VARIABILITY

One of UDL's most powerful contributions to education is its grounding in neuroscience. Our brains are complex webs of integrated and overlapping networks, and like fingerprints, no two brains are alike. Learners do not have isolated "learning styles."

Interested in learning more about Learner Variability?

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Instead, they rely on many parts of the brain working together, and that combination shifts depending on context, emotion, interest, and countless other factors.

This means there is no such thing as an "average learner." Every student brings individual strengths, preferences, and challenges. Variability exists not just between students, but within each student across different tasks and settings. When we design learning environments that account for this variability, students can access and engage in ways that are genuinely effective for them.

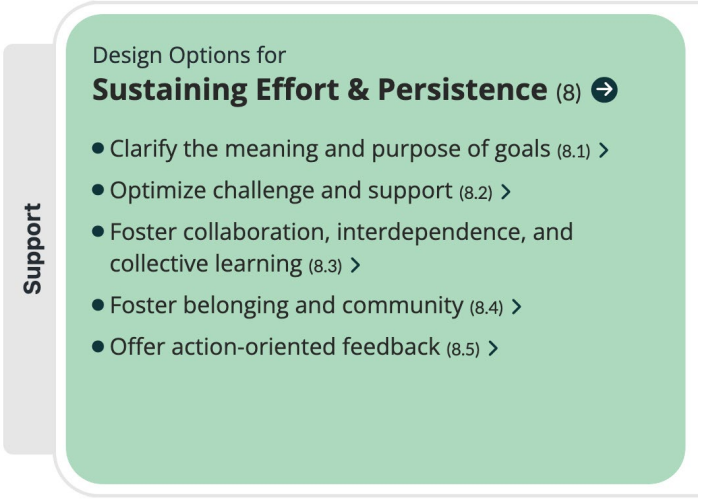
For students who use AT and AAC, this variability is particularly pronounced. The way a student communicates or accesses information may look very different from one day to the next, from one subject to another, or from a small group setting to a whole class discussion. Embracing variability means building flexible systems that can respond to that reality.

Interested in learning more about Learner Variability?
Something to Read: ***Variability is the Rule, Not the Exception* by The Digital Promise**
Something to Watch: ***Learner Variability* from Nicole Tucker Smith**
Something to Explore: ***The Digital Promise Learner Variability Navigator***

THE STRUCTURE OF THE UDL GUIDELINES FRAMEWORK

The UDL Guidelines framework becomes especially powerful when you flip the lens: each guideline represents a potential barrier learners might face, while the considerations listed beneath it represent potential solutions to address that problem. For AT and AAC users, this reframe is particularly useful. It shifts the question from "Does this student have access?" to "Where exactly is the barrier, and what design moves can minimize the barrier?"

Take the guideline Design Options for Sustaining Effort & Persistence as an illustration. The guideline itself surfaces the underlying challenge: how do we design learning experiences that keep all learners engaged and persisting toward their goals? The considerations beneath it offer concrete design moves in response, including clarifying the purpose of goals, optimizing challenge and support, fostering collaboration and collective learning, building belonging and community, and offering action-oriented feedback. These considerations aren't arbitrary design suggestions. They are grounded in the neuroscience of how humans actually sustain effort and persist through challenge, reflecting what research tells us about motivation, goal-directed behavior, and the affective networks of the brain. A student who uses AT or AAC may struggle with any one of these, not because of a deficit, but because the environment hasn't yet been designed with their participation in mind.



Design Options for Sustaining Effort & Persistence

In this way, the framework becomes less of a checklist and more of a diagnostic-to-design pathway. Identify which guideline reflects a struggle your learners are experiencing, then look to the considerations as a menu of targeted, evidence-based solutions. The sections below put that pathway into practice, walking through each of the three UDL principles with a common barrier and concrete strategies to address it.

USING UDL TO ANTICIPATE AND REMOVE BARRIERS

One of the most actionable applications of UDL is using the guidelines proactively, before a lesson begins, to anticipate barriers and design them out of the learning experience. For AT and AAC users, barriers are most often found in two areas: participation opportunities and access. Below, we walk through each of the three UDL principles with a common classroom barrier and practical strategies to address it.

A CRITICAL DISTINCTION: ACCESS TO ALL CHOICES, NOT JUST ONE

When we remove barriers for students who use AT and AAC, our goal is not simply to give them a way out of a difficult situation. Our goal is to ensure they can genuinely access every option available to their peers. There is an important difference between reducing a barrier by narrowing a student's choices and reducing a barrier by expanding their capacity to choose freely. True inclusion means that a student who uses AAC can choose to work alone, with a partner, or in a group, not because one option was pre-selected as manageable for them, but because we have done the work to make all options genuinely accessible. The same is true for students who use AT. A student who relies on a word processor, a text-to-speech tool, or an alterna-

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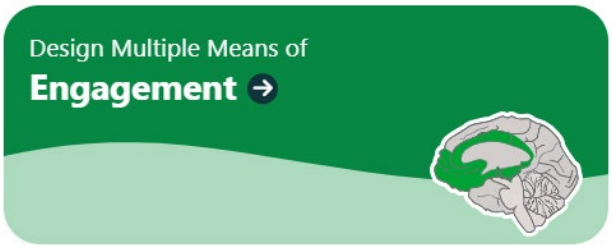
tive keyboard should be able to choose any expression option their peers can choose, not because the team has steered them toward the most manageable one, but because every option has been set up to work with their tools.

ENGAGEMENT: BUILDING COMMUNITY, SAFETY, AND SELF-REGULATION



The UDL principle of Engagement focuses on what motivates and sustains learners, including building a sense of community, feeling emotionally safe, and developing the skills to self-regulate.

Common barrier: Group work is required, but the learning environment offers limited options for how students can participate. When collaboration depends on a single mode of engagement, such as real-time verbal discussion, the design itself can create barriers. Providing flexible participation options (e.g., varied roles, alternative communication supports, and structured collaboration) helps ensure the barrier remains in the environment, not the learner.

Universal strategy: Offer students choices about how to participate, such as working independently, with a partner, or in a small group. This respects the variability of all learners and gives every student the autonomy to choose the structure that supports their best learning and engagement.

Strategy for AAC users: ensuring access to ALL choices: Here is where it is easy to fall into a well-meaning trap. Simply offering a choice is not enough if a student who uses AAC can only realistically access one of those options. Our goal is not to remove the collaborative option from the student's reach. Our goal is to build the supports so that collaborative work is genuinely available to them.

This looks like:

- Proactively loading collaboration vocabulary onto the student's AAC device or providing a core vocabulary board that includes the language of working together, with phrases such as "I think," "Can I share?" "What do you think?" "I agree," and "Let's try"
- Working with the SLP ahead of the lesson to front-load and practice this vocabulary, so the student can use it with confidence
- Teaching peers in the class how to engage with a student who uses AAC, including how to allow wait time, how to look at and interact with the device, and how to be a genuine communication partner rather than a passive bystander
- Modeling AAC use yourself and creating structured opportunities for all students to try using the AAC system, so that device use becomes a normalized and valued part of the classroom community

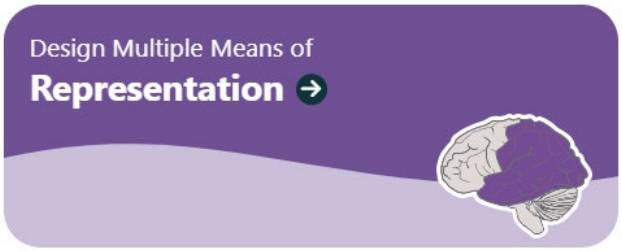
When we build these supports, the student who uses AAC is no longer steered toward the safe option of working alone. They can choose to collaborate because collaboration is now genuinely available to them.

Strategy for AT users: ensuring access to ALL choices: Students who use AT to support self-regulation or executive functioning may face a different but equally real barrier in flexible participation structures. If a student relies on a visual schedule, a timer, or a structured routine to feel emotionally safe and ready to learn, an open-ended choice about how to participate can itself become a source of anxiety rather than empowerment.

This looks like:

- Pairing the participation choice with a visual support that makes each option concrete and predictable, such as a choice board that shows what "working with a partner" or "working independently" actually looks like in this classroom,
- Building in a brief preview of the available options at the start of the lesson, so students who need processing time or routine can prepare before a choice is required
- Checking that any timers, visual schedules, or organizational tools the student relies on are available and functional, regardless of which participation structure they choose

REPRESENTATION: SUPPORTING PERCEPTION AND KNOWLEDGE BUILDING



The UDL principle of Representation focuses on how information is presented, ensuring students can perceive, process, and apply knowledge regardless of sensory, linguistic, or cognitive differences.

Common barrier: Instruction relies exclusively on verbal delivery, followed by cold-call questions. Students who process information differently, or who need time to formulate a response using their AT, are immediately at a disadvantage. This format rewards rapid verbal processing and penalizes those who need more time or a different modality.

Universal strategy: Offer information through multiple modalities: audio, visual, and hands-on. This can be structured as

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a choice exploration period, or embedded into whole-group instruction by simultaneously presenting a variety of materials (e.g., a verbal explanation paired with a visual anchor chart and a physical manipulative).

Strategy for AAC users: ensuring access to ALL choices: Accessing multiple modalities only removes the barrier if the student's AT and AAC supports are aligned with each modality being offered. A student who uses a speech-generating device needs to be able to navigate between modes of input and response, not just be pointed toward a visual option and left there.

This looks like:

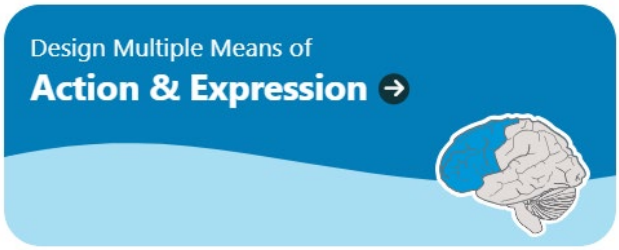
- Providing front-loaded information before the lesson by sharing the topic, key questions, and relevant vocabulary the day before or at the start of class, so the student has time to locate and organize vocabulary on their device
- Ensuring that visual materials such as anchor charts, diagrams, and graphic organizers are accessible using symbol support.
- Building in processing time for all students, which benefits AAC users specifically and also creates a better learning environment for everyone

Strategy for AT users: ensuring access to ALL choices: Offering multiple modalities only removes the barrier if the student's AT is compatible with each one. A student who uses text-to-speech to access written content, for example, needs digital versions of any visual materials being offered, not just a printed anchor chart. A student who uses a screen reader needs materials formatted to work with that tool before the lesson begins, not as an afterthought.

This looks like:

- Auditing each modality being offered ahead of the lesson and asking: Can this student's AT tools access this format?
- Ensuring that digital materials are formatted with accessibility in mind, utilizing proper heading structures, alt text for images, and readable fonts, so that text-to-speech and screen reader tools function as intended
- Providing materials in advance so students who use AT for reading or organization have time to navigate and process the content before instruction begins, rather than trying to catch up in real time

ACTION AND EXPRESSION: DEMONSTRATING UNDERSTANDING IN FLEXIBLE WAYS



The UDL principle of Action and Expression focuses on how students demonstrate what they know, and on ensuring that the method of demonstration does not become a barrier.

Common barrier: There is only one way to show understanding, such as a handwritten response or a verbal answer in front of the class. A student who uses AAC may be fully capable of demonstrating deep understanding of the content but unable to do so within the constraints of a single-mode assessment. The same barrier applies to students who use AT. A student who relies on a word processor or speech-to-text tool to produce written work may be unable to demonstrate what they know when the only option requires handwriting.

Universal strategy: Apply the principle of "Firm Goals, Flexible Means." Identify clearly what evidence you need that students understand the content, then expand the options for how students can produce that evidence, whether through a drawing, a video, a verbal explanation including a response communicated through an AAC device, a visual organizer, or a constructed model.

Strategy for AAC users: ensuring access to ALL choices: Offering options only removes the barrier if the student can genuinely access all of them. The work here is not to identify which option is best for the AAC user and guide them toward it. The work is to verify and build the supports so that every option is within reach.

This looks like:

- Reviewing each available option ahead of the lesson and checking whether the student's AAC system supports that mode of expression
- Pre-loading vocabulary, sentence starters, or symbol supports that correspond to each option
- Working collaboratively with the classroom teacher to ensure that the student's expression via AAC is recognized as equally valid and equally rigorously assessed as any other mode of response

Strategy for AT users: ensuring access to ALL choices: A student who uses AT to produce written work, such as a word processor, a speech-to-text tool, or an alternative keyboard, may find that some expression options are genuinely accessible while others create unexpected barriers. The goal is not to assume which options work for a given student, but to verify and

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build supports across all of them.

This looks like:

- Reviewing each expression option ahead of the lesson and confirming that the student's AT tools support that mode, for example checking that speech-to-text software is set up and functioning if a verbal explanation option is offered
- Ensuring that the student's preferred AT tools are available and charged for every option, not just the one the team expects them to choose
- Working with the classroom teacher to establish that work produced with AT support, whether dictated, typed, or recorded, is assessed on the quality of the student's thinking, not on the modality used to produce it

THE ROLE OF COLLABORATION IN ADVOCACY

The most powerful lever for change is collaborative relationship-building with classroom educators.

When all members of the educational team work together, they can jointly identify barriers before they become problems, plan proactively for the full range of learners, and build shared understanding of what individual students need. This includes a shared understanding of the "access to all choices" principle: helping classroom teachers see that their job is not to protect AT and AAC users from challenging options, but to build the supports that make those options genuinely available.

Peer education is a particularly powerful piece of this work. When classmates understand how to be effective communication partners, including how to give wait time, how to engage with an AAC device, and how to interact with a peer who communicates differently, the social environment of the classroom shifts. AAC use becomes normalized. Similarly, when peers understand that a classmate who uses an alternative keyboard or voice-to-text tool is simply accessing a different pathway to the same learning, AT use becomes a normalized and valued part of the classroom community rather than something that sets a student apart. Students who use AT and AAC devices are seen as learners, not as exceptions, and collaborative learning structures become genuinely available to everyone.

Practical entry points for collaboration include co-planning sessions focused on upcoming lessons, brief check-ins to identify barriers and brainstorm supports, sharing vocabulary overlays, core boards, and AT tool supports ahead of lessons, and modeling both AAC and AT use in the classroom alongside peer practice opportunities. Advocacy for inclusion begins in these everyday conversations.

DEVELOPING LEARNER AGENCY

The ultimate goal of UDL is not accessibility for its own sake; it is learner agency. Agency develops when students know what engages them, understand what tools and strategies they need to perceive and make sense of information, and can organize and communicate their learning in ways that are authentic to them.

For students who use AT and AAC, learner agency means more than having the right tool or strategy. It means being taught to use them with fluency and confidence. For students who use AAC, it means having vocabulary that is robust and personally relevant, not just functionally adequate. For students who use AT, it means having tools that are genuinely matched to their needs across all tasks and settings, not just the most readily available option. And crucially, it means being given the real opportunity to make choices: to choose to collaborate or to work independently, to choose how to demonstrate understanding, and to choose the tools and strategies that work best in a given moment, because all of those choices have been genuinely made available.

When we apply UDL to our practice, we are not adding one more framework to an already full plate. We are building a shared language and a shared commitment to the kind of classrooms where every student, including those who communicate and access the world differently, can become a purposeful, resourceful, and strategic learner who chooses their own path.

CONCLUSION

UDL, AT, and AAC are not separate silos. UDL provides the framework for anticipating and removing barriers, while AT and AAC serve as the tools and strategies that bring that vision to life. When integrated intentionally, they create classrooms where participation is truly universal. By learning to apply flexible strategies and build supports that open all options to all learners, collaborative teams can be powerful advocates for the inclusive environments every student deserves.

The next time you are planning for a student who uses AT, including AAC, ask not just "What choice can this student manage?" but "What would it take for this student to access every choice?" That shift in question is the shift from accommodation to true inclusion.

INTERESTED IN LEARNING MORE ABOUT UDL, AT AND AAC? CHECK OUT OUR FREE OPEN ACCESS LEARNING OPPORTUNITIES!

Looking to go deeper? Open Access offers free professional learning opportunities throughout the school year, from full-day sessions to one-hour webinars, all designed to help educators increase access for every learner. Visit our website (linked above) to find an upcoming event and join us.

CHECK OUT THE OPEN ACCESS WEBSITE FOR FREE RESOURCES TO SUPPORT YOUR UDL, AT AND AAC IMPLEMENTATION JOURNEY!

Free Printable CORE Boards Ready to put the strategies in this article into practice? Our free, printable CORE boards give students who use AAC immediate access to the high-frequency vocabulary they need to participate meaningfully across activities and settings. Available in a range of sizes and formats, including lanyards, and activity-specific boards, these tools make it easy to ensure that collaborative vocabulary is in students' hands before the lesson begins.

FlipKits (UDL, AT, and AAC) Not sure where to start when selecting the right tools and strategies for a student? Our FlipKits are curated collections of resources organized to help teams make informed, student-centered decisions. The AAC FlipKit organizes tools by user level, from emergent communicators to advanced system users, so teams can identify where a student is and plan for where they are headed. FlipKits are available for UDL, AT, and AAC, making them a practical companion to everything covered in this article.

Interactive UDL Companion The Interactive UDL Companion is a dynamic, user-friendly tool built directly on CAST's UDL Guidelines 3.0. It walks educators through each of the three UDL principles and offers practical strategies and examples for designing flexible learning experiences that meet the needs of all learners. If the framework described in this article sparked your thinking, the Companion is the natural next step for putting it into action in your classroom.

UDL Unlocked Podcast UDL Unlocked takes the framework out of the handbook and into the classroom. Each episode is about 20 minutes long and features a real classroom teacher sharing how they implement one specific UDL consideration in their own practice. Rather than broad theory, listeners get concrete, strategy-level insights straight from educators doing the work. It's an ideal resource for anyone who wants to hear what UDL actually looks and sounds like in action, one consideration at a time.

ECE UDL Crosswalk Working with early childhood learners? The ECE UDL Crosswalk was developed in partnership with Novak Education and San Joaquin County Office of Education to help early learning educators connect UDL principles directly to developmentally appropriate practice. Each UDL consideration is broken down into manageable parts and paired with practical application ideas designed specifically for early childhood settings, so the framework feels relevant and immediately usable no matter the age of your learners.

ABOUT THE AUTHORS

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RESOURCES

- Open Access Website: https://www.openaccess-ca.org/
- CAST UDL Guidelines 3.0: https://udlguidelines.cast.org
- CAST (2024). Universal Design for Learning Guidelines version 3.0. Lynnfield, MA: Author. ■

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Rehadapt

Empowering Communication through Engineering:

How Mounting Solutions Enable AAC Users to Thrive in Their Daily Lives

Summary: This article will explore how thoughtful engineering and holistic design make AAC access possible throughout the entire day. Through the real-life experiences of Mara and Frank, expert insight from John Costello and practical experience from Lisa Gore, readers will see how mounting solutions enable independence, consistency, and dignity across environments. The article will outline key engineering principles, regulatory demands, and the role of services like VMS, showing clinicians how reliable positioning transforms communication from possibility into everyday participation.

Communication shapes every aspect of human life: how we connect, how we express our needs, how we build relationships, and how we participate in our communities. For people who rely on augmentative and alternative communication (AAC), the importance of reliable access to their communication device cannot be overstated. Yet while AAC technology continues to advance rapidly – offering more powerful software, better eye-tracking, faster processing, and more seamless interfaces – one essential and often underestimated truth persists: none of these advancements matter if the user cannot physically access their device at the right moment, in the right position, across the full rhythm of their day.

PHILIPPE FERREIRA, PhD, is a biomedical engineer with a Master's in Biomechanics and a doctorate in Gait Analysis. After more than eight years at Rehadapt, first in R&D and now in product management, he focuses on transforming clinical challenges into simple, reliable solutions. Passionate about accessibility and regulatory compliance in both Europe and the U.S., he is dedicated to developing dependable products, maintaining a clear portfolio, and ensuring that user needs drive every innovation.

SAMANTHA SHIELDS, PT, DPT, is a doctor of physical therapy and a mounting consultant specializing in physical access and assistive technology solutions. She began her career in outpatient and subacute rehabilitation, where she focused on building strong therapeutic relationships and empowering patients to take an active role in managing their overall health. Drawing on her clinical background, biomechanics expertise, and experience with rehabilitation technology, she transitioned into her role as a mounting consultant for AT. Sam is passionate about creative problem-solving and enjoys developing customized solutions that help her clients achieve the highest level of independence possible.

MAGGIE MAHONEY, BSBE, ATP, is an assistive technology practitioner specializing in AAC, alternative access, and mounting. Her passion for this industry began in university where she learned how technology could be used to bridge the independence gap for people with disabilities. After a rewarding career in the clinical sector as a Rehabilitation Engineer she transitioned to the commercial side of the AT industry. Over the last 20+ years Maggie has worked with many of the leading AT and AAC companies in both the US and Europe.

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Mounting solutions, though often viewed as peripheral hardware, are in reality the infrastructure that makes all AAC interaction possible. They are the link between potential and real-world usability. The mount ensures that a device stays stable, reachable, and aligned in ways that respect the user's motor patterns, energy, muscle tone, and daily environments.

This article explores how thoughtful mounting design transforms lives – through the stories of three individuals representing different ages, abilities, environments, and experiences. Mara, a young adult in Germany beginning her professional life; Frank, a coach, music writer and AAC ambassador who depends on consistent access for both personal and professional independence; and John Costello, the director of the Boston Children's Augmentative Communication Program and one of the world's most recognized AAC clinicians, who brings four decades of insight into why mounting is foundational to communication success.

Their stories illustrate a central principle: mounting is not an accessory. It is an enabler of autonomy. An equalizer of opportunity. And it affirms dignity.

MARA'S STORY: FREEDOM THROUGH POSITIONING

Mara is nineteen years old, determined, and already carving out a meaningful place for herself in the world. She lives with cerebral palsy and uses a wheelchair; her motor limitations mean that many everyday actions require adaptation. But Mara is far more than the constraints of her body. She is confident, engaged, and proudly independent. She has completed school, excelled in an internship in communications, and is now preparing to start her first job in the administration office at her former school.

Mara with her tablet mounted on a power chair using a **curved wheelchair mount**.

For Mara, communication technology is not simply a tool – it is her voice, her autonomy, her presence in both personal and professional spaces. But the device alone is not enough. What truly gives her independence is the ability to access her Tobii Dynavox TD Pilot or iPad consistently, comfortably, and safely across all her environments. And that is where mounting solutions come in.

At work, her communication device is mounted in a stable but flexible position at her desk. She does not need someone to set it up each morning or adjust it throughout the day; the mount delivers repeatable, reliable positioning that fits her needs and her posture.

When she goes out with friends – meeting for coffee, attending events, or browsing through shops, the mount ensures that her speech generating device remains accessible and ready. Her communication does not depend on whether someone can hold a device for her or reposition it. She remains autonomous.

At home, the same consistency enables her to enjoy the full spectrum of her interests: reading, painting, browsing online, or communicating with her family. Her device can be easily repositioned based on what she is doing – angled for reading, aligned for eyegaze access, or set at a comfortable height for relaxation.

Without appropriate mounting solutions, these everyday activities would become frustrating or even impossible. Devices might slip out of alignment, fall out of range for access, or require constant help from others. But with the right mounting system, Mara gains far more than a stable screen: she gains freedom. She gains efficiency.

Mara's story demonstrates why we must think beyond the device itself and consider the entire environment in which communication happens. When we give people the right positioning, we unlock their power to engage.

"Mounting solutions aren't just hardware made of alloy," Robert Causemann, an occupational therapist once explained to her family. "They're a piece of freedom. I have known Mara since she was five years old, during the earliest stages of her AAC journey. Watching her growth – from a young girl learning to communicate with emerging tools to a young professional preparing to enter the workforce – has been a profound reminder of why positioning matters. It turns what is technically possible into what is practically achievable. It makes inclusion not an aspiration but a lived reality."

If Mara's everyday routines reveal what mounting makes possible, the engineering behind those routines explains why it works so reliably. The most successful mounting solutions share a quiet, almost invisible characteristic: they are designed to disappear into the background while doing an enormous amount

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of technical work. They absorb vibration without wobble, hold their position over time, enable fast micro adjustments, and repeat those positions accurately, day after day, across wheelchairs, desks, bedsides, and community environments. The device feels as if it has always belonged exactly where it is.

FRANK'S STORY: HOW RELIABLE POSITIONING TURNS POSSIBILITY INTO PARTICIPATION

Frank with his SGD mounted on a wheelchair with a **M3D mount with a swing away joint**. His phone is attached directly to the Accent 1400 using a **dedicated phone holder**.

Frank's experiences capture this contrast vividly. As someone who depends on a speech generating device in every environment of his life, he knows better than most how dramatically communication can be disrupted – or enabled – by positioning. His mount is not an accessory he occasionally uses. It is the foundation that makes participation in daily life possible.

For Frank, the mount attached to his wheelchair ensures that his PRC-Saltillo Accent 1400 is always exactly where it needs to be. It aligns consistently with his access method, allowing him to communicate spontaneously whether he is at home, working, traveling, or meeting new people. With his phone mount attached directly to the device, he can send messages independently, answer calls on the move, and let family or friends know he has arrived safely somewhere. These are everyday actions many people take for granted, but to Frank they represent freedom: not depending on someone else to use his phone, hold his device, not waiting to express a thought, and not being slowed down by the friction of poor alignment.

He only fully realized how vital this access was during a cruise trip – a moment that transformed mounting from a convenience into an undeniable necessity. At the airport, security procedures required him to remove his mount and place his AAC device into his luggage. Instantly, the reliability he depended on vanished. He found himself able to communicate only with his assistant and with his mother. Outside of those two people, he was effectively silenced.

This temporary loss reframed everything for him. Without the mount, even simple interactions – asking a question, giving instructions, greeting someone – became inaccessible. Once he arrived on the ship and his device was remounted on his wheelchair, communication returned at once. He regained his voice, his independence, and his identity as someone who embraces life and connection. Over the course of the trip, he spoke with musicians, chatted with fellow passengers, exchanged numbers, and built new relationships, all because the mount restored a stable, predictable, always available communication setup that moved with him throughout every moment.

Reflecting on it afterward, Frank described life without his mount as "a catastrophe." It would confine him to a desk. It would strip him of the ability to do his job as a coach supporting other AAC users or his work as a brand ambassador. His communication would shrink to the narrow moments when someone else could position his device for him. The mount, he said, is what makes his life as he knows it possible. It gives him freedom, independence, connection, and professional capability.

His testimony reveals a truth that professionals sometimes forget: when mounting works well, the user can almost forget it exists. When it fails or is absent, the impact is immediate and profound: not on the technology, but on the person.

THE QUIET FOUNDATION OF COMMUNICATION: JOHN COSTELLO'S PERSPECTIVE

That human impact is at the center of the perspective offered by John Costello, one of the most influential figures in AAC worldwide. After more than three decades directing AAC programs, pioneering approaches like Message Banking, and supporting individuals with ALS, complex needs, and communication vulnerabilities, he brings a clarity that grounds the entire conversation: mounting is not a hardware decision. It is an access decision. A communication decision. An independence decision.

From his clinical vantage point, John explains that individuals with significant physical disabilities – especially those with fluctuating tone, dynamic movement patterns, or posture changes throughout the day – need mounting systems that move with them rather than working against them. A rigid, unforgiving setup forces the user to chase alignment. A flexible, well-engineered one can be readjusted to follow the user's natural movement and maintains consistent access even as the body changes with fatigue, transitions, or environment. Consistency is what preserves communication. Flexibility is what preserves comfort. Both are essential.

John emphasizes that proper mounting reduces physical

strain. Without it, individuals must expend precious energy on holding their bodies in unnatural positions to maintain device access. That energy should belong to communication, not to compensation. The right mount lowers the physical cost of participation, allowing attention and effort to be directed toward conversation, expression, humor, learning, advocacy, and social connection.

"*Most importantly",* he says, *"effective mounting affirms dignity".* It ensures that a person is not limited by their movement, but supported by it. It protects their ability to speak for themselves, make choices, and participate in the relationships that define their lives.

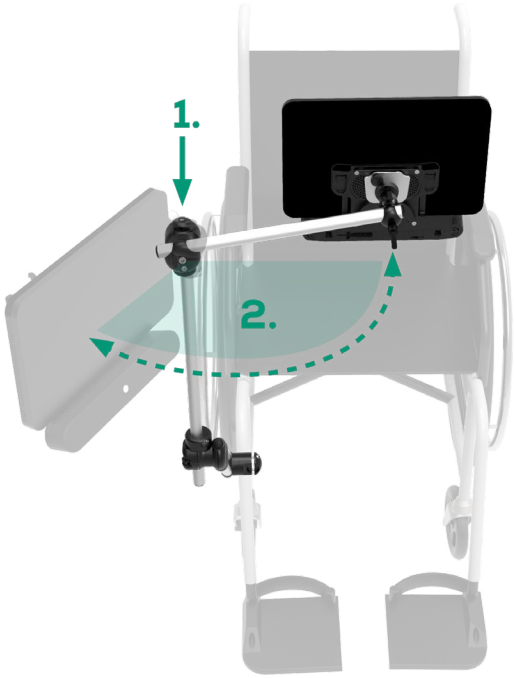
This perspective bridges the experiences of Mara and Frank with the engineering philosophy that drives modern AAC mounting design. It also highlights the responsibility that engineers, clinicians, and manufacturers share: every mechanical decision has a human impact. Every design choice affects someone's ability to express themselves in real time. And every moment of communication gained or lost influences a person's autonomy, identity, opportunities, and relationships.

ENGINEERING CHALLENGES FOR A HOLISTIC MOUNTING MINDSET

Start with **stability**. A well designed system balances strength with weight, selecting materials and tube geometries that resist flexing under dynamic loads, such as acceleration, braking, curb drops, uneven pavements, and the constant forces of daily movement. Joints and couplers must translate torque into predictable holding power, which is not just a matter of clamping "tighter" but of distributing force through the joint so that adjustments are smooth when you want them and nonexistent when you don't.

Then consider **adjustability**. A mount should invite the clinician or caregiver to fine tune guided by clear mechanical geometries and intuitive levers or knobs that make small changes (e.g. height, reach, orientation) easy to repeat. In eyegaze access, mere millimeters in height and angle can separate a perfect calibration from a frustrating session. For switch access, the sweet spot is often a narrow corridor where motor patterns are consistent; the mount's job is to keep that region accessible, even as posture, tone, or seating position evolves through the day. Good engineering turns adjustability into **repeatability:** every minute not spent chasing alignment is a minute returned to conversation.

Safety and **workflow** sit alongside stability and adjustability. Swing away mechanisms, for example, are not cosmetic conveniences; they enable safe transfers and mobility. The ability to move the device out of the way, predictably and with a tactile stop and a safe return path, speeds up transfers, and protects both user and equipment. Quick release interfaces serve a similar dual purpose: emergency removal if needed, routine detachment for travel, or storage, and effortless reconnection without refitting the entire system.



The **swing away joint** allows the mount to be effortlessly swinged away for entering/exiting the wheelchair.

The **base coupler** allows the detachment and reattachment of the entire mount from the chair.

TACKING COMPLEXITY WITH MODULARITY

Over years, clinicians and engineers have learned that people need individualized solutions assembled from a consistent set of interoperable parts. Modular systems let you combine clamps, arms, couplers, and device plates in countless configurations

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without creating bespoke, one off hardware that is hard to maintain or fund. This is particularly relevant with wheelchair mounting as wheelchairs vary widely in their standard and individual configuration – from wheel size, frame geometry, brake types, and seating systems to belts, lateral supports, trays, and additional accessories – meaning every mounting solution must adapt to a uniquely individual setup.

From a business and implementation standpoint, modularity also solves a crucial problem: complexity at the point of care. If clinicians can rely on a standard "grammar" of parts whose behavior they know, they can design and adjust faster, train families more confidently, and document choices in a way that funding sources understand. This is where engineering choices intersect directly with realworld adoption. Scalability matters – not because it sells more parts, but because it ensures the right part is in stock when a person needs their voice.

Even details that seem cosmetic carry functional weight. **Surface finishes** and coatings influence the friction behavior at joints and must remain fully resistant to cleaning agents and disinfectants to ensure long-term reliability; knurling, slotting, and indexing marks become the visual language of repeatability; tactile detents signal that you have arrived at a known setting. Because sunlight or bright incandescent lighting often interfere with eye-gaze, these systems are often used in darker rooms; in such settings, a mount that remains visible helps reduce the risk of people bumping into or tripping over the device or the mount itself, particularly the extended legs of a floorstand. Cable management preserves clean lines of sight for eye tracking and prevents damage over time.

Rehadapt's Universal Device Socket (UDS)

Mounting plates attached on the back of the devices do more than simply attach a device to a mount. A **standardized interface** creates a neutral, durable connection between the mount and the constantly evolving world of AAC devices, tablets, and eye-tracking cameras. A mount should never lock a user into a single device – it should be future proof and support growth and change. By using an interface like Rehadapt's Universal Device Socket (UDS) at the endpoint of each mount, the same AAC device can be moved quickly, reliably, and seamlessly between different setups.

All of these engineering characteristics are in service of one outcome: access that follows the person. To achieve that in practice, teams adopt a whole day, whole environment perspective. Rather than positioning for a single snapshot in a clinic, mounts are required in all the contexts that matter: at a kitchen table, in a classroom, while travelling or playing, or even in bed. "A world where environments adapt to people" is not just a slogan; it is a testable requirement. A holistic approach is necessary and ensures AAC users are not silenced because their device is out of reach.

This holistic mindset also known as "**360° of mounting**" changes the order of operations during assessment. Instead of asking, "Where can we put the device now?" teams ask, "What positions will this person need across a typical day, and how can we make moving between them fast, fatigue saving, and safe?" The difference is subtle but decisive. It leads to choices that privilege repeatability, to arms that clear chair accessories and thresholds, and to clamps that play nicely with the frame geometry of the user's chair. Multiple mounts need to follow the user through the rhythm of the day: a wheelchair mount that fits both of their chairs, a floorstand waiting by the couch for relaxing moments, and a portable table mount that travels with them.

This whole day, whole environment mindset is echoed by clinicians worldwide. Lisa Gore, a speech pathologist and AT consultant with Link Assistive in Australia, explains that having access to a broad and reliable mounting range allows her team to work alongside the individual and their clinician with confidence. *"Whether someone needs a mount that can be easily adjusted as their positioning changes, the ability to independently swing their mount away, or a floorstand that supports communication from bed, there is a Rehadapt solution that can be offered."* She notes that this flexibility ensures communication doesn't stop and that having such versatile options simplifies her role: *"It allows us to focus on the individual and confidently match their needs with the right solution so they can communicate when, where, and how they want to."*

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3-tube wheelchair mount for a Tobii Dynavox I-16 attached underneath the seat of a therapy wheelchair.

Adjustable **floorstand** wrapped around an armchair. The floating arm allows for quick toolless readjustment.

Foldable table stand with adjustable height, designed to collapse easily for convenient transport.

Regulatory frameworks such as the European Medical Device Regulation (MDR) and the U.S. FDA requirements place rigorous expectations on any component that directly affects the safety, reliability, and clinical performance of an assistive technology system – including mounting solutions. These regulations demand clear evidence of risk management, mechanical safety, durability, biocompatibility where applicable, and consistent performance across real life conditions. They also require transparent technical documentation, strict labelling and marking requirements, traceability of materials, clear instructions for use, and robust post market surveillance to ensure that mounts continue to perform safely throughout their lifecycle. In this sense, regulatory compliance is not a bureaucratic hurdle but a safeguard: it protects users by ensuring that the hardware supporting their communication device is engineered, tested, and documented to the same standard of care as the device itself.

All of this explains why an AAC user experiences daylong reliability rather than a patchwork of good moments and bad ones. It explains why a parent stops hovering, why a teacher trusts the system to hold true through a lesson, and why a clinician sees progress stick between sessions. Most of all, it explains why people who rely on AAC describe their mount not as a metal arm but as a promise: that their voice will be there when they reach for it.

And yet, the most persuasive evidence that the engineering works does not come from specifications or even from clinical logic. It comes from what happens when access is lost – and what returns when it is restored. That contrast is at the heart of another lived experience, one that underscores how profoundly a mount can shape a day, a job, and a person's sense of self.

ON THE IMPORTANCE OF CUSTOMER SUPPORT, TRAINING AND SERVICE

The assessment is where engineering meets the people who recommend and who live with the solution. Training the clinicians (OTs, SLPs, etc.) ensures they are confident selecting, recommending and in many cases installing the mounts.

This is why Rehadapt created the **Virtual Mounting Service (VMS)** which removes the uncertainty surrounding the design and selection of wheelchair mounting by turning real-world photos into personalized solutions. Clinicians and resellers simply send images of the user's chair and optimal device position, and Rehadapt's team overlays the correct components onto those photos, delivering a clear, visual proposal that shows exactly how the final system will look and function.

Virtual Mounting Service (VMS)

Each solution begins with a proven frame clamp and a carefully selected set of modular components tailored to the user's posture, desired device position, access method, etc. VMS empowers recommenders by saving time, reducing guesswork,

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and strengthening funding justifications. It helps professionals think holistically about whole-day access, even prompting the consideration of additional mounts such as floorstands or table mounts to ensure communication remains available in every setting. With VMS, every recommendation is more accurate, more closely aligned with the user's individual needs, and is delivered with the confidence of having specialists by your side.

Families and support staff need a support path that is simple, memorable, and dependable even under stress. Intuitive products with clear, easy-to-follow instructions (supported by online resources such as short explanatory videos) are essential. Responsive customer service that resolves issues quickly further strengthens success. Every problem prevented or solved promptly expands the user's available communication time.

MOUNTING ISN'T PERIPHERAL. IT'S FOUNDATIONAL.

When these principles align – clinical insight, engineering excellence, user experience, and reliable support – the result is a system that does more than hold a device. It holds space for a person's voice. It protects their right to participate and express themselves. It transforms communication from a technical possibility into a lived reality across home, work, school, and community.

The convergence of these stories and insights lays the groundwork for understanding why mounting is not the periphery of AAC but its backbone. And as we look toward practical implementation, the question becomes: how do we ensure that the promise of independence, dignity, and seamless communication becomes the everyday experience of every AAC user?

If the stories of Mara and Frank illuminate how mounting transforms daily life, and John Costello's insight explains why that transformation matters clinically and ethically, then the final layer of this narrative is the work of implementation: how these principles can be consistently translated into real world solutions that endure beyond the clinic, beyond the assessment room, and into the natural flow of a person's day.

Successful implementation begins long before the first tube is clamped or the first bolt is tightened. It begins with listening: listening to the user's goals, their routines, their physical realities, their environments, and their frustrations. This is a principle echoed by clinicians like Lisa Gore, who emphasize that truly effective solutions start with understanding how and where a person wants to communicate across their day. For some, the challenge lies in postural fluctuations or fatigue that changes access needs throughout the day. For others, the barrier is environmental: narrow spaces, shared desks, busy classrooms, or wheelchairs with limited attachment points. And for many, the greatest challenge is time: time spent adjusting, troubleshooting, or waiting for someone to reposition a device. Lisa's experience highlights that when a mounting system offers the flexibility to follow these changing conditions, often through easy adjustments and a combination of mounts (e.g. wheelchair mounts and floorstands) that ensure the communication device is accessible through the day, clinicians can focus more on the individual and less on compensating for hardware limitations. This is where thoughtful engineering becomes tangible support.

When engineers and clinicians approach mounting with a mindset of partnership, the user's lived experience becomes the design blueprint. Instead of applying a mount "to" someone, the system is built "around" them, and when we design mounting solutions that honor that principle we do more than engineer systems. We open possibilities. We strengthen inclusion. We ensure AAC users, whether at work, at home, at school, or out in the world, can say what they want to say, when they want to say it, to the people who matter most. ■

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44RD ANNUAL CONFERENCE
OCTOBER 20-22, 2026

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The Closing The Gap Conference is an annual assistive technology conference that presents an opportunity to deepen your assistive technology (AT) knowledge and strengthen your implementation strategies. The 3-day conference is designed to dig deeper into critical areas that have the power, when implemented strategically, to transform your classroom, your school, your district, your practice. When you start thinking differently about how to reach ALL students, how to infuse tech-





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One Registration. Three Full Days of Learning.
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Day 1: October 20 - Begin with an expert-led, full-day workshop, then join us for an evening of networking at our Exhibit Grand Opening and Reception.

Days 2 & 3: October 21-22 - Dive into our traditional programming with over 160 sessions, full access to the exhibit hall, and the AT Maker Fair.

Topics include:

- accessibility & UDL
- assessment & IEPs
- augmentative and alternative communication (AAC)
- autism spectrum disorder (ASD)
- blind / low vision
- deaf and hard of hearing
- early childhood development
- instruction, literacy & inclusion
- leadership, policy & implementation
- mathematics
- mobility, mounting, seating & positioning
- research
- transition, employment & vocational rehab

- Speech Language Pathologists
- Occupational Therapists
- Physical Therapists
- Autism Specialists
- Vision Specialists
- Special Educators

- Special Education Directors
- Administrators
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- Parents

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Renowned for its exceptional learning opportunities and vibrant networking atmosphere, this conference is truly one-of-a-kind!

Who should attend?

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LEARN MORE

Technology Beyond the Classroom:
Using Assistive Technology in a Self-Directed Program

Summary: In this article we will define what self direction is and the different self-direction models that may be available in your state. Readers will then explore pairing person-centered planning models with specific assistive technology tools to create individual vision plans to be used to guide both the IEP and the ISP. Finally, the author will share her son's real life, practical assistive technology use in his participant directed program, exploring using tools for vocational, independence and daily living skills.

INTRODUCTION:

For families of individuals with disabilities, the transition out of the school system is often described as approaching a "cliff". The familiar structure of the K-12 environment, being defined by IDEA, ends, leaving families to navigate the new landscape of adult services. While there may be a variety of options available to your adult once they exit the public school system, one of the most notable changes is that your person now moves from an entitlement system into an eligibility system. So while your person may be found eligible for specific services and programs, based an a variety of factors, those may not be available to them, and those agencies are not required to provide services to your person.

This is where self-direction services came into play for us. Our son was found eligible for adult services, specifically for Community Based Day Support programs. But, due to no spaces available we were left at a crossroads. Do we put him on months to years long "waitlists" for programs, with no guarantee that they would accept him into a program, or do we explore the self-direction model of support? After many months and up to a year of planning, our son decided that he wanted us to explore setting up a participant directed program for him.

This article will look at how we prepared for, set up, and executed his participant directed program model. While our story will focus on the laws and services in Massachusetts, this article can be a starting point for people all over the country to begin exploring what self direction is, how you can help your person prepare for it, and what assistive technology tools can support them in living their best lives.

PART 1: DESIGNING FOR THE FUTURE

WHAT IS SELF-DIRECTED PROGRAMMING?

Before we take a deeper dive into how we can use Assistive Technology in a self-directed program, let's take a few minutes to review WHAT self directed programming is.

I live in Massachusetts, and in our state, the Department of Developmental Services (DDS) defines it as:

CHERYL FARLEY, M.S. Ed., O.D. is an Assistive Technology Consultant and Owner of Adaptech Consulting, LLC. She received her B.S. from Stonehill College, her Doctor of Optometry degree from The New England College of Optometry, and her M.S. Ed in Special Education: Assistive Technology from Simmons College. She has been the owner of Adaptech Consulting LLC for the past 15 years and provides assistive technology consultations and evaluations to public K-12+ school districts. She has presented at local, regional and national conferences on the topic of Assistive Technology.

In addition to her professional role, Cheryl is also the mother to a young adult who is currently utilizing the Self-Directed Adult Service model. She is the "CEO" (Chief Everything Officer") of his self-directed program, which includes facilitating the creation of his person-centered plan and implementation of said plan into his ISP and programming model.

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"Self-Directed service delivery models allow the participant and family the opportunity to create individualized supports based on the vision and needs. The individual and family have authority and responsibility over a budget, and can decide who they would like to hire, when the supports will be provided, what the individual will do, where the supports will be provided and how services will be arranged. The services are flexible and can be customized to meet the changing needs of the individual as they learn and grow. Each of the two options, Agency with Choice and the Participant Directed Program, require the individual and family to have shared responsibility for the administration and management of the services they have created."

While this definition may be worded differently from state to state, the core pillars of self direction are usually the same. It is a program to support our adults, empower them to take control of their daily lives and give them the choice of how and with whom they spend their days.

HOW ARE SELF-DIRECTED SERVICES ADMINISTERED?:

In Massachusetts, people that are exploring self directed services have the choice of 2 service delivery models: "Agency with Choice" and "Participant-Directed Programming".

Agency with Choice: this is considered a "co employment" model where the agency provides you with staff and you provide the programming opportunities. Families work with the agency on identifying and hiring employees, but then the family provides daily supervision of the employee.

Participants receive a budget allocation and the team determines how much will go towards staffing and how much will go towards the purchase of services to meet their needs.

Participant Directed Programming: in this model, think of it as creating a business. While this program provides high flexibility, it also places full responsibility on the client and/or family. The participant and/or family is responsible for:

- Identifying and onboarding support staff (with the assistance of your DDS Support Broker and the fiscal intermediary)
- Managing an individual DDS budget, (with the oversight of your DDS Support Broker and fiscal intermediary)
- Working with a financial management service to process payroll and invoices.
- The participants and families customize their daily activities and focus on their interests and needs.
- Execute the goals in the ISP Plan

Just like the definition for self direction, the agency that administers self directed programs can differ from state to state. As stated previously, in Massachusetts, the Department of Developmental Services, or DDS, is the primary agency that oversees and provides the budget for this program. The state also participates in waiver programs where, if applicable, Medicaid funding can be used. In other states, Medicaid may be the primary agency. So, it is important to reach out to your state agencies to find out who the primary agency is, and what service models are available.

TIPS TO SET UP A SELF-DIRECTED PROGRAM MODEL

If you are considering introducing the self-directed service model to your students and their families and need more information, I have created a checklist that outlines the steps to establish and maintain the program. While this checklist is specific to Massachusetts, it provides an overview of all the components of the participant-directed service model.

You can find the link on the "Resource" page at our website: https://lifewithoutafiltercf.com/resources/

PART 2: PLANNING FOR YOUR DREAMS WITH PERSON-CENTERED PLANNING.

USING PERSON-CENTERED PLANNING DURING TRANSITION AND BEYOND

Before your student can even begin to decide which adult program they will participate in, they will need to know which adult agency they qualify for, and they will need to have a vision for their life past high school.

Using the pillars of transition planning as a guide, all transition and adult program planning must be individualized, driven by the student's vision for future education, employment and independent living. What better way to achieve this than through person-centered planning?

WHAT IS PERSON-CENTERED PLANNING?

According to the Centers for Medicare and Medicaid in Massachusetts, "Person-Centered Planning is a process, directed by the participant, intended to identify the strengths, capacities, preferences, needs, and desired outcomes of the participant."

It is the foundation upon which any IEP, ISP or similar document should be built — replacing older models that were more typically driven by providers or caregivers rather than by the individual themselves. In Massachusetts, students are invited to participate in their IEP's beginning at age 14 or younger. Using person-centered planning can help support our students as they take on the primary role within their IEP or ISP process.

PERSON-CENTERED PLANNING MODELS

There are several well-established Person-Centered Planning (PCP) models, each with its own approach and tools. Below is a brief overview of three models and how Assistive Technology (AT) can be paired with each to support students in creating their own plans. It should be noted that there are many other person-centered planning models and assistive technology tools available for people to use. The purpose of this sampling is to introduce the concept to educators and families to use as a

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starting point on their journey in facilitating the creation of their student/child's person-centered plans.

Some examples we are going to explore in this article are:

- **Charting the LifeCourse**
- **The PATH Method**
- **MAPS**

Each of the following pairings highlights an AT tool alongside a PCP model, showing how technology can help students actively participate in — and drive — their own planning process.

SnapType Pro with Charting the LifeCourse The Charting the LifeCourse framework was designed to "help individuals and families of all abilities and ages develop a vision for a good life. It supports people in thinking about what they need to know and do, identifying supports, and discovering what it takes to live the life they want." SnapType Pro allows students to access and complete Charting the LifeCourse tools digitally — taking photos of printed forms and typing directly onto them — making the process more accessible for students with fine motor, writing, or organizational challenges. (Image 1)

Book Creator with the PATH Method PATH (Planning Alternative Tomorrows with Hope) "brings together diverse people around a shared challenge to align their purpose, understand their situation, and identify hopeful possibilities for action. The goal is to build enough common understanding and mutual support so that individuals can focus their energy on positive change." Book Creator is a natural fit for PATH because it allows students to build their own multimodal plan — combining text, images, audio, and video — making their voice and vision visible in a format they can share with their team and revisit over time. (Image 2)

Read&Write for Google Chrome with Charting the LifeCourse (in Google Slides) For our son, this is the method that he used to create a slide deck to share with his team during his IEP, and now ISP meetings. He used the word prediction, voice notes and text to speech features to pull together the worksheets within Charting the Life Course to present his vision for living his best life.

Clicker with MAPS The MAPS (Making Action Plans) process "centers on the story of the person — encouraging individuals to share their life journey, articulate both a dream and a nightmare, and use that clarity to build a portrait of strengths and desired next steps." For students who find open-ended writing challenging, Clicker provides the scaffolding they need to participate fully and authentically in the MAPS process by using sentence starters, connect set grids or word banks to create their narrative.

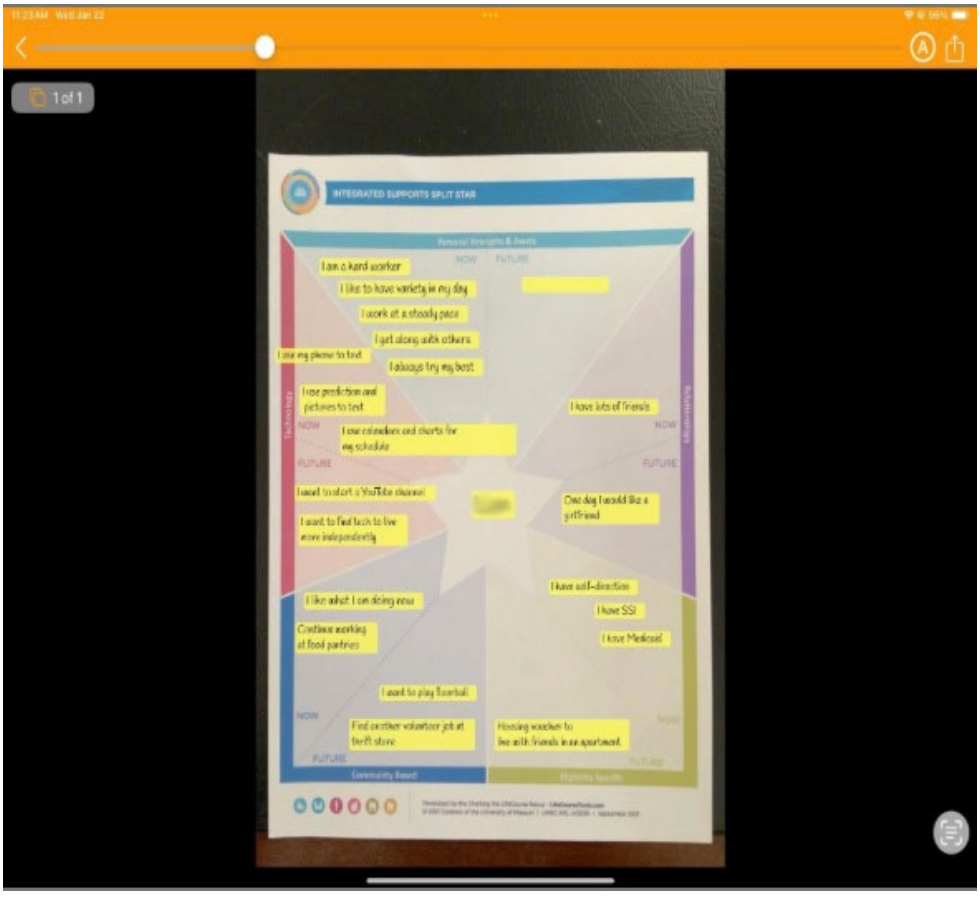

Image 1 - Using SnaptType Pro with Charting the Life Course.

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Image 2 - Book Creator with the PATH Method.

PART 3: ASSISTIVE TECHNOLOGY IN ACTION WITHIN A PARTICIPANT-DIRECTED PROGRAM MODEL. (IMAGE 3)

Once a program is established, Assistive Technology supports can become an integral part of the young adults programming needs. Some examples of how my son has used assistive technology within his self-directed programming model are highlighted below. It should be noted that this is just one example and the reader should use this as a starting point. The assistive technology tools that your child or client may need will be highly individualized to them and their programming needs.

Image 3 - Using AT in a Self Direction Program model wheel.

VOCATIONAL SUPPORTS

Technology can bridge the gap in workplace independence. Whether the person is pursuing volunteer or paid employment, using assistive technology can be the bridge to support those vocational skills. Some ways we have used assistive technology are:

- **Organization and Memory:** At certain volunteer sites, L will either need to log in using a computer punch system, or he needs to access a lock box to open up the food pantry. We used the Notes app for lock codes or Google Keep (with pinned cards and company logos) for quick access to clock-in information. Did you know that in the Notes app, you can lock your note? This way, if there is any confidential information, only the user can access it. (Image 4)

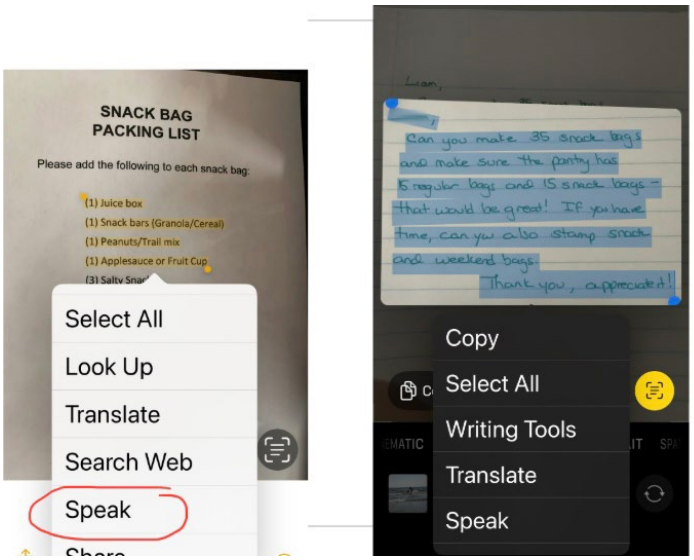

Image 4 - Using speak selection with photos.

- **Task Management:** For one of my clients who was working the coffee cart at school, we used Book Creator to house instructional videos—such as how to use a specific coffee machine—for easy reference on the job.
- While we tried using the calendar and its alerts to notify L of when he had to get ready to leave for the day, we found that he didn't always respond to them. So instead we used the alarm feature on his iPhone and found that he responded better to this method.
  - You can add text and images to your various alarms to provide additional cues and supports.
  - We were able to add alarms for his various jobs and activities and set them to repeat so that he doesn't have to remember to turn them on the night before. (image 5)

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- **Reading and Following Directions:** At work, L would take photos, using his iPhone, of packing lists and use the Speak Selection feature to have the information read aloud. Did you know that you can also take a photo of handwritten text, and there is a text-scanning feature to read handwritten notes? We have used this feature many times at the food pantry when his supervisor leaves him a note on any changes to the packing for that day. (Image 4)

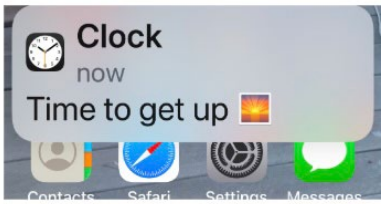

Image 5 - Customizing iPhone alarms.

INDEPENDENT LIVING AND ADLS:

L has expressed that he would one day like to live independently of us, and we are fully supporting that vision of supported living for him. Regardless of whether your person requires 24/7 support or can live independently, there is always some level of independence that we can foster with our people within the category of independent living and ADL's. Some examples are:

- **Visual Supports:** Tools like Lesson Pix or Boardmaker can be used to create checklists. We created a hygiene checklist that is taped to the inside of the medicine cabinet that he can reference until the steps become a habit.
- We have used resources from The Autism Housing Pathways website, including the "Modified Autonomy Checklist" to identify ADL's that he still needs to work on.
- **Safety and Navigation:** Life 360 and "Find My" programs may be essential for navigating the community safely. For programs like this it is very important that all participants know that the ability to find the person's phone location is turned on and that they are ok with that.
- **Smart Home Integration:** We are starting to integrate the use of an Echo Show device in our home. L has used it to read recipes aloud, watch cooking videos, and we have synched his iCal to the Echo so that he can see his daily schedule in the kitchen every morning.
    - For people that need support with medication management, there are a wide array of medicine dispensers from low to high tech to support independent medication taking. (Image 6)
    - Some families have used products like doorbell camera's, smart thermostats with wifi capability, touchpad door locks, water sensors and other household smart home systems to make living independently more feasible.
    - For cooking: we have used some low tech assistive technology, like color coded measuring cups and spoons, and adapted choppers and knives to make meal preparation safer. There are also high tech products like Smart ovens and stoves that can be used for more independent cooking needs. (image 7)

CALL TO ACTION: FROM PLANNING TO POSSIBILITY

As your students move towards graduation, remember that your role as an educator and/or parent is to move from being a manager of care to a team member, helping them build for their future.

The future is not just something that happens to our young adults, it should be something that the team builds together. By making the approach intentional, inclusive and innovative, you ensure that technology is not just a gadget, but a gateway to the adult living their best life.

As you reflect on this article:

Explore Self-Direction Models

- Understand how self-direction empowers young adults and supports individualized, meaningful transition planning.

Start with Person-Centered Planning

- Use planning models that put the individual first - and integrate technology supports from the beginning.

Integrate Technology Thoughtfully

- Leverage both assistive and mainstream tools to support the goals in the IEP and ISP:

Prioritize Social Inclusion

- Technology can help young adults connect, contribute, and thrive as active members of their communities.

Your Role Matters: Whether you're a parent, educator, or support professional, you are a key member of the "circle of care", supporting your student/child in building an empowered future. The move from "planning" to "possibility" starts today.

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Image 6 - Medication Dispenser.

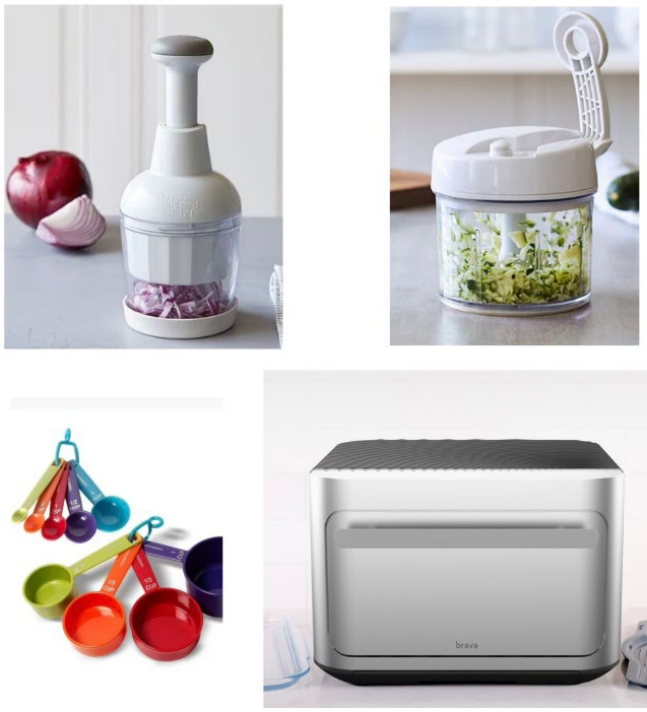

Image 7 - Adapted Cooking.

PRODUCT LINKS

- Snap Type Pro: https://snaptypeapp.com/
- Book Creator: https://bookcreator.com/
- Read&Write: https://www.everway.com/products/read-and-write-education/
- Clicker: https://us.cricksoft.com/clicker/
- Lesson Pix: https://lessonpix.com/
- Boardmaker: https://us.tobiidynavox.com/pages/boardmaker-7
- Life 360: https://intl.life360.com/
- Echo Show: https://www.amazon.com/b?node=9818047011&tag=googhydr-20&hvadid=570444916768&hvpos=&hvnetw=g&hvrand=15783514188066333069&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9191390&hvtargid=kwd-310736619495&ref=pd_sl_35heu0ihpi_e

ADDITIONAL RESOURCES

- Website and blog for Life Without a Filter: https://lifewithoutafiltercf.com/
- Podcast: "Life Without a Filter" can be found on Apple Podcast, Spotify and on my Buzzsprout website: https://www.buzzsprout.com/2440578
- YouTube Channel for Life Without a Filter: https://www.youtube.com/@LifeWithoutaFilter-n9t
- Instagram for Life Without a Filter: https://www.instagram.com/life_without_a_filter_2025/
- Website for Adaptech Consulting, LLC: http://www.adaptechcf.com/
- YouTube Channel for Adaptech Consulting, LLC: https://www.youtube.com/@adaptechconsultingllc6850
- LinkedIn: https://www.linkedin.com/in/cheryl-farley-840a4414/

REFERENCES

What Is Self Direction? https://www.mass.gov/info-details/what-is-self-direction

Person-Centered Planning FAQs https://www.mass.gov/doc/per-centered-plandoc/download

LifeCourse Framwork https://www.lifecoursetools.com/lifecourse-library/lifecourse-framework/

Page 5, Pearpoint, J. C., O'Brien, J., & Forest, M. (1993). PATH: A workbook for planning positive possible futures. Inclusion Press.

Page 33, Pearpoint, J.C. & O'Brien, J. Person-Centered Planning with MAPS and PATH, Inclusion Press

Autism Housing Pathways https://autismhousingpathways.org/ ■

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