



**University of Dundee**

## **MSc Educational Assistive Technology**

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# CM2022

Communication  
Matters International  
AAC Conference

11-13 September 2022  
University of Leeds

**Book of Abstracts**



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Communication  
**Matters**

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## "Just because I can't talk, Doesn't mean I don't understand" by Harchie Sagoo AAC Jedi

Sagoo, Bob - Author; Sagoo, Harchie - Author

### **Format**

Lightning Talk

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

"Look into my eyes, and hear what I am not saying, for my eyes speak louder than my voice ever will" My name is Harchie Sagoo, I am 16 yrs old, and I'm an AAC user, who have been an eyegaze user since the age 5. I want to present at conference and share my experiences with everyone. AAC has help me in so many ways, more than just helping me to communicate. I want to share how sometimes its hard, and sometimes is easy to communicate. And also that people often find it difficult to talk to me, as they are not sure if I understand, which I always do. I am very lucky to have so many people who have helped me, and I would like to share that at conference. My Mom will be assisting me, and my Dad will be around as well, but he will probably be working, he works for EyeTech Digital. I hope you let me present as I want to be an AAC Influencer or like my Dad says "AAC Jedi Master" Thanks and I hope I will see you at conference.

### **Level**

General Session

### **Age Group**

All Ages

## "The Nonsensesnakebat's Poem": Translating "Jabberwocky" into Blissymbolics

Everson, Michael - Author; Waller, Annalu - Author

### **Format**

Platform

### **Submission Topic**

Best Research Evidence

### **Abstract**

Blissymbolics is unique in comparison to other AAC graphic systems in that it is a constructed language which was originally devised as a utopian auxiliary language to facilitate commerce. Proving that a language is a language is not something that is done very often, apart from investigations into communication systems used by bees, dolphins, and primates. This presentation will demonstrate that Bliss is a rich, flexible language and a means for thought and communication, by introducing the work being done to encode Bliss in the Unicode Standard, the international standard for multilingual text interchange. A recent translation of Lewis Carroll's famous nonsense poem "Jabberwocky" into Bliss will illustrate the robustness of Bliss as a medium for the expression of concepts, because Bliss has no phonology and all of its vocabulary is constructed out of concepts or sequences of concepts. Although most translations of "Jabberwocky" deal with its nonsense words at least in part according to their sounds, a translation into Bliss has to take a different path to solving this issue. Encoding Bliss in the Unicode Standard will enable end-users of Bliss to write Bliss to express concepts which are not hard-coded to their Bliss board or other devices. Prototype interfaces have been developed which help to demonstrate how a Blissymbolics font can be used by users of assistive technology inputs.

### **Level**

General Session

### **Age Group**

All Ages



## "You lead, I'll follow" A parent's reflection on their son's AAC journey

Sagoo, Bob - Author; Sagoo, Harchie - Co-Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

What do you do ? You take for granted that life has a roadmap that's laid out for you . You assume that when you do settle down and start a family, that life will follow the "conventional route" and you experience the usually trial and tribulations when raising kids. Then something happens...and now life has a different take to it. But this is only the beginning, you are the parent of an exceptionally bright, intelligent child who has so much to say but hasn't the ability to vocalise their thoughts, feelings and opinions. What do you do ? In my case, my work begins.... I push the boundaries of my knowledge, and explore all aspects, dismissing nothing, leaving no rock unturned, because my purpose now is to equip my child with the means to communicate, interact with people and their surroundings. To expression everything they want to. This abstract isn't just about my experience, its a piece that will cover how AAC empowers not just individuals, but also families, friends, social interaction, the list is endless. I will be covering experiences with low and high tech AAC. The intention is that the main take away should be, " Wow someone else gets it, I'm not the only one" You often think you alone, in thinking and trying to find ways to support you child in AAC. I am happy to provide further detail with respect to my presentation, but I hope I have given you enough to allow me to present at conference. The tagline " You lead, I'll follow is the last line in an article I submitted to CM that was published in the journal, unfortunately I can't locate a copy at the moment. Thanks for the opportunity to submit.

### **Level**

General Session

### **Age Group**

All Ages

## **“Paediatric outcome measurement in AAC: Application of the TOM-AAC and literature review.” MSc Speech & Language Student Project. Joint project: UCL & Great Ormond Street Hospital**

Macleod, Kate - Author; Graves, Rebecca - Author

### **Format**

Platform

### **Submission Topic**

Best Research Evidence

### **Abstract**

Augmentative and alternative communication (AAC) is associated with many positive outcomes for those with communication needs. Research focuses on factors that are facilitators and/or barriers to AAC success, which include preference for using natural speech, support for the AAC user, features of the AAC system and opportunities for AAC use. Outcome measures (OMs) assess change over time. The therapy outcome measure for AAC (TOM-AAC) has been identified by previous reviews to be the only OM designed specifically for AAC and thus is currently used in specialist AAC centres in England. The aim of this project was two-fold: 1. Service evaluation: To evaluate the TOMS-AAC (Therapy Outcome Measures) data to understand the effectiveness of introducing high-tech AAC to children and young people. Investigate functional outcomes of AAC and factors impacting AAC success. To explore similarities and differences in the profiles of children who continued/discontinued using high tech AAC. To determine the type of information obtained from the TOM-AAC in practice. 2. Literature review: To identify available OMs designed for AAC, other than the TOM-AAC, through a literature search. To analyse the concepts and psychometric properties of the OM's. The project involved analysing data from the GOSH ACS Hub, one of England's Specialised AAC Services, collected through standard service delivery during initial and follow up appointments. Results were described for similarities and differences in those continuing and discontinuing high tech AAC. The literature review used pre-defined search terms to extract and analyse OM data on AAC specific tools. This lightning talk will summarise the service evaluation results and the OM's identified in the literature search.

### **References (Optional)**

Allied Health Professionals Outcome Measures Working Group. (2019). Key questions to ask when selecting outcome measures: a checklist for allied health professionals. London: RCSLT. <https://www.rcslt.org/wp-content/uploads/media/docs/selecting-outcomemeasures.pdf>

Broomfield, K., Harrop, D., Judge, S., Jones, G., & Sage, K. (2019). Appraising the quality of tools used to record patient-reported outcomes in users of AAC: a systematic review. *Quality of Life Research*, 28(10), 2669–2683. <https://doi.org/10.1007/s11136-019->

Delarosa, E., Horner, S., Eisenberg, C., Ball, L., Renzoni, A.M., & Ryan, S.E. (2012). Family impact of assistive technology scale: Development of a measurement scale for parents of

children with complex communication needs. *Augmentative and Alternative Communication*, 28(3), 171–180. <https://doi.org/10.3109/07434618.2012.704525>

Enderby, P. & John, A. (2019). *Therapy Outcome Measure: User Guide and Scales*. Guildford: J & R Press Ltd. Plus many more .. 02228-3

**Level**

General Session

**Age Group**

All Ages

## 10 free apps that can be adapted/repurposed to support communication, activity and participation

Cave, Richard - Author

### **Format**

Workshop

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

- This session will demonstrate live five free Android apps from installation to content creation specific to your client.
- If you have an Android device (Android 9 or higher), you can follow each step too.
- Explore how texts, phone calls and environmental controls can be initiated by facial gesture alone.
- Learn how key phrases can be accessed and 'spoken' using eye movement alone - useful if the main eye gaze device is not available.
- Review an app that can transcribe speech with dysarthria in real-time - argued to help people be better understood in daily life
- You can ask questions and share your views throughout the session. The remaining 5 apps will be reviewed in a poster.

### **Level**

General Session

### **Age Group**

All Ages

## 10 free apps that can be adapted/repurposed to support communication, activity and participation

Cave, Richard - Author

### **Format**

Poster

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

- This session will demonstrate five free Android apps from installation to content creation specific to your client.
- If you have an Android device (Android 9 or higher), you can follow each step too.
- Explore how an incoming phone call can be automatically captioned, AND in reply a person can type text and have it read it out in the phone call.
- Learn a simple way to make calls or send texts a one step-process with buttons that can be as large as the phone screen.
- Review an app that recognizes objects and text, and tells you what it finds.
- You can ask questions and share your views throughout the session.

### **Level**

General Session

### **Age Group**

All Ages

## 100 Voices: 12 months on – Learnings from delivering AAC into the independent care setting

Vacara, Kerry - Author

### Format

Poster

### Submission Topic

Clinical and Professional Experience

### Abstract

The 100 Voices Project began in 2020 and aimed to provide 100 people in care settings with a voice. Throughout 2022 we have continued to deliver support for those involved and gather data to evidence the outcomes. We are now analysing the data around three key themes identified early in the project; Empowerment, Connection with Others and Participation. This session will recap what has been achieved so far and look in more detail at the impact we are seeing through the data analysis. Drawing on existing frameworks and tools we have gathered data that is grounded in evidence based clinical practice. The 100 Voices Project enabled us to gather data that traditionally has been hard to achieve. We will share initial findings and talk about what this means for future collaboration between AAC providers and independent care settings. If you are an AAC practitioner, parent or carer this session will discuss our learning on funding a device for people within a care setting and the impact the technology can have for each individual. The 100 Voices Project was led by Smartbox Assistive Technology and CareTech.

### References (Optional)

Pragmatics Profile for People who use AAC Martin, S., Small, K., & Stevens, R. (2017).  
IPAACKS: Informing and Profiling AAC Knowledge and Skills, Scott, J (MBE), NHS  
Education for Scotland (2014)  
Raising our sights: Services for Adults with profound intellectual and multiple disabilities  
(Mansell 2010)  
Augmentative and Alternative Communication for Individuals with Intellectual Disability  
(Ambady & Sherly, 2018).  
Building Capacity in AAC: A person-centred approach to supporting participations by people  
with complex communication needs (McNaughton, Light, Beukelman, Klein, Nieder &  
Nazareth 2019)

### Level

General Session

### Age Group

All Ages

### Details of sponsorship

Smartbox Assistive Technology

## 1Voice Discussion: Role Model Reflections

Gilmour, Gregor - Co-Author; Carroll, Dominic - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

1Voice is a UK charity that creates opportunities to bring together children and adults who use augmentative and alternative communication (AAC) and the people important to them (family/PAs/supporters), to share ideas, information, skills, and personal experiences. 1Voice holds online meetups, annual residential events, and local activities supported by regional committees. The charity aims to increase public awareness of AAC, through newsletters and online activities, including its website and social media. (1Voice, 2020) In 2019, 1Voice began training some of its members as role models. A 1Voice Role Model is someone who: - Supports other AAC users, especially children, and their families by interacting with them and encouraging them to use their AAC. - Can provide concrete examples of how AAC can be integrated into different life situations. - Acts as a buddy for people who need support from an experienced role model - including our junior or teenage role models. This platform presentation will discuss how the role model programme has worked so far, the impact it currently has, and where we hope to go with it in the future. We also want to open the discussion to input from other delegates. We are particularly interested in hearing if: - You have suggestions for projects 1Voice role models could get involved in. - You have seen role model programmes before. What things have worked? What has been less successful?

### **References (Optional)**

1Voice. 2020. Report for 2019-20 — 1Voice. [online] Available at: <<https://www.1voice.info/annual-reports-1>> [Accessed 22 April 2022].

### **Level**

General Session

### **Age Group**

All Ages

## **A case series from Service Users' perspective of AAC decision-making and the views of family members and professionals who support them**

Murray, Janice - Author; Lynch, Yvonne - Co-Author; Randall, Nicola - Co-Author; Moulam, Liz - Co-Author; Meredith, Stuart - Co-Author; Judge, Simon - Co-Author; Whittle, Helen - Co-Author; Webb, Ed - Co-Author; Goldbart, Juliet - Co-Author

### **Format**

Platform

### **Submission Topic**

Best Research Evidence

### **Abstract**

The aim of this study was to explore the perspectives of all key stakeholders in AAC decision making. We did this by considering AAC recommendations and their consequences specific to each participant. Our context of exploration included recognition that: Child and family involvement plays a crucial part in our understanding of the long-term impact of decisions for people who use symbol communication aids and their support networks. Furthermore, hearing the voices of the professionals who have had long-term and frequent input to this process adds to our sense-making of the impact of decision making over time. We recruited 15 children and young people (CYP) with a wide range of characteristics and AAC needs, their family members and staff. We captured views on the decisions made in communication aid recommendations and their life-long implications. We completed a set of cluster-interviews, with the CYP as the central focus for consideration. These included children as young as 4 years of age. We completed a qualitative analysis of data which will be presented for debate. Findings suggest that care must be taken in choosing the first aid as this often influences AAC choices thereafter.

### **References (Optional)**

Murray, J., Lynch, Y., Goldbart, J., Moulam, L., Judge, S., Webb, E., et al. The decision-making process in recommending electronic communication aids for children and young people who are non-speaking: the I-ASC mixed-methods study. *Health Serv Deliv Res* 2020;8(45) now available at:  
<https://www.journalslibrary.nihr.ac.uk/hsdr/hsdr08450/#/abstract>

### **Level**

General Session

### **Age Group**

All Ages



## AAC Exams Access Group - Where are we now?

Murphy-Mann, Saffron - Author; Kilvington-Smith, Laura - Co-Author; Baggley, Laura - Co-Author; Stanton, Marion - Co-Author

### **Format**

Poster

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

The AAC Exams Access Working Group is a group of AAC users, parents/carers, educational professionals, health professionals and suppliers of equipment from all across the UK. The group formed in September 2018 after networking at CM Conferences, where discussions were had around the difficulty some students had with accessing appropriate exam access arrangements. Members shared their experience of students (or themselves) who had studied for an exam and any reasonable adjustments made in order for them to access the exam. It was clear at the time that experiences were extremely varied. It became clear that educational settings and other stakeholders needed some written guidance, to support students using AAC to access formal examinations from Key Stage One through to GCSE's and beyond. It was important that the guidance illustrated what is available to AAC users who use AAC in examinations, and prepared the student and the educational setting for collecting evidence to submit as part of access arrangements requests. The group produced a guidance document, 'Exams Access Guidance for Young People Who Rely Upon AAC', which is updated annually to reflect new guidelines (e.g. JCQ). The document is available on Cornwall Council's website and will be updated as guidelines change. It was felt that this document could be useful for AAC users, family and carers, people involved in the education of AAC users, Speech and Language Therapists/Therapy Assistants, exams officers and others working with the student. The past two years have been exceptional for their lack of formal exams but the AAC Exams Access Group has now reconvened and has some exciting new case studies from the 2022 exams period. We will be presenting some of these case studies as well as providing information on the work of the group and looking at our work in the future.

### **Level**

General Session

### **Age Group**

All Ages

## AAC User Focus Group

Sharples, Andrea - Author; Murphy-Mann, Saffron - Co-Author; Hewson, Helen - Co-Author; Preece, Jamie - Co-Author; Sillars, Sam - Co-Author; Shearer, Sarah-Jane - Co-Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Communication Matters supports everyone in the AAC community. This includes AAC users, families, professionals, suppliers and everyone with an interest and involvement in AAC. AAC Users are undisputedly the most important group within the AAC community. Lockdown was a challenging time for all and during this time Communication Matters wanted to ensure that AAC users remained at the heart of the organisation and involved with activities such as online conference accessibility. The voice of AAC users was especially important to engage at this time, plus it was important to support AAC users to keep in contact with each other. A number of AAC users and Communication Matters trustees formed a focus group to discuss decisions being made by the trustees and also to bring issues from AAC users to the trustees for consideration. The focus group has been a success for both AAC users and Communication Matters and has continued post lockdown. This presentation by members of the focus group and Communication Matters trustees will reflect on the process of the group being established, highlight issues discussed in the meetings, and highlight the influence of the focus group on Communication Matters and the successes achieved to date. AAC users who would like to find out about the group and potentially attend future meetings are encouraged to attend to find out more! Presented by CM trustees and focus group members. There is also a poster available about the focus group if you can't make the session.

### **Level**

General Session

### **Age Group**

Adult

## AAC User Group - Who We Are

Murphy-Mann, Saffron - Author; Sharples, Andrea - Co-Author; Hewson, Helen - Co-Author; Preece, Jamie - Co-Author; Sillars, Sam - Co-Author; Shearer, Sarah-Jane - Co-Author

### **Format**

Poster

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Lockdown was a challenging time for all and during this time Communication Matters wanted to ensure that AAC users remained at the heart of the organisation and involved with activities such as online conference accessibility. The voice of AAC users was especially important to engage at this time, plus it was important to enable AAC users to keep in contact with each other. A number of AAC users and Communication Matters trustees formed a focus group to discuss decisions being made by the trustees and also to bring issues from AAC users to the trustees for consideration. The focus group has been a success for both AAC users and Communication Matters and has continued post lockdown. This poster will reflect on the process of the group being established, highlight issues discussed in the meetings, and highlight the influence of the focus group on Communication Matters and the successes achieved to date. This poster provides information for those unable to attend the AAC User Group session.

### **Level**

General Session

### **Age Group**

All Ages

## AAGI: Augmentative and Alternative Gesture Interface

Yoda, Ikushi - Author

### Format

Platform

### Submission Topic

[Exhibitor Session](#)

### Abstract

We developed a gesture interface for individuals with motor dysfunction who cannot use normal interface switches. These users have cerebral palsy, quadriplegia, or traumatic brain injury and experience involuntary movement, spasticity, and so on. Our aim is to provide these individuals with an easy and low-cost interface for operating PCs, controlling indoor environment, and maintaining contact. To this end, we utilized commercially available RGB-D cameras and developed a non-contact, non-constraint interface. We collected effective 1745 gestures from 80 persons with motor dysfunction and classified voluntary movements on the basis of body part. We developed all algorithms for recognition in-house and used only a few basic camera libraries to obtain 2D and 3D images. If the RGB-D camera is discontinued, we can transport all software to another camera easily. We have finished seven recognition modules dependent on body parts and two independent recognition modules. The seven recognition modules are Head, Wink, Mouth-Tongue, Shoulder, Finger, Knee, and Foot. The two recognition modules are Front object and Slight movement. We call this software the Augmentative and Alternative Gesture Interface (AAGI) and will open it sequentially. All software is now supplied freely. Please check our HP. We have started the spread of software now in Japan. We have held classes for Tokyo Association of Occupational Therapists and lend PCs and RGB-D cameras in free to hospitals and visit care centers for introduction of the software. Over ten hospitals are now utilizing the software for inpatients. The users use the software for controlling PCs, games (PC, Switch, PlayStation and Xbox), home electric appliances, and so on. We are now starting a free grant of this software abroad now.

### References (Optional)

<http://gesture-interface.jp/en/>

### Level

General Session

### Age Group

All Ages

## Aided Language Input in English classrooms: are we modelling?

Danger, Charlie - Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

The use of modelling (Aided Language Input, Aided AAC, Augmented Input, etc.) is regarded by many as the “gold standard” for developing communication aid competencies (Clarke & Williams, 2020, p. 587). Recent research, including systematic reviews, indicate that modelling is both effective and has social validity (Biggs et al., 2018; Douglas et al., 2022). The benefits of modelling have, in fact, been known to researching clinicians for several decades, yet there is very little knowledge of how widely it is used to support communication aid users outside research settings (O’Neill et al., 2018). A number of smaller studies have indicated that modelling is used rarely in classrooms, particularly for those young people that use alternative access (Barker et al., 2013; Holmqvist et al., 2017). This research explores the prevalence of AAC modelling in English classrooms. Teaching assistants from across the country (n=205) completed and returned a survey that explored modelling strategies for young people with a range of needs relating to both language and access. The results contradict the earlier findings that modelling is used rarely in classrooms. In England, teaching assistants are using modelling for students across a range of locations, ages and medical conditions when using either electronic or paper-based aids, and for various types of access. Results indicate that teaching assistants simplify syntax when modelling, that emotions and requests are the most commonly modelled, and that the strategy of recasting is commonly used. Modelling of non-linguistic competencies, such as operational use, is rare. This interactive platform presentation provides an opportunity for AAC professionals to discuss these results in light of improving services for communication aid users.

### References (Optional)

- Barker, R. M., Akaba, S., Brady, N. C., & Thiemann-Bourque, K. (2013). Support for AAC use in preschool, and growth in language skills, for young children with developmental disabilities. *Augmentative and Alternative Communication*, 29(4), 334–346.
- Biggs, E. E., Carter, E. W., & Gilson, C. B. (2018). Systematic Review of Interventions Involving Aided AAC Modeling for Children With Complex Communication Needs. In *American Journal on Intellectual and Developmental Disabilities* (Vol. 123, Issue 5, pp. 443–473). <https://doi.org/10.1352/1944-7558-123.5.443>
- Clarke, K. A., & Williams, D. L. (2020). Instruction Using Augmentative and Alternative Communication Supports: Description of Current Practices by Speech-Language Pathologists Who Work With Children With Autism Spectrum Disorder. In *American Journal of Speech-Language Pathology* (Vol. 29, Issue 2, pp. 586–596). [https://doi.org/10.1044/2019\\_ajslp-19-00045](https://doi.org/10.1044/2019_ajslp-19-00045)
- Douglas, S. N., Meadan, H., Biggs, E. E., Bagawan, A., & Terol, A. K. (2022). Building Family Capacity: supporting multiple family members to implement aided Language

modeling. *Journal of Autism and Developmental Disorders*. <https://doi.org/10.1007/s10803-022-05492-4>

Holmqvist, E., Thunberg, G., & Peny Dahlstrand, M. (2017). Gaze-controlled communication technology for children with severe multiple disabilities: Parents and professionals' perception of gains, obstacles, and prerequisites. *Assistive Technology: The Official Journal of RESNA*, 1–8.

O'Neill, T., Light, J., & Pope, L. (2018). Effects of interventions that include aided augmentative and alternative communication input on the communication of individuals with complex communication needs: A meta-analysis. *Journal of Speech, Language, and Hearing Research: JSLHR*, 61(7), 1743–1765.

**Level**

General Session

**Age Group**

Child

## Appraising conversation patterns between children who use aided AAC and their conversation partners in two-person and multi-person interactions – clinical implications

Sotiropoulou Drosopoulou, Christina - Author; Murray, Janice - Author; Smith, Martine - Co-Author; Launonen, Kaisa - Co-Author; Neuvonen, Kirsi - Co-Author; Lynch, Yvonne - Co-Author; Stadskleiv, Kristine - Co-Author; von Tetzchner, Stephen - Co-Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

The active engagement in interactions is crucial for the development of identity, social competence, and cognitive abilities. For children with severe speech impairment (SSI) and who use AAC, active participation in conversations can be challenging. Overcoming such challenges can be critical for their social inclusion and participation. The present study investigated the conversational patterns emerging from interactions between children who use aided communication and typically speaking conversation partners. This study explored whether active participation by the AAC user was different in interactions with different numbers of partners (two-person versus multi-person interactions). An unusually large multilingual dataset was used (N=85 conversations). This allowed us to systematically investigate discourse analysis measures indicating participation. These measures considered: the distribution of conversational control (e.g., initiations versus responses versus recodes) and the type of language interaction that requires a response of some kind (obliges versus comments). The findings suggest that (i) conversations were characterized by asymmetrical conversational patterns with typically speaking conversational partners assuming most of the conversational control, and (ii) multi-person interactions were noticeably more symmetric compared to two-person interactions, as children's active participation in multi-person interactions was significantly increased. Clinical implications and best practice recommendations will be discussed.

### References (Optional)

Sotiropoulou Drosopoulou, C., Murray, J., Smith, M., Launonen, L., Neuvonen, K., Lynch, Y., Stadskleiv, K., & Von Tetzchner, S., (2021). Conversation Patterns between Children with Severe Speech Impairment and their Conversation Partners in Dyadic and Multi-person Interactions, *Applied Linguistics*, <https://doi.org/10.1093/applin/amab043>

### Level

General Session

### Age Group

Child

## Archery, Abseiling and Canoeing AAC in the great outdoors.

McCallum, Kate - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

For over 40 years, the charity, Bendrigg Trust has provided residential outdoor adventurous activity courses for disabled & disadvantaged people. Led by highly qualified & experienced Tutors, Bendrigg provides to people of all ages and abilities. We are constantly developing our equipment, grounds and facilities, to ensure that everyone can access everything. We believe in adventure for all, and this includes people who use AAC. AAC should not be constrained to an SLT session or left to practice in the classroom. AAC should be accessible everywhere and this includes whilst wiggling through passages in a cave, ascending a crate stack or on a canoe trip across a lake. Bendrigg has been adapting its practice to become even more aware and inclusive of people with AAC needs. During this talk I will discuss the adventure we have undertaken to raise awareness of AAC amongst our staff team and with visiting groups and organisations. I'll talk about the training and implementation of Makaton for all staff. Discuss the value consultation with AAC users has and continues to have in helping us grow and develop our service provision. Pre pandemic we launched a hidden disability project which included funding for the creation of a series of Activity stories. We have taken the "social story" concept a step further than paper based and created a collection of short Activity story videos, which, provide a step by step to the most common activities here at Bendrigg. I'll discuss the impact of this project. I'll also discuss our Bendifolk symbols which are used frequently around the centre and provide a great visual aid to help people with additional communication needs prepare for their trip. So lace up your boots and come on a AAC adventure which is a little different from the norm.

### **Level**

Introductory Session

### **Age Group**

All Ages



## **Audit of a bespoke visual screening tool used in the Kent and Medway Communication Assistive Technology (KMCAT) Adult team**

Bradford, Julie - Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

Knowledge of someone's vision, is critical in completing a thorough AAC assessment. In response to several cases which required retrospective assessment of vision, a new system of visual screening and assessment was introduced for all KMCAT clients during 2017. This was based on several sources including RNIB, 2014 & SeeAbility, 2012, with a focus on the visual abilities most relevant to the use of AAC. The screening tool was created in a way that any member of the team could complete it, which would then highlight the need for further in-depth visual assessment. This would usually be by one of the occupational therapists in the team. Issues highlighted at screening would also inform adaptations to future assessment and intervention. An audit of the screen was completed in 2020 to look at whether it was sensitive enough to capture those clients requiring closer investigation of their visual abilities. The audit reviewed data from a 1 year period. The results showed that the screen was being used regularly by staff assessing new clients. Of the 10 new clients who were screened, 7 went on to have a full assessment. 5 had adjustments made to their future intervention. These included increased font size, auditory feedback, change of software layout, and bespoke low tech created for language assessment. 3 clients were also referred on to other professionals for review (e.g. optometrist, neurologist, orthoptist). Changes to the screening tool were suggested at the conclusion of the audit; this was to help capture those clients for whom visual difficulties are a feature of their condition but who didn't meet the threshold on the screen to warrant more in-depth visual assessment. This session will provide an overview of the screening and assessment process and tools as well as sharing our learning around the implementation of these.

### **References (Optional)**

Functional Vision Assessment for People with Learning Disabilities SeeAbility 2012  
<https://www.seeability.org/fva> accessed on 16/02/2022

Guide to Functional Vision and Functional Hearing Assessments – RNIB 2014  
[https://www.rnib.org.uk/sites/default/files/Access\\_to\\_education\\_2.doc](https://www.rnib.org.uk/sites/default/files/Access_to_education_2.doc) accessed on 16/02/2022

### **Level**

General Session

### **Age Group**

Adult

## Becoming a Trustee of Communication Matters as an AAC User

Hewson, Helen - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

In this paper I will be discussing my experience of becoming a Trustee of Communication Matters as an AAC User and what this journey has been like and what it has involved. I will talk about how we work as a team, and divide ourselves into subgroups to cover the different elements of the organisation and our work. I will be discussing how I manage my communication needs and get my points across during our Trustee meetings, both face to face and virtually. I will also be talking about what I get out of being a Trustee and how it gives me a sense of purpose in my life, I will discuss the details of what is involved with being a Trustee of Communication Matters, how we are constantly in touch with our various subgroups via email and via our various online group meetings through either Zoom or Microsoft Team's. I will be talking about the huge amount of learning that is involved with the governance of the organisation, and all the rules and guidelines there are around running a charity. I will talk about how at first I found some of the information quite big and daunting to get my head around, and how some of the other Trustees gave me some help and a session on understanding the governance of Communication Matters. I feel that by doing this paper I might be able to inform and encourage other AAC User's to consider becoming a Trustee themselves, and this could help more AAC User's to have a say in the future and running of the organisation.

### **Level**

General Session

### **Age Group**

Adult

## Beginner to expert - head tracker masterclass

Waits, Adam - Author; Fitzgerald, Neil - Author

### **Submission Topic**

Exhibitor Session

### **Abstract**

Presented by: Adam Waits (Head of Assessment) and Neil Fitzgerald (Product Manager) In this session we will be breaking head tracker myths and showing you how to get the most out of these incredibly reliable and accurate tools. Head trackers are often overlooked as an option to help people control their device, usually due to preconceptions about the setup requirements and the level of head control needed. However, with the right setup, head trackers can provide users with a precise and powerful way to have complete control of their device. We will show you three head tracking solutions and how they can be used in Grid - Smyle Mouse, Quha Zono and HeadMouse Nano from Origin Instruments. This is an interactive session and we'll be exploring the three different technologies using a mixture of discussion, video and live demonstrations. You will have the opportunity to compare the three solutions and explore their various features and strengths for different user needs. During the session, we will also cover some of the more advanced options available, including use of gesture control to complete tasks when browsing, adjusting the speed and smoothness of your cursor and how to get setup for accessible editing! You can also use head trackers alongside switches for improved flexibility and speed, we'll show you how. To finish, we will share some exciting new head tracker developments launching this autumn.

### **Level**

General Session

### **Age Group**

All Ages

## Beyond requesting- how we can target other language functions within preferred activities.

Gabrielle, Emily - Author

### **Format**

Workshop

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

When introducing AAC it can be challenging to think about moving beyond those first requests - especially if someone has a perceived limited repertoire of interests. In this session, after briefly looking at different language functions and considering why they are so important, participants will be able to spend time thinking about how they can model multiple language functions, within activities which are meaningful to their clients or family members. Using a freely downloadable planning tool, participants will be then supported to create a plan for exactly how they can do this within each activity. Finally, the group will come together to share their ideas and as a group we will reflect on the importance of remembering to focus on more than just requesting

### **Level**

Introductory Session

### **Age Group**

All Ages

### **Details of sponsorship**

I am an employee of Liberator Ltd. The planning tool used is a resource which is freely downloadable from our website.

## CALL Scotland – supporting learners with communication difficulties access the curriculum through AAC

McNeill, Gillian - Author; Courtney, Joanna - Co-Author

### Format

Platform

### Submission Topic

[Exhibitor Session](#)

### Abstract

CALL Scotland, based at the University of Edinburgh, was set up in 1983 as a Research and Development centre, as well as a working Service unit, supporting learners with additional needs to use Assistive Technology, including AAC. Our core funding comes from the Scottish Government, so our work is concentrated mostly in schools in Scotland, although some aspects of the service and many of our resources can be accessed from across the world. We are a team of 10 with a skill mix and backgrounds ranging from teaching and speech and language therapy, to assistive technology and engineering, supported by information, ICT and admin staff. In this workshop we will describe our key areas of work, with case studies to illustrate how this works in practice. These areas of work are:

- Strategic Leadership
- Specialist Pupil Assessment and Support
- Professional Learning and Training
- Information and advice
- Equipment Loans and Support
- Knowledge Transfer, Research and Development

We will provide information about practical tools available to download from our websites, including our Symbols for All website symbol resources, core word vocabulary kit and our AAC Scotland website online professional learning materials. We will update on new and ongoing projects and resources.

### Level

Introductory Session

### Age Group

Child

## CandLE AAC Adaptations for Education

Rota, Stefania - Author; Madera, Annamaria - Co-Author

### **Submission Topic**

Exhibitor Session

### **Abstract**

CandLE supports students with their learning in education through the creation of adaptations using the software that has traditionally been utilized solely or mainly for communication. This innovative work has involved a number of years of developing mainstream and special school lessons within AAC software. We individualize adaptations to the access needs of every student and have resources that span from the sensory curriculum right through semi-formal and conventional to GCSE and beyond. We have also developed a comprehensive literacy program using the same platforms. The literacy program has 6 levels: 1. Early emergent (sensory to text), 2. Emergent (ready to learn to read and spell), 3. Transitioning (ready for literacy assessment and learning), 4. Early conventional, 5. Developing conventional, 6. Conventional. We also have a growing library of over 300 very accessible reading books. We offer services to students in need of support in both mainstream and special schools as well as home-educated students and in our own 'out of school' provision. This is achieved through our AAC teacher coordinator provision, AAC teaching assistant service, Resource Development Support, training, and our qualifications which are being produced to provide students who rely on AAC to have equitable access. These are the AAC City and Guilds, Bridge to English, Bridge to Maths, World Knowledge, Personal Project, and Independent Living through Technology and Instruction. The qualifications range from Entry Level 1 through to Level 2. This session will give an overview of our curriculum support, literacy program, and reading library and explain how families and schools can access our products and services.

### **Level**

General Session

### **Age Group**

All Ages

## Communication Access UK

Harris, Catherine - Author

### **Format**

Poster

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

Communication Access UK is a partnership between charities and organisations that share a vision to improve the lives of people living with communication disabilities. If a business displays the Communication Access UK symbol it means that they are committed to supporting people with communication difficulties more effectively. Following a 'share the vision' day in July 2016 a Steering Group was established. This is chaired by Royal College of Speech and Language Therapists. A pilot and early adopter phase followed. The purpose of the Steering Group has been to have a strategic overview and shared input to the operational plan. The website and eLearning resource was launched in November 2020 and the response has been amazing! See [www.communication-access.co.uk](http://www.communication-access.co.uk) Sign up can be as an organisation or as an individual. The eLearning is an interactive resource including videos which can be embedded into existing induction and mandatory training programmes. Our poster will outline the journey from vision to implementation with an update on progress to date.

### **References (Optional)**

RCSLT Bulletin November 2020 'Time to Talk-Rolling out the new Communication Access symbol'

### **Level**

Introductory Session

### **Age Group**

All Ages

## Communication Matters: What matters to you?

Broomfield, Katherine - Author

### **Format**

Workshop

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Communication Matters is a UK wide charity that supports people of all ages who find it hard to communicate because they have little or no clear speech. We are a registered charity with a large number of associate members who represent people with personal, professional, commercial and research interests in communication difficulties, and who support us in our mission. But does our mission represent the needs of the people that we support and/ or those that support us? Following the pandemic, and with several new trustees on the board, Communication Matters has identified an opportunity to review and refocus on what we offer as an organisation. Later this year, we are undertaking a strategic review aimed at re-energising the mission and objectives of the charity. Successful strategies are developed with input and involvement from key stakeholders. Communication Matters therefore invite delegates, our supporters and key stakeholders, to join a discussion about what should be our core business as an organisation. This session will consist of a workshop during which we ask you to give us your feedback about what we should focus on over the next 5-10 years. Please join us and bring some ideas about: - priorities for supporting people who have difficulties communicating - where, how and who? - how to raise funds for the organisation & what to spend them on - news ideas and innovations welcome Our members are the heart and soul of the organisation and it is important that our activity reflects your needs and interests. We are looking forward to welcoming you to Leeds in person this year and hearing your suggestions about how and where we take our next steps as an organisation.

### **Level**

Introductory Session

### **Age Group**

All Ages



## Core vocabulary or pragmatically organised language – which one?

Martin, Becky - Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

In this talk, we will explore core vocabulary and pragmatic approaches to arranging AAC vocabularies. We will delve into the research behind each method of language organisation and understand more about the different use of each approach, as well as who they may be appropriate for. Core vocabulary refers to the words we use all the time, in different situations, to talk about lots of different things (e.g. “I”, “go”, “want”, “this”, “is”, “of”). These useful words make up around 80% of the phrases and sentences we speak. Core based AAC vocabularies are made up primarily of single words, and users can use these words individually or in combination to form phrases and sentences. Pragmatically organised vocabularies, on the other hand, focus on the many different reasons we communicate, how we interact using language, and successfully communicating your message. This different focus often leads to messages which are built by combining phrases rather than single words, resulting in messages which may not be grammatically perfect, but can still be understood by the listener. For example, saying “Can I tell you something” → “about a thing” → vehicles → “see” → “plane”, compared to a core vocabulary approach where you might say “I” “saw” “a” “plane”. Each approach has strengths which may benefit different individuals and we will discuss some of the reasons you may choose one approach over the other, including case study examples. This talk will be presented by Becky Martin, a qualified Speech and Language Therapist at Smartbox. We will use Super Core and Voco Chat to demonstrate the concepts, however the content can be applied to any other core vocabulary or pragmatically organised AAC system.

### **Level**

General Session

### **Age Group**

All Ages

### **Details of sponsorship**

Smartbox Assistive Technology

## Customising Predictable: voices, voice banking, eye tracking and more

Bright, Rebecca – Author; Gadgil, Swapnil - Author

### **Submission Topic**

Exhibitor Session

### **Abstract**

A comprehensive overview of the latest version of Predictable covering not only the updates to access methods (eye tracking) but also the addition of new voice banking engines. Other new features to be explored include the conversational support features such as draft. This will cover the iOS and Android apps and the session will overview how you can move between the apps on each platform.

### **Level**

General Session

### **Age Group**

All Ages

## Development of an interactive computer-based language screening system for people with learning and physical disabilities who require AAC

Simpson, Oliver - Author; Brophy-Arnott, Bernadette - Author; Arnott, John - Co-Author; Stewart, Nicola - Co-Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

People with intellectual, physical and communication impairments can benefit from using AAC (augmentative and alternative communication) [1]. Accurate assessment of a user's language and physical skills is important for selecting an appropriate AAC system for them. Assessment of communication for people with intellectual, physical and communication impairments can be challenging [2]. Many assessments require physical skills for manipulating test items to demonstrate understanding. Clinicians have to adapt assessments or rely on observations to estimate language skills. This risks an inaccurate estimation of the person's skill which can impact on the choice of AAC system provided [3]. The work described here discusses the development and evaluation of a computerised assessment based on the Derbyshire Language Scheme (DLS) which takes into account the needs of people with intellectual, physical and communication impairments [4]. The assessment uses on-screen interactive tasks which simulate real life actions that can be carried out by the user using a variety of access methods. Clinicians contributed suggestions for the design of the assessment and their suggestions were included in its development. This novel approach to an on-screen assessment was evaluated with adult participants who had intellectual, physical and communication difficulties, using adapted standard measurement tools (questionnaire, Talking Mats®) to evaluate the system and gather user opinions [5]. The outcomes showed the participants were able to carry out the assessment tasks successfully and reported high levels of enjoyment in using the system. Clinicians reported positively about the system and provided suggestions for improvements. Enabling a user to interact with items on the screen as a way of communicating with others is also discussed as a potential future development.

### References (Optional)

1. David R. Beukelman and Janice Light. 2020. *Augmentative & Alternative Communication: Supporting Children and Adults with Complex Communication Needs*. (5th Edition). Brookes Publishing Co., Baltimore, USA. p.303.
2. Darren Chadwick, Susan Buell, and Juliet Goldbart. 2019. Approaches to communication assessment with children and adults with profound intellectual and multiple disabilities. *Journal of Applied Research in Intellectual Disabilities*, 32: 336-358.
3. Mark Moseley, Linsey Howart, Leigh McLoughlin, Sarah Gilling and Diane Lewis. 2021. Accessible digital assessments of temporal, spatial, or movement concepts for profoundly motor impaired and non-verbal individuals: a pilot study. *Disability and Rehabilitation: Assistive technology*, 16: 350-360.
4. Wendy Knowles and Mark Masidlover. 1982. Derbyshire Language Assessment,

Derbyshire County Council, Matlock, UK.

5. Lois Cameron and Joan Murphy. 2008. The Effectiveness of Talking Mats with people with Intellectual Disability. *British Journal of Disorders of Communication*, 36: 232-241.

**Level**

General Session

**Age Group**

All Ages

## EyeCommander: Developing an affordable access method through the power of Machine Learning

Henderson, Gavin - Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

Ace Centre can develop bespoke products to fit the needs of specific clients that cannot be met using existing solutions. We assess for the most efficient method of control to a device. This involves looking at a range of access options which may include switches or eye-controlled technology. For some, it is the eye where we see the most reliable movements. However, for some people eye tracking technology does not work (either due to the environment or an underlying visual difficulty) and finding a suitable physical switch to detect eye movements is not always successful. To solve this problem, we built EyeCommander. EyeCommander is a desktop application that uses a camera to detect when a user blinks. It can be setup as an access method for your chosen communication software package. EyeCommander uses artificial intelligence to detect an eye gesture such as a blink. The machine learning doesn't rely on specific camera hardware which means EyeCommander doesn't require specialist equipment. It creates a 'virtual' switch which allows EyeCommander to input directly into any communication software application. EyeCommander is designed to be highly adaptable so that it can work for as many clients as possible. In this presentation I will outline why we decided to build EyeCommander and the process we went through to develop it. Secondly, I will discuss the technology used in EyeCommander and how we can use it in other future projects. I will also talk through a case study of a client who uses EyeCommander. By making our products available under an open license we allow others in a similar position to further develop the product to fit a wider range of users. We welcome any discussion about how we can continue create sustainable open-source development in this area.

### **Level**

Specialist Session

### **Age Group**

All Ages

## Eyes on the prize...communication and participation through eye gaze.

Connolly, Tracy - Author; Bates, Kim - Co-Author; Dowling, Marianne - Co-Author; Wray, Louisa - Co-Author; Davis, Gabriel - Co-Author

### Format

Lightning Talk

### Submission Topic

Clinical and Professional Experience

### Abstract

Children and young people with significant motor impairment require assistance for most if not all daily activities including communication. Alternative and augmentative communication (AAC) is often required and involves a range of strategies and tools that facilitate functional and effective interaction. For some of these children and young people, eye gaze technology may be an option. Using specific software and a camera, the eye gaze user controls a speech generating device with their gaze. Recent research has demonstrated the positive effect of eye gaze technology on the expressive communication and functional independence of children and young people with complex needs. Studies often examined the perspective of caregivers and teaching staff as opposed to the users themselves. Of note, it has been found that caregivers believe that eye gaze technology is not used as frequently as it is needed throughout the day. The need for further qualitative research on the frequency of use and user satisfaction with eye gaze technology has therefore been identified. The Augmentative Communication Service at Great Ormond Street Hospital is one of 15 nationwide hubs that provide specialised assessment for complex AAC systems such as eye gaze technology. This lightning talk will describe the outcome of qualitative case study interviews with our eye gaze users to explore their level of daily eye gaze use, the facilitators and barriers to same, and the impact of the technology on their participation in meaningful life routines.

### References (Optional)

Borgestig, M., Al Khatib, I., Masayko, S. and Hemmingsson, H. 2021. The impact of eye-gaze controlled computer on communication and functional independence in children and young people with complex needs – a multicenter intervention study, *Developmental Neurorehabilitation*, 24 (8), pp. 511-524.

Hemmingsson, H. and Borgestig, M. 2020. Usability of eye-gaze controlled computers in Sweden: a total population survey. *Int J Environ Res Public Health*. 17 (5) p 1639.

Karlsson, P. and Wallen, M. 2017. Parent perception of two eye-gaze control technology systems in young children with cerebral palsy: pilot study. *Stud Health Technol Inform*. 242, p 1095–102.

Rosenbaum P. 2003. Cerebral palsy: what parents and doctors want to know. *BMJ*. 326(7396), pp. 970–74.

### Level

General Session

### Age Group

All Ages

## From iPad to Eye Tracking with Voice In between

Naraynsingh, Joe - Author; Mazars, Nicolas - Author

### **Submission Topic**

[Exhibitor Session](#)

### **Abstract**

The journey of a progressive AAC user who wants to use an iPad with their own voice and their own colloquialisms. During this session, we will explore the free Tobii Dynavox text based app, TD Talk, with built in voice banking from Acapela, and show how it travels with a progressive AAC user from their initial voice banking through touch access all the way through to eye tracking, preserving their voice and their word & phrase bank along the way. No longer do you have to accept changing software, losing word & phrase predictions and changing operating systems to accommodate changes in the users access needs. This is the biggest breakthrough in the iOS system for years. Come and see the only complete progressive iOS journey available.

### **Level**

General Session

### **Age Group**

All Ages

## Gaming – How To Enable Access For Fun, Friendship And Communication

Friday, Marcus - Author; Lee, Andrea - Co-Author; Brearley, Jordan - Co-Author; Sagripanti, Tim - Co-Author; Mars, Joshua – Co-Author

### **Format**

Workshop

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

The industry claims there are 3 billion gamers across the world. Online gaming platforms range from consoles, to computers and mobile devices. As well as entertainment, gaming enables inclusion with peers, friendship and communication opportunities. In the AAC and broader Assistive Technology field, are we aware of how to enable gaming access and the communication opportunities that follow? Gamers communicate with each other by voice, text, emotes, memes and coded language which emerges from within the community and may be represented by letters, symbols or images. Friendship groups formed in the physical world can continue online through gaming and chat or individuals can enter games and find friendship via a shared interest. Adaptations exist to make gaming accessible and inclusive for many with physical disabilities. This opens up exciting communication channels for AAC users. Gaming chat can be inherently accessible in that the items required are usually located within the game and text is often a minimal part of these conversations. The symbolic language used by players can be created rather than learnt and develops through experience and exposure, meaning non literate users can be immersed in this and communicating in the same manner as their peers. This workshop will demonstrate some adaptations through inbuilt accessibility options and alternative input devices. Part of the session will be hands on, with the intention that users will attend as well as showing video of gamers in action. Chat functions within games will be explained. The team are a specialised service and will refer to gaming in the context of the national AAC and EC service specifications. Issues such as internet safety will be discussed. Access to gaming and associated communication is an expectation for so many in society and this is increasingly reflected among our service users.

### **Level**

Introductory Session

### **Age Group**

All Ages



## How can we Ace this?

Leckenby, Katy - Author; Brady, Mary-Bridget - Co-Author; Beedles, Becky - Co-Author

### **Submission Topic**

Exhibitor Session

### **Abstract**

This presentation will be a fun filled session from Ace Centre's AAC Consultants, guiding you through the fantastic services Ace Centre offer to support your AAC/ ATech journey. Could a private assessment and report unlock a funding pathway to get you the kit you need? Would your team benefit from training to help to meet your AAC/ ATech need? Ace Centre Learning, Ace's new online learning platform hosts a range of courses which cover everything from communication partner skills to alternative access methods. Come and see some of the development in the areas of niche products (for example where there is no commercial solution and where there is an identified need) and hear about the work Ace Centre is championing in developing a national user group and working with partners on clinical trials when looking at the UK's research field of output. Not sure where to start? This session will also signpost to Ace Centre's free information services, whether that's our free downloadable paper-based resources or just knowing Ace Centre Consultants are on hand 5 days a week to discuss your queries and share their expertise. We can't wait to share it all with you, so come along and join us!

### **Level**

General Session

### **Age Group**

All Ages

## How do we describe software attributes of communication aids when thinking about AAC decisions?

Judge, Simon - Author; Murray, Janice - Co-Author; Lynch, Yvonne - Co-Author; Randall, Nicola - Co-Author; Moulam, Liz - Co-Author; Meredith, Stuart - Co-Author

### **Format**

Platform

### **Submission Topic**

Best Research Evidence

### **Abstract**

The aim of this work was to understand how communication aids were described by those involved in AAC recommendations and support for children and young people. We also aimed to look at what impact these communication aid attributes were described as having on AAC use. A secondary qualitative analysis of the I-ASC project data from the team around a child or young person was completed. These data were from interview and focus groups involving 91 participants involved in the support of 22 children and young people using symbol communication aids. Attributes of communication aids described by participants were extracted as themes and a descriptive summary of these attributes was produced. This presentation focuses on software attributes. The analysis identified attributes related to vocabulary, graphic representation, consistency and intuitiveness of design and ease of editing. Developmental staging of vocabularies, core and fringe vocabulary and vocabulary personalization were attributes that were described as being explicitly considered in decisions. When participants described decisions they often were described in terms of comparisons between commercially available pre-existing vocabulary packages. The environment and/or milieu in which the child or young person was using AAC was described as the predominate factor driving choice of some attributes and personalisation was discussed extensively. These findings provide a picture how the software attributes of communication aids appear to be considered in real settings, we will compare this against the information the empirical research evidence might provide us to inform decisions, and consider the implications of this for those making decisions or supporting children and young people using symbol communication aids. We will also consider how these findings might be considered in the design of symbol communication aids as well as the design of future research studies.

### **Level**

Specialist Session

### **Age Group**

Child

## How social media rekindled interest in high tech AAC

Murphy-Mann, Saffron - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Having worked with a student for 10 years I watched as their interaction with high tech AAC dwindled, they increasingly relied on others to interpret limited speech or answer closed questions. At home the device was rarely used and only reluctantly used in an educational setting. That was until Lockdown, when the young person discovered controlling devices at home and social media. Now the young person has just purchased a new device and uses it to access social media, control music and TV. They are looking forward to using it at a new college. I am interested with how their communication has adapted to the social media age and how the rekindled interest in high tech AAC has aided this.

### **Level**

General Session

### **Age Group**

All Ages

## Introduction to Proloquo and Proloquo Coach: AssistiveWare's Next Generation AAC

Niemeijer, David - Author; van't Westende, Barbara - Co-Author

### Submission Topic

Exhibitor Session

### Abstract

This session is an introduction to AssistiveWare's next generation AAC service based on the new Proloquo and Proloquo Coach apps. Over ten years ago, AssistiveWare pioneered the use of consumer devices for AAC with the introduction of Proloquo2Go. Today, Proloquo2Go remains the most popular AAC app. However, we observed that many people found the recommended grid size and the many configuration options overwhelming and significantly limited key functionality in an effort to simplify the app. As a consequence, the amount and quality of language produced by AAC users and modelled by communication partners became quite restricted. AssistiveWare invested over 3 years in researching and developing Proloquo and Proloquo Coach, our new AAC service. This service offers a simple, efficient AAC solution (Proloquo) designed to scaffold families and professionals in effective AAC implementation. It includes a new cutting-edge vocabulary called Crescendo Evolution™ that is based on the latest research insights and anonymous language use data from tens of thousands of AAC users. This is combined with an AAC best-practice coach (Proloquo Coach) that supports communication partners to implement AAC, provide aided language stimulation, and reduce the risk of device abandonment. Proloquo Coach introduces novices to the field of AAC. It combines plain-language, highly-readable text with attractive and engaging visuals and short instructional videos to ensure families can develop the skills to support their child to learn to use Proloquo. This session will describe and demonstrate the result of that work, as well as the research base that informed the design of Proloquo and Proloquo Coach.

### References (Optional)

- Beck, I.L., McKeown, M.G., & Kucan, L. (2002). Bringing words to life: Robust vocabulary instruction. New York: Guilford Press.
- Biemiller, A. (2010). Words worth teaching : closing the vocabulary gap . McGraw-Hill SRA.
- Crowe, Machalicek, Wei, Drew, & Ganz (2021). Augmentative and alternative communication for children with intellectual and developmental disability: a mega-review of the literature. *Journal of Developmental & Physical Disabilities*, 1-42.
- Erickson, K., and Koppenhaver, D. (2020). *Comprehensive Literacy for All: Teaching Students with Significant Disabilities to Read and Write*. Baltimore: Brookes.
- Knight, J (2017). *The Impact Cycle: What instructional coaches should do to foster powerful improvements in teaching*. Thousand Oaks, CA: Corwin.
- Smith, M. (2014). *Supporting Vocabulary Development in Children Who Use Augmentative and Alternative Communication*.

### Level

General Session

### Age Group

Child

## **IssieEd: An inclusive approach to AAC in the classroom**

Cappel, Dana - Author; Yitshari, Vanessa - Co-Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

Presenters: Dana Cappel, occupational therapist, and Vanessa Yitshari, special education teacher. In this talk, we will present "IssieEd" – a unique approach that combines AAC software with learning activities. This approach was created by the technology team at Beit Issie Shapiro in Israel and is used in the Beit Issie Shapiro School for Special Education. The school caters to students aged 6 – 12, with multiple complex disabilities and special education needs. IssieEd combines the unique use of AAC software as a platform for delivering educational material, with a supportive educational approach that together creates active and successful learning opportunities for all students. Capitalising on the unique features of AAC software (speech generation, symbol support) we have created lesson templates that allow both AAC and non-AAC users to actively engage with learning materials within a wide variety of subject matter, something that they may not have otherwise been able to. The lesson templates can be quickly adapted to any subject, giving teachers an efficient tool to suit their curriculum and can also be easily tailored to individual students' needs. Our staff have adopted this approach systemically, such that the AAC platform and the templates used have become embedded in the classrooms and in our teaching methods. As a result of this structure and consistency, both teachers and students have a predictable lesson format. Children are familiar with the layout and can navigate with confidence, encouraging interaction and independent learning, and teachers can easily and efficiently create and share lesson materials. We have seen tremendous results with this approach, maximising teaching efficacy and student participation. We have also seen a big difference in how students build relationships and participate in school and home life. This talk is sponsored by Smartbox and features Grid AAC software.

### **Level**

General Session

### **Age Group**

All Ages

### **Details of sponsorship**

This talk is sponsored by Smartbox who will cover the conference registration fee for the speakers.

## Jabbla devices showcase

Foulger, Ian - Author

### **Submission Topic**

Exhibitor Session

### **Abstract**

This year at Communication matters, we at Jabbla UK will be showcasing some new innovative devices. The new Allora 3, a replacement for the highly popular and successful Allora 2. Building on the simplicity and reliability of the Allora 2, the Allora 3 retains those key features and adds further additions and design updates. The Tellus 6 and i6, the latest iterations of the Tellus range. The Tellus 6 has some unique power management features allowing for a full days use on one charge. The unique tilt cam allows budding photographers to have full control of taking their own pictures. The new Vibe 10 is a lightweight tablet based solution. It is primarily used as a hand held device but can also be wheelchair mounted, combined with switch access, environmental control and unique wake up on touch sensor make for a small but powerful package. Both the Tellus 6 and Vibe 10 have partner displays to help get your message across, another innovation that Jabbla were first to develop in the AAC market. Come and see how Mind Express combined with Jabbla devices lead the way in AAC.

### **Level**

General Session

### **Age Group**

All Ages

## Jabbla Mind Express resources showcase

Foulger, Ian - Author

### **Submission Topic**

[Exhibitor Session](#)

### **Abstract**

This year at Communication matters, we at Jabbla UK will be demonstrating a new messaging banking system used within Mind Express. We will show the novel and innovative approach that we have used for message banking. We will be showcasing new Mind Express content allowing literate users to communicate more effectively as well as access Windows based devices more efficiently. Finally we will be showing further developments in our range of page sets allowing Mind Express to be used in an educational setting.

### **Level**

General Session

### **Age Group**

All Ages

# Jacdac - a framework to turn assistive technology ideas into products

Oppenheim, Matthew - Author

## Format

Platform

## Submission Topic

Clinical and Professional Experience

## Abstract

How do we get from an idea for a device to enable augmentative and alternative communication (AAC) to a reliable prototype? If the prototype proves useful, how do we then create a marketable product? Many people have ideas for new assistive technology (AT) devices. Until now, knowing how to turn these ideas into prototypes for evaluation requires expertise. Turning a promising prototype into a reliable and affordable product requires specialist skills, equipment and money. AT devices are often only needed in small quantities, making them disproportionately expensive. As a result, many good ideas for AT are never implemented. Microsoft has started an open-source project called Jacdac (<https://aka.ms/jacdac>) to enable people without specialist engineering skills to create technologically sophisticated devices. A series of plug-together boards can be easily programmed and configured through a web browser interface. This makes prototyping of hardware and software easier than ever before. Tools to carefully test devices, to automate the creation of enclosures for them and to support a transition to low volume manufacturing, are all part of the project. Collectively, these innovations make the design and manufacture of devices that will only ever be needed in small quantities practical. The Jacdac hardware and software infrastructure are under active development by Microsoft with collaborators from Lancaster University and elsewhere. The project is open-source and anybody can contribute. It is already available for use by makers and technologists, such as those working to create devices for people with specialised AT requirements. In this presentation, we show how Jacdac be used to make AT devices to enable AAC. In 2021 an early version of the Jacdac system was used in a successful 'hackathon' where over 80 hackers from 4 continents explored and built AT devices, including AAC technology. A video of this hackathon can be viewed at <https://aka.ms/makeaccessible>.

## References (Optional)

<https://aka.ms/makeaccessible>

## Level

General Session

## Age Group

All Ages



## Joy of Communication

Diener, Bethany - Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

AAC intervention often focuses on producing two to three word sentences, answering questions correctly, and making requests. Why? Because this is the prevailing definition of successful AAC use. However, that definition does not capture the sheer joy that communication can bring. Further, it may lead to discouragement and even abandonment of AAC if progress is not evident quickly enough. Instead, what if our definition of success included gains in attention to interaction, creative use of words, alphabetical awareness, increased independence, and longer interactions? How might such a definition impact the AAC user and the team? Let's explore this new definition supported with video examples, share ideas to encourage partners to embrace it, and identify evidence-based strategies to support success of all kinds.

### **Level**

General Session

### **Age Group**

All Ages

### **Details of sponsorship**

I am an employee of Tobii Dynavox.

## Literacy Informed Approach: Supporting Students and Improving Service

Zielonka, Marcin - Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

The aim of this presentation is to share our findings from the implementation of the literacy programme based on Dr. Karen Erickson Ph.D. Dr. David Koppenhaver Ph.D. 'Comprehensive Literacy for All: Teaching Students with Significant Disabilities to Read and Write'. KM CAT would like to present two different ways we have used K. Erickson's and D. Koppenhaver's approach to support students: indirect (training for teachers and other professionals and workshop for parents) and direct (supporting students on our caseload and mentoring teachers). Additionally, we would like to share how using literacy assessment (as presented in 'Comprehensive Literacy for All') can inform and improve the service delivery: by providing clarification when prioritising cases and allocating resources, and by helping to identify students who are not reaching their potential so that they can receive a personalised support. The KM CAT Service has been working with a number of selected students who have been provided with personalised support as well as teachers who have decided to improve outcomes of their students by implementing K. Erickson's and D. Koppenhaver's in their classes. We would like to share the details of our work, challenges we have approached and solutions to issues that can emerge when using the programme within a Special Education Needs setting. We believe that a Literacy Informed Approach can help to improve outcomes and support service delivery.

### **References (Optional)**

Dr. Karen Erickson Ph.D. Dr. David Koppenhaver Ph.D. 'Comprehensive Literacy for All: Teaching Students with Significant Disabilities to Read and Write'

### **Level**

General Session

### **Age Group**

Child

## **Making Changes Brick by Brick; building fun, friendships and communication skills at school.**

Coakes, Laura - Author; Daniewska-Lodyga, Monika - Co-Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

LEGO®-based therapy supports the social and emotional well-being of children and young adults who enjoy using LEGO® bricks to build models. To support good practice the programme should be delivered by a trained facilitator who provides regular group sessions, which are known as Brick Clubs. Brick Clubs offer the children and young adults a space to play, have fun, interact and build with others. This in turn nurtures friendships and fosters the development of social, communication and problem solving skills. This paper will present how LEGO®-based therapy was adapted and used within a mainstream primary school, to achieve positive outcomes for a young AAC user in Year 3. This will include how the Brick Club was established in the school, the identification of individualised goals for all the children and how they worked as a team to build the LEGO® models. It will share the positive changes and development in skills that occurred as a result of the group for the young AAC user and his peers. It will conclude with considerations for the future provision of the programme in the school.

### **References (Optional)**

Play Included Brick-by-Brick Programme Facilitator Training Manual 2021  
[www.playincluded.com](http://www.playincluded.com)

### **Level**

General Session

### **Age Group**

Child

## Megan's AAC journey: A teacher's perspective

Ebbage-Taylor, Meaghan - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Megan is a 12 years old, social butterfly that loves chatting with friends. During this presentation I will demonstrate Megan's AAC journey, from using simple paper-based resources, including symbol charts, before progressing onto a communication book, and gaining a communication aid of her own. As her teacher I had the pleasure of watching her journey unfold.

Using her device, she has learnt to find and use language that is important to her. I will show how this has been incredibly empowering for her, enabling her to chat freely with her friends and share what's on her mind. She can now communicate with whoever she wishes all-day every day, opening up a whole new world for her.

I will show how staff presuming competence, modelling effectively, and recognising the importance of 'babbling' has led to the success of Megan moving forward in her AAC journey.

Through modelling the use of core words throughout the day, this has not only supported Megan in communicating more complex messages but has also supported her literacy skills.

I will highlight how Implementing Project Core has been an integral part of this success.

I will also illustrate how having an AAC device with voice output has supported her verbal speech development. She has now begun saying and combining more words verbally.

Megan's AAC journey has only just begun, and I am excited to see how she blossoms over time.

### **Level**

Introductory Session

### **Age Group**

All Ages

## More than just talking

Lowe, Anthony - Author; Healy, Vicky - Co-Author

### **Format**

Workshop

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Communication Matters will be celebrating 10 years at the University of Leeds, seven years since their administrative move to the city of Leeds and establishing a positive-impact partnership with MEETinLEEDS. 2023 is also going to be Leeds city of culture, a year that changes with a year-long celebration of culture, celebrating community, culture and diversity. With the commitment of Leeds City Council, the mission is to deliver a transformational year of creative experiences that will bring us together and change Leeds forever and for the better. Led by Vicky Healy and Anthony Lowe this session is to brainstorm and come up with practical ideas for initiatives and events in and around the University and City of Leeds in 2023. Outline of current potential events

- First international AAC Awards
- Develop the mentoring project
- Working with Leeds University galleries and School of Fine Arts to promote a small art exhibition of creative work produced by artists using AAC technology and other disabilities
- Working with the sustainability team to provide something for the future that embeds Communication Matters within the university and the city (possibly working on a disability trail or outreach within schools) and liaise with other community or organisations that would be able to help to promote
- Working with other services/schools and community projects
- To embed the Communication Access UK symbol as part of the staff training within services across the university
- To gain support from LUU and the student body to support delivery

### **Level**

General Session

### **Age Group**

All Ages

## Mounting Made Easy

Tennent, Mathew - Author; Quick, Christian - Author

### Submission Topic

Exhibitor Session

### Abstract

A proper mounting solution is a critical component for the success of assistive technology systems. Most computers, access methods, or communication aids will only be successful if mounted and positioned appropriately. However, those making assistive technology recommendations often overlook the importance of mounting. Fortunately, mounting does not have to be stressful or complicated. There are many universal solutions designed to work with virtually any switch, tablet or speech-generating device. And there are specific and individualized solutions tailored to meet the needs of all users. Most importantly, there are resources, technologies, services and support to help! Rehadapt is making it easier than ever to ensure your assistive technology is mounted perfectly. Join us in this session to examine the needs and requirements for mounting different assistive technologies with a focus on mounting speech generating devices, access methods (ie: switches), iPads, tablets, and phones. Explore different mounting solutions that allow users to access assistive technologies both in and out of wheelchairs in multiple environments. Utilize the latest in technology to find the exact solution for your specific needs. Our promise: Mounting made easy!

### Level

Introductory Session

### Age Group

All Ages

## MSc Educational Assistive Technology: Training a new professional group

Slaughter, Rohan - Author; Waller, Annalu - Co-Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

The novel MSc Educational Assistive Technology (EduAT), (University of Dundee, 2022) is relevant to the Communication Matters conference due to the valuable contribution that the emerging assistive technologist profession can make to the assessment, provisioning and ongoing support of AAC and allied AT systems. This presentation provides an overview of the unique EduAT curriculum and the methods we have developed to train assistive technologists. The CM conference played a pivotal role in the inception of EduAT. Following a 2014 presentation on the Dart project (Slaughter and Mobbs, 2015), Professor Annalu Waller (University of Dundee, 2022) approached the author regarding the AT training method described. Based on this work began that resulted in MSc EduAT. The MSc EduAT has six core modules. These are briefly described in the 5-minute AT short on MSc EduAT recorded for the Natspec TechAbility 2021 conference. (Natspec, 2021) In addition to the 100 credits of core modules, students take 40 elective credits and choose a project dissertation that is worth 40 credits. The Dart project curriculum has inspired our approach, and has been expanded upon considerably. The EduAT competency framework was developed by the author, based on work to define the Assistive Technologist role in the ESCO (ESCO, 2022) database. The author collaborated with Neil Beck and Fil McIntyre from the Natspec TechAbility service to support the creation of the ESCO 'occupation' for the assistive technologist. The AT elements in the EduAT framework are mapped to the TechAbility Standards. The author has previously defined the assistive technologist role in the Communication Matters journal article from Vol. 29 No. 1 (Slaughter, 2014). The first module utilises a guided tutorial to undertake a supportive gap analysis using the EduAT competency framework. Based on the identified learning opportunities we suggest elective modules from Education, Computing and Health / Therapy.

### References (Optional)

- ESCO. (2022). Assistive Technologist. Retrieved from European Skills/Competencies, qualifications and Occupations:  
<https://ec.europa.eu/esco/portal/occupation?uri=http%3A%2F%2Fdata.europa.eu%2Fesco%2Foccupation%2F4e82464b-e9d7-4d51-9116-294ab40c5169&conceptLanguage=en&full=true#&uri=http://data.europa.eu/esco/occupation/4e82464b-e9d7-4d51-9116-294ab40c5169> Natspec. (2021).  
 Natspec TechAbility Conference 2021 Resources. Retrieved from Natspec TechAbility:  
<https://www.techability.org.uk/training/techability-conference-2021/resources/>  
 Slaughter, R. (2014, Volume 28, Number 1). Connect to Control: How we can do the 'bells and whistles'. Communication Matters, 11.  
 Slaughter, R., & Mobbs, T. (2015). The DART Project - Improving Assistive Technology provision in Further Education. Communication Matters Journal, 29, 24-26.

University of Dundee. (2022). MSc Educational Assistive Technology. Retrieved from University of Dundee: <https://www.dundee.ac.uk/postgraduate/educational-assistive-technology-part-time>

University of Dundee. (2022). Professor Annalu Waller . Retrieved from University of Dundee: <https://www.dundee.ac.uk/people/annalu-waller>

**Level**

General Session

**Age Group**

All Ages



## My Grids and how I evolved them to fit my life

Bates, Patrick - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

My name is Patrick Bates and I am 54 years of age. I have been using the Grid for 5 years now and am mostly self-taught, because I have the ability to be shown once, and I can remember how to do it. However, I must say I have learnt some techniques from my friends, I will be talking about my computer control Grids.

### **Level**

General Session

### **Age Group**

All Ages

## My Literacy Journey

Hewson, Helen - Author

### Format

Platform

### Submission Topic

Personal Stories and Preferences

### Abstract

In this paper I will discuss the challenges I faced as a child when I was learning to read. I was severely short sighted which wasn't properly detected until I was seven and a half and I had a significant speech impediment. Both factors meant that reading always was, and to an extent still is a huge amount of physical effort for me. My school thought that I would never be able to read, and it is only thanks to my mother that I learnt to read over one summer holiday when she just took all my books home from school and taught me herself. I often lost my place on the page because of my involuntary head movements due to Cerebral Palsy, and it always took me time to find my place again. I was expected to read aloud to my teachers as I have some natural speech, but it took more time and effort than they had to understand me. Eventually my mum was asked to come in and carry out a reading assessment with me and then it was discovered that the books I'd been given were far too young for me and I was given more stimulating material. These are the advances in technology that have helped me to overcome these reading and literacy issues during my lifetime:

- I use a computer program which reads aloud any text I need to read.
- I make use of the zoom function enlarge the font size and I find the biggest and brightest mouse pointer style is helpful to find my place on the page.
- I use my Allora communication aid to speak to people outside my close family who cannot understand my natural speech.

### Level

General Session

### Age Group

All Ages

## My voice my identity

Martin, Becky - Author; Smith, Alice - Author

### Submission Topic

Exhibitor Session

### Abstract

Presenters: Becky Martin (Smartbox SLT) and Alice Smith (CEO of SpeakUnique) In this session we will be hearing about how SpeakUnique and Smartbox are collaborating to take on the challenge of providing AAC users with a unique voice. Having a voice that sounds and feels like you is something we take seriously, and lack of customisation has been cited as a possible barrier to AAC adoption and social integration (Mills, Bunnell and Patel, 2014). We will share how, for the first time, creating a personalised voice is quick, affordable and easy to use in Grid 3 and Grid for iPad. For many years the range of voices available to people who use communication aids has been limited, with little innovation happening to improve quality or representation of regional accents, gender or age. We will share how we have been taking on the challenges AAC users have been sharing with us, such as people within the same school or residential setting using the same voice. Join us to hear from AAC users and what voice means to them and the impact regional and personalised voices can make. We will demonstrate new voice technology in development that will make synthetic voice creation easier and quicker. We will also cover new voice features coming to Grid that are designed to help users get their message across in a way that better reflects their identity and locality, including a collection of over 50 regional voices in accents from across the UK and Ireland.

### References (Optional)

Mills T, Bunnell H, Patel R. Towards personalized speech synthesis for augmentative and alternative communication. *Augment Altern Commun.* 2014;30:226–236.

### Level

General Session

### Age Group

All Ages

## New Motor Planning Pageset in TD Snap

Ako, Shea - Author; Langley, Alice - Author

### **Submission Topic**

Exhibitor Session

### **Abstract**

We will be presenting our new Motor Planning page set for TD Snap. This new page set places a strong emphasis on language development and is targeted at emergent communicators with complex access needs. Operationally, the page set follows principles frequently associated with “motor planning”, namely, the user learns distinct motor patterns associated with each word. Over time, the user develops motor automaticity, allowing them to transfer more cognitive effort towards generative language production and communication. The 2700 word vocabulary has been carefully selected to provide wide coverage and thoughtfully arranged to support efficiency, while also following organisational patterns which promote learning, vocabulary acquisition and conceptual development. Our approach is backed by decades of research in the field of language and cognitive development. We will also introduce the accompanying Vocabulary Filter tool, which provides a way to incrementally grow the vocabulary as well as allowing clinicians to temporarily focus on specific words in the context of a therapy session.

### **Level**

General Session

### **Age Group**

All Ages

## New resources for learning and development - Mentoring Project 2022 update

Elliott, Verity - Author

### **Format**

Workshop

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

As part of the National Lottery funded Communication Matters Mentoring Project, we would like to present a workshop about the various formats that our learning and development resources have been adapted to meet the needs of individual learners completing Entry Level 2, Entry Level 3, Level 1 and Level 2 accredited units and qualifications. The accredited learning opportunities relate to Personal and Social Development, Mentoring and Employability as well as some resources for Digital Skills. The adaptations and formats include the addition of symbols, PDFs with fillable text boxes, simple Word activity sheets, workbooks and handbooks. These have been developed as a result of the feedback and specific requests from learners, practitioners and family members and this feedback has been greatly appreciated and very useful. The workshop will include some activities that relate to the themes and topics of some of the units so that participants can have a go to find out more and provide some feedback so that we can continue to develop our resources as required. For example, the role of a mentor, healthy living and interpersonal skills. There is funding available for AAC users, parents and practitioners to access these learning opportunities during 2022 and 2023.

### **Level**

General Session

### **Age Group**

All Ages

## Nurse training and AAC: How do AAC users and nursing staff feel about current training and what does their ideal training look like?

Paterson, Helen - Author; Murray, Janice - Co-Author; Lancaster, John - Co-Author; Jayes, Mark - Co-Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

Individuals with communication difficulties are a vulnerable population within hospitals and long-term care settings and have been linked to higher rates of preventable adverse events in hospital (Bartlett et al., 2008). Although nurses identify that supporting people to use communication methods is within their role (Braun-Janzen et al., 2009), many barriers to implementing AAC in hospital settings have been identified, including lack of staff knowledge and skills (Santiago et al., 2021). Globally, nurses and AAC users are a diverse population culturally and linguistically, and we must ensure that any training considers their views. However, there is a distinct lack of any evidence-base on best-practice training of nursing staff, particularly in long-term care settings, despite the fact that they play a key role in enabling individuals with communication difficulties to access and use their AAC systems. This presentation will discuss Phase 1 of a PhD research project. This mixed methods research project has been exploring the views of AAC users, nurses and health care assistants through the use of interviews, focus groups and Talking Mats, in a long-term care setting. They were asked about AAC use and training on low and high tech AAC. This presentation will present the results of the data collection and analysis through reflexive thematic analysis and descriptive statistics which were triangulated with a systematic literature review. The ultimate aim of the research is to develop a care staff training programme in AAC and to test its feasibility through evaluating nursing staff knowledge and satisfaction using surveys and the views of AAC users through Talking mats and interviews. The presentation will also discuss the author's current clinical practice in nurse training in a rehabilitation and long term care hospital and the role of AAC users in the training.

### References (Optional)

- Altschuler, T., Santiago, R., and Gormley, J. (2021) Ensuring communication access for all during the COVID-19 pandemic and beyond: supporting patients, providers, and caregivers in hospitals. *Augmentative and Alternative Communication* 37(3) 155-167.
- Bartlett, H., Blais, R., Tamblyn, R., Clermont, R., and MacGibbon, B. (2008) Impact of patient communication problems on the risk of preventable adverse events in acute care settings. *Canadian Medical Association Journal* 178 (12) 1555-1562.
- Braun-Janzen, C., Sarchuk, L., and Murray, R. P. (2009) Roles of Speech-Language Pathologists and Nurses in Providing Communication Intervention for Nonspeaking Adults in Acute Care: A Regional Pilot Study. *Canadian Journal of Speech-Language Pathology and Audiology* 33 (1) 5-23.
- Santiago, R., Gormley, J., Altschuler, T., Howard, M., and Pressman, H (2021) Promoting

System Change for Communication Access in Acute Care Hospitals. Assistive Technology Outcomes Benefits 15(1) 100.

**Level**

General Session

**Age Group**

Adult

## Perspectives of AAC service providers in Canada on factors influencing effective use of AAC technology.

Lackey, Steph - Co-Author; Burnham, Seamus - Co-Author; Watson Hyatt, Glenda - Co-Author; Shepherd, Tracy - Co-Author; Pinder, Shane - Co-Author; Davies, T. Claire - Co-Author; Batorowicz, Beata - Co-Author

### Format

Poster

### Submission Topic

Best Research Evidence

### Abstract

Emerging evidence suggests that augmentative and alternative communication (AAC) systems support daily communication needs and social relationships of people with severe communication impairments, however use of AAC technology is often discontinued long term (Johnson et al., 2006; Shepherd et al., 2009). Factors that influence the use of AAC technology include support, training, fit between technology and person, reliability of technology, and available services (Baxter et al., 2012; Moorcroft et al., 2019; Shepherd et al., 2009). Addressing service-related factors may improve outcomes of AAC technology use (Lindsay, 2010; Moorcroft et al., 2019). This study aimed to identify the key areas of importance with respect to the effective use of AAC systems from the perspective of AAC service providers across Canada. Three online focus groups were conducted in English and one in French resulting in input from 23 participants, including speech language pathologists, occupational therapists, and communicative disorder assistants. The data were analyzed by six academic researchers using reflexive thematic analysis (Braun and Clarke, 2019; 2021). The analysis resulted in four themes reflecting variability in AAC services, the roles of informal and formal supports, contextual influences on AAC systems recommendations, and misconceptions about AAC. Services varied based on factors including geographic location, funding, service delivery models, and providers' experience. The participants highlighted a critical role of both informal and formal supports and the importance of collaboration among family members and professionals. Professionals' decision-making was influenced by features and learning demands of the AAC technologies. Participants discussed how abilities of people who rely on communication aids are being underestimated and that the importance of AAC is not well understood by the general population. This study findings will inform strategies for enhancing implementation of AAC and future research on effectiveness of service delivery in Canada.

### References (Optional)

- Baxter, S., Enderby, P., Evans, P., and Judge, S. 2012. Barriers and facilitators to the use of high-technology augmentative and alternative communication devices: a systematic review and qualitative synthesis. *International Journal of Language & Communication Disorders*, 47(2), pp.115-129.
- Braun, V. and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), pp.77-101.
- Johnson, J.M., Inglebret, E., Jones, C., and Ray, J. 2006. Perspectives of speech language pathologists regarding success versus abandonment of AAC. *Augmentative and Alternative Communication*, 22(2), pp. 85–99.



Lindsay, S. 2010. Perceptions of health care workers prescribing augmentative and alternative communication devices to children. *Disability and Rehabilitation: Assistive Technology*, 5(3), pp.209-222.

Moorcroft, A., Scarinci, N., and Meyer, C. 2019. A systematic review of the barriers and facilitators to the provision and use of low-tech and unaided AAC systems for people with complex communication needs and their families. *Disability and Rehabilitation: Assistive Technology*, 14(7), pp.710-731.

**Level**

General Session

**Age Group**

All Ages

## Perspectives of AAC service providers in Canada on factors influencing effective use of AAC technology.

Lackey, Steph - Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

Emerging evidence suggests that augmentative and alternative communication (AAC) systems support daily communication needs and social relationships of people with severe communication impairments, however use of AAC technology is often discontinued long term (Johnson et al., 2006; Shepherd et al., 2009). Factors that influence the use of AAC technology include support, training, fit between technology and person, reliability of technology, and available services (Baxter et al., 2012; Moorcroft et al., 2019; Shepherd et al., 2009). Addressing service-related factors may improve outcomes of AAC technology use (Lindsay, 2010; Moorcroft et al., 2019). This study aimed to identify the key areas of importance with respect to the effective use of AAC systems from the perspective of AAC service providers across Canada. Three online focus groups were conducted in English and one in French resulting in input from 23 participants, including speech language pathologists, occupational therapists, and communicative disorder assistants. The data were analyzed by six academic researchers using reflexive thematic analysis (Braun and Clarke, 2019; 2021). The analysis resulted in four themes reflecting variability in AAC services, the roles of informal and formal supports, contextual influences on AAC systems recommendations, and misconceptions about AAC. Services varied based on factors including geographic location, funding, service delivery models, and providers' experience. The participants highlighted a critical role of both informal and formal supports and the importance of collaboration among family members and professionals. Professionals' decision-making was influenced by features and learning demands of the AAC technologies. Participants discussed how abilities of people who rely on communication aids are being underestimated and that the importance of AAC is not well understood by the general population. This study findings will inform strategies for enhancing implementation of AAC and future research on effectiveness of service delivery in Canada.

### References (Optional)

- Baxter, S., Enderby, P., Evans, P., and Judge, S. 2012. Barriers and facilitators to the use of high-technology augmentative and alternative communication devices: a systematic review and qualitative synthesis. *International Journal of Language & Communication Disorders*, 47(2), pp.115-129.
- Braun, V. and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), pp.77-101.
- Braun, V. and Clarke, V., 2021. One size fits all? What counts as quality practice in (reflexive) thematic analysis?. *Qualitative Research in Psychology*, 18(3), pp.328-352.
- Johnson, J.M., Inglebret, E., Jones, C., and Ray, J. 2006. Perspectives of speech language pathologists regarding success versus abandonment of AAC. *Augmentative and Alternative Communication*, 22(2), pp. 85–99.

Lindsay, S. 2010. Perceptions of health care workers prescribing augmentative and alternative communication devices to children. *Disability and Rehabilitation: Assistive Technology*, 5(3), pp.209-222.

Moorcroft, A., Scarinci, N., and Meyer, C. 2019. A systematic review of the barriers and facilitators to the provision and use of low-tech and unaided AAC systems for people with complex communication needs and their families. *Disability and Rehabilitation: Assistive Technology*, 14(7), pp.710-731.

Shepherd, T.A., Campbell, K.A., Renzoni, A.M. and Sloan, N. 2009. Reliability of speech generating devices: A 5-year review. *Augmentative and alternative communication*, 25(3), pp.145-153.

**Level**

General Session

**Age Group**

All Ages

## Perspectives of young people who use AAC and their family members on their literacy learning

Murray, Janice - Author; Lynch, Yvonne - Co-Author; Sephton, Fran - Co-Author; Sharples, Andrea - Co-Author; Martin, Catherine - Co-Author

### **Format**

Platform

### **Submission Topic**

Best Research Evidence

### **Abstract**

This research project explored the perspectives of young people who use AAC and their family members of their literacy learning experiences. A qualitative ethnographic approach was used to explore perspectives and perceptions of young people and their family members regarding literacy learning and attainment. Participants: Young people: Four young people aged 11-15 years who use AAC were recruited to the study. Purposive sampling was used to recruit two young people with emerging literacy abilities and the remaining two young people with some independent literacy skills. Family members: Each young person nominated a family member who also consented to taking part in the study. Procedures: The four young people who consented to participate in the study completed group social and literacy activities and an individual language and literacy assessment. Each young person participated in an interview exploring their perspectives on their literacy learning experiences and their view on how those experiences contributed to their literacy attainment. The interviews involved an adapted procedure involving 3 forms of data collection which will be detailed in the conference presentation. Family members: Family members also participated in individual interviews. Data analysis A phenomenological analysis was undertaken to examine the literacy learning experiences as reported by the young people and their family members in an unusual literacy learning context. An inductive-semantic approach to analysis was adopted, with a six-stage process of analysis completed. This initial coding process suggested that no literacy experiences were recorded as not helpful. Steps 3-6 of the analysis process resulted in the generation of themes describing what or who had supported literacy development, and also what was missing from that experience but could offer some opportunities for greater enjoyment of literacy skill development activities. A more detailed consideration of the results will be delivered as part of the conference presentation.

### **Level**

General Session

### **Age Group**

Adolescent

## Promotion of Gesture Interface for Employment and Education among People with Motor Dysfunction within real users

Yoda, Ikushi - Author; Nakayama, Tsuyoshi - Co-Author; Itoh, Kazuyuki - Co-Author; Kawashima, Michie - Co-Author; Hara, Takatoshi - Co-Author; Nishida, Daisuke - Co-Author; Mizuno, Katsuhiko - Co-Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

We have conducted research and developed a gesture interface to enable simpler operation of computers and home appliances for the many individuals with motor dysfunction who have difficulty operating a standard keyboard and mouse[1-4]. Specifically, we established a contactless, non-constraining interface using a commercially-available imaging range sensor to make it affordable for all users in low price. In order to develop such gesture interface, we collected 1663 gestures from 78 persons with motor dysfunction and classified voluntary movements based on body parts. We created all algorithms for recognition in-house by using the RGB-D camera. We have finished seven recognition modules dependent on body parts and two independent recognition modules. The seven recognition modules are Finger, Head, Wink, Tongue, Shoulder, Knee, and Foot. The two recognition modules are Front object and Slight movement[5]. We have started to distribute this system in Japan as part of JST/RISTEX (Japan Science and Technology Agency/Research Institute of Science and Technology for Society) SDGs project since Oct. 2020[6]. Three steps are needed to practically distribute this system for real users. As the first step, some collaborating hospitals are using the interface at their rehabilitation sections. As our second step, we are developing some learning programs for occupational therapists in order to increase its recognition among medical professionals. Collaborating with Tokyo Association of Occupational Therapist, we conducted some learning sessions in 2022. As our third step, we will step into more areas like occupational training and education by introducing this system to special subsidiary companies and special needs schools. We have involved our users in our developmental process. Our system has been improved by taking feedbacks from real users in our project. In the future, we would like to collaborate with users oversea.

### References (Optional)

- [1] I. Yoda, K. Itoh, and T. Nakayama: "Collection and Classification of Gestures from People with Severe Motor Dysfunction for Developing Modular Gesture Interface," UAHCI 2015, Part II, LNCS 9176, pp. 58-68 (2015).
- [2] I. Yoda, K. Itoh, and T. Nakayama, "Long-Term Evaluation of a Modular Gesture Interface at Home for Persons with Sever Motor Dysfunction," Proceedings of Universal Access in Human-Computer Interaction 2016, (Springer LNCS 9738), pp.102-116 (2016).
- [3] I. Yoda, T. Nakayama, K. Itoh, Y. Ariake, S. Mihashi, H. Awazawa, and Y. Kobayashi: "Augmentative and Alternative Gesture Interface (AAGI): Multi Modular Gesture Interface for People with Severe Motor Dysfunction," TECHNOLOGY AND DISABILITY Vol.31,

Supplement 1, pp. S140-S141 (2019).

[4] I. Yoda, T. Nakayama, K. Itoh, and K. Mizuno: "Application of Gesture Interface to transcription for People with Motor Dysfunction," Computers Helping People with Special Needs. International Conference, ICCHP. Proceedings. Lecture Notes in Computer Science (LNCS 12377), PP.343-347 (2020).

[5] <http://gesture-interface.jp/en/>

[6] <https://www.jst.go.jp/ristex/en/funding/solve/index.html>

**Level**

Introductory Session

**Age Group**

All Ages

## Researching Experiences of Community: Participation, Inclusion and Identity

Bayliss, Ria - Author; Mercer, Jenny - Co-Author; Hynan, Amanda - Co-Author; Delaney, Calum - Co-Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

This session will report on the methodological approach and findings from the second phase of a doctoral research project which is investigating what participation and inclusion within community/ies means to adults who use AAC. We all exist within communities, and they contribute to defining who we are. Our participation and inclusion within communities relies on our interactions with other people, be that face-to-face or more remotely. This research aims to increase understanding of the lived experience of community for AAC users by giving the participants the opportunity to define these experiences for themselves. In 2011, the World Health Organisation stated the importance of both researching lived experience and including people with disabilities within the research process [1]. Research into lived experience supports the exploration of one of the long-term aims of AAC, that 'it must support full participation in all aspects of 21st century life' [2]. This project considered the way in which data could be gathered from AAC users which would enable them to express and reflect on their lifeworld. A hermeneutic phenomenological approach was used for the collection and analysis of data. Within this phase of the research, four adult AAC users were each interviewed twice using a semi-structured interview format. A topic guide was used for each of the interviews to encourage participants to share their thoughts and experiences of community in conversation with the researcher. The meanings that emerged were co-constructed through use of dialogue, with both the participant and the researcher exchanging thoughts and views, as part of the hermeneutic circle [3]. The main findings from this phase will be presented. The session will also invite the Communication Matters community to reflect on the types of research carried out in the field of AAC and how lived experience research might be encompassed.

### References (Optional)

- [1] World Health Organization and The World Bank. (2011). World Report on Disability. Geneva, Switzerland: World Health Organization.
- [2]. Williams, M; Krezman, C and McNaughton, D. (2008). "Reach for the Stars": Five Principles for the Next 25 Years of AAC. *Augmentative and Alternative Communication* 24(3), pp 194-206.
- [3] Grbich, C. (2013) *Qualitative Data Analysis*. London: SAGE.

### Level

General Session

### Age Group

Adult

## Rethinking Communicative Functions

Lee, Andrea - Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

The term “communicative functions” is widely used in the field of AAC and refers to a system where messages expressed are classified by their purpose, for example, as a greeting or a request for information. Use of this system provides a model for analysing, describing and comparing interaction styles and the roles of the communicators. Communicative functions are used in AAC assessments and goal setting tools with a wider range of functions being indicative of a higher level of communicative competency. This measure is also referred to in policy when defining service criteria. Observations of AAC use may indicate that there are specific communication functions missing from the AAC user’s repertoire and highlight these as areas needing intervention or potential goals. Despite their accepted use in the field, the author has found there to be discrepancies in the categories and definitions of communication functions used and the way in which they are interpreted. In a previous paper, the author found this to be particularly apparent in the area often described as “social closeness”. The presentation will refer back to the author’s previous work in this area and explore the origins of the term and the various interpretations over the years considering pragmatic functions, speech acts and social actions. Questions concerning the currently accepted definitions and the ways they are implemented will be discussed, including the value given to certain communicative functions over others and the usefulness, reliability and integrity of the interaction being perceived and potentially graded by an outsider. The author will draw on clinical experience to exemplify the above points, suggest alternative categories and definitions and intends to generate questions and discussion amongst the participants. The audience will be asked to reflect on their clinical use of this system and to generate alternative types of social acts.

### References (Optional)

- Clarke, M and Kirton, A. 2003, Patterns of interaction between children with physical disabilities using augmentative and alternative communication systems and their peers. *Child Language Teaching and Therapy* Vol. 19 no. 2 135-151
- Light, J 1989, Toward a definition of communicative competence for individuals using augmentative and alternative communication systems. *Augmentative and Alternative Communication*, 5:2, 137-144.
- Money, D and Thurman S. 2002, *Inclusive Communication – coming soon near you*. *Speech and Language Therapy in Practice*.
- Martin, S., Small, K., and Stevens, R. 2017. *The Pragmatics Profile for People who use AAC* (First Published 26 Sep 2017).
- Keycomm, 2022, *The CODES framework*, <https://codesframework.wordpress.com/>

### Level

Specialist Session

### Age Group

All Ages



## Right Place, Right Time. Creating a local AAC service that meets the needs of the AAC community.

McPeake, Claire - Author; Walker, Lynsey - Co-Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

**Background** For many people Augmentative and Alternative Communication (AAC) is a lifelong tool to supplement and/or replace speech (Beukelman and Mirenda, 2013). The Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016 (part 4) determines that people who require AAC, receive the system and the ongoing support to use it in a timely manner. Following the introduction of the abovementioned legislation, NHS Greater Glasgow & Clyde Health Board commissioned the creation of a local AAC service to meet the needs of the legislation. Under the legislation health boards must provide: “(a) communication equipment, and (b) support in using that equipment, to any person who has lost their voice or has difficulty speaking.” In February 2020, The CHAT (Communication Help through Assistive Technology) Service, hosted by SCTCI (Scottish Centre of Technology for the Communication Impaired) was created to allow the health board to meet the delivery of ‘communication equipment’ and the subsequent ‘support in using that equipment’ for people who use AAC who live within the NHS GG&C area.

**Content of presentation** In this presentation we will cover the following topics: - The nature of AAC services in Scotland - Why a new service was required. - Developing a service that meets the journey of AAC users. - Ways we have consulted with AAC users and their families in the development of the service. - Working to create the AAC team around the person. - What the service is currently delivering - Challenges of setting the service up during a pandemic - Future Plans We hope this presentation will emphasise the importance of AAC users and their communication partners having access to the specialised support and equipment that they require at the right point of the AAC journey, alongside the discussion of developing this within an NHS setting.

### References (Optional)

Beukelman, D. R. and Mirenda, P. (2013). Augmentative & Alternative Communication, 4th Ed. Baltimore, Maryland: Paul H Brooks Publishing Co Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016 (part 4)

### Level

General Session

### Age Group

Adult

## **Singing from the same hymn sheet with vocabulary modelling. How to pick the words that matter.**

Gabrielle, Emily - Author

### **Format**

Workshop

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

We frequently emphasise the importance of core vocabulary within AAC and this is reflected in the breadth of vocabularies now available, which clearly prioritise core words. But how do we choose which core words to model? And does this mean fringe vocabulary should be forgotten? In this session I will think about the importance of both core and fringe vocabulary and consider how we can find the right balance, considering what we know about high frequency core words, language development in AAC and the importance of a client centred approach to vocabulary selection. Then, participants will be able to spend time thinking about the vocabulary they can be modelling in the activities which are most meaningful to their clients or family members. Using a freely downloadable vocabulary planning tool, participants will be then supported to plot this vocabulary onto a visual prompt, in the session. Finally, the group will come together to share the words they have chosen and as a group we will think about the similarities and differences between the vocabulary selections and what the implications are for our AAC modelling.

### **Level**

Introductory Session

### **Age Group**

All Ages

### **Details of sponsorship**

I am an employee of Liberator Ltd. The planning tool used is a resource which is freely downloadable from our website.

## Softly non-spoken: soft robotics as non-verbal communication aids

Broomfield, Katherine - Author; Oldfield, Alison - Co-Author; Philamore, Hemma - Co-Author; Sewell, Richard - Co-Author; Powell, Emma - Co-Author; Haynes, Alice - Co-Author; Gillespie, Calum - Co-Author

### Format

Workshop

### Submission Topic

Best Research Evidence

### Abstract

Introduction: Traditional AAC systems are based on a conceptualisation of communication that is rooted in speech, language, and the transmission of messages from one person to another. However, communication can be considered not just as a transactional exchange of information, but rather as means of facilitating connection between people, allowing them to engage in spontaneous, socially mediated interactions. The fields of robotics and puppetry have done much work in understanding embodied communication: how humans achieve connections that extend beyond words and speech (Wachsmuth, Lenzen and Knoblich 2008). Softly Non-spoken is a research collaboration between roboticists, puppeteers, educationalists and speech and language therapists which aims to employ soft-robotic technology to develop AAC devices that expand the ways in which external communication systems can be used to support more diverse flavours of communication. Aim: 1) To take delegates on a journey, exploding the concept of communication and how technology can be used to facilitate connection beyond words. 2) To demonstrate a non-verbal AAC robot prototype 3) To provoke delegates to consider possible uses of non-verbal AAC, identify additional use cases, and help the team refine the design for further testing. Conclusion: Softly non-spoken has provided a vehicle for inter-disciplinary working which has inspired a deeper understanding of the scope of communication and the limitations of existing AAC systems. This workshop will use collaborative practices and participatory techniques to engage the delegates of CM in thinking creatively about AAC. The workshop will also support them to develop a prototype robotic solution for further user-testing and ultimately expand the horizon for AAC device design.

### References (Optional)

Wachsmuth, I., Lenzen, M. & Knoblich, G. (Eds) (2008) Embodied Communication in Humans and Machines. Oxford University Press, UK

### Level

Introductory Session

### Age Group

All Ages

## Steady progress with bringing our lipreading app, SRAVI, to AAC patients

McDaid, Emily - Author; McQuillan, Liam - Author

### Submission Topic

Exhibitor Session

### Abstract

Liopa developed its SRAVI lip-reading app in 2018 and has been making steady progress with the app in hospitals around the UK. So far, SRAVI has been used with patients in critical care in Royal Preston Hospital in Lancashire, the Royal Victoria Hospital, City Hospital and Altnagelvin Hospital (all in Northern Ireland). What is SRAVI? SRAVI is a mobile app that records a video of you mouthing a phrase. Using Liopa's lip-reading technology, SRAVI is able to convert your silent lip movement into text for a carer or family member to understand. SRAVI helps patients communicate with people in an efficient and natural way. It can currently recognise around 40 phrases, and this phrase list has been specially selected for use in critical care departments in hospital. Example phrases are: "I'm in pain." "I need the toilet." "I'm thirsty." SRAVI's phrase list can be expanded and customised for different occasions. We have demonstrated that SRAVI can be helpful to patients who have undergone a tracheostomy. These patients can mouth words but cannot pass air over their vocal cords, rendering them voiceless. What's next for SRAVI? Liopa is in the process of identifying further clinical groups to try SRAVI at other hospitals – both across the UK, and in other countries, such as the US. Although the app must come from the healthcare provider, patients can lodge their interest with their doctors, nurses and SLTs to make them aware of SRAVI – and the Liopa team can then gauge their interest in obtaining SRAVI for their hospital. The more interest in SRAVI, the greater the possibility that this app can succeed at helping the voiceless to communicate.

### Level

General Session

### Age Group

All Ages

## Stories Beyond Words project – exploring collaborative video making to reclaim pride in non-normative voices

Soreny, Cathy - Author; Preece, Jamie - Co-Author; Sullivan, Emma - Author; Fox, Emily - Author

### **Format**

Workshop

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

The 'Stories Beyond Words' project sets out to challenge representation of non-normative voices through co-creating films and video installations. Collaborating with people with diverse communication impairments we are making immersive video and sound-based artworks, using short films and projection mapping. These explore non-normative voices authentically and creatively, with self-representation being central to creating visibility. All of the project is co-designed with the collaborators – everyone has a say in the aims of the research, and the way that we do it. Project collaborators will learn filmmaking, editing and exhibiting skills over a series of workshops, in person and online. The creative part of the research is happening over 18-24 months, with participation being flexible to suit each person's needs and time. The research is being undertaken as a practice-based PhD at Sheffield Hallam University, who specialise in creative practice approaches to explore health and social issues. The research includes people who are AAC users, plus people with various diverse communication impairments, including, dysarthria, dysphasia, stammer and more. We are exploring and celebrating the unique properties of voice and AAC, and playing with approaches video editing to challenge norms around their representation on film. In this session we will present progress made in early workshops over summer 2022. This will include explorations of creative approaches to accessibility and creating a total communication environment. We will also show some early clips and examples of our creative outputs, and discuss how a playful approach to editing is leading to unique ways to film AAC devices in use.

### **Level**

Introductory Session

### **Age Group**

All Ages

## Studio Greta: Creative Processes and Eyegaze

McMillan, Greta Raphaella - Author; McMillan, Thea - Co-Author; McMillan, Ian - Co-Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Greta is an artist and film maker: her main theme is climate change and how to change behaviours. She is the creative lead within the team StudioGreta, using her eyegaze device to give instructions as well as now learning to directly access her camera and iMovie: for storyboarding, camera angles and editing. Greta and her creative assistants in Studio Greta will talk about her creative processes, and how she uses her eyegaze communicator to do these, including film making, art, and music. Her presentation will include short films showing her processes, and we will also be happy to answer questions. The presentation will show how a combination of instruction giving, to her creative assistants, through her AAC communicator, and directly accessing softwares on her TD Pilot (eyegaze) for music (thumbjam), art (digitalpainters and art set app), and film making (iMovie, and iPad video camera) enables Greta to develop increasing creative control in her varied projects. She works with Drake Music Scotland, Edinburgh Youth Theatre, and is currently an associate artist in a sensory theatre project, 'When the World Turns, which works with nature and landscape to explore ideas of freedom and power in relation to a shifting world', with Oilycart, London and Polyglot, Melbourne. Greta McMillan exhibits internationally, and her works are collected worldwide. Greta's largest work 'Dance\_6', is a 15m by 3m art installation at the Waverley Steps, Edinburgh.

### **Level**

General Session

### **Age Group**

All Ages

## Supporting Students who rely on AAC to access maths

Rota, Stefania - Author; Madera, Annamaria - Author; Stanton, Marion - Co-Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

CandLE has developed adaptations and systems for students who need support with maths which this presentation will describe. We are excited to have been able to influence the exam system in the UK so that it is fairer for students who rely on AAC and to have developed teaching approaches which makes more sense of maths for those who struggle with the subject. Children with cerebral palsy and/or those who rely on AAC are more likely to experience learning difficulty in relation to maths than their non-disabled peers. Research has found that several factors contribute to this. These include:

- Inability to manipulate objects (this is thought to be essential to the development of early maths concepts)
- Working Memory problems.
- Difficulty with visual perception + visual-spatial cognition.
- Difficulty with the drawing elements of maths through motor restrictions.
- Difficulty with maths vocabulary.
- The demands of stepped problems and difficulty with displaying one step whilst moving on to the next.
- Not being able to show workings and work with number such as carrying and borrowing.
- The amount of time a school dedicates to maths instruction.

This presentation will be identifying ways in which these difficulties may be compensated by using approaches that complement mainstream approaches to enable the student to access the concepts they need to progress in maths. This will include:

- Alternatives to manipulatives for early learners.
- The importance of going beyond basic numeracy even when basic numeracy seems to be presenting challenges.
- The use of AAC and other software to enable drawing, calculation, managing stepped problems, and showing working.
- Teaching maths vocabulary.
- Maths across the curriculum.

This presentation should provide participants with the confidence to support the unique learning needs of every student. It will also address negotiation with exam boards for reasonable adjustments.

### References (Optional)

Jenks, K. M., De Moor, J., & Van Lieshout, E. C. D. M. (2009). Arithmetic difficulties in children with cerebral palsy are related to executive function and working memory. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 50(7), 824–833.

<https://doi.org/10.1111/j.1469-7610.2008.02031.x>

Jenks, K. M., De Moor, J., Van Lieshout, E. C. D. M., Maathuis, K. G. B., Keus, I., & Gorter, J. W. (2007). The effect of cerebral palsy on arithmetic accuracy is mediated by working

memory, intelligence, early numeracy, and instruction time. *Developmental Neuropsychology*, 32(3), 861–879. <https://doi.org/10.1080/87565640701539758>

**Level**

Introductory Session

**Age Group**

All Ages



## Supporting Students who rely on AAC to access qualifications

Madera, Annamaria - Author; Evans, Catherine - Co-Author; Pearce, Jess - Co-Author; Stanton, Marion - Co-Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

Many students who use AAC have cognitive ability levels that could enable them to gain qualifications but have limited options. Some qualifications are available to students who rely on AAC including:

- ASDAN. Many of the available modules require the student to be able to use their hands and be otherwise mobile.
- Functional skills English, maths, and ICT. These qualifications have been developed for the needs of young people who may not attain GCSE's but who may benefit from basic maths and English skills so that they can participate in industry. The kind of industries often cited include construction, retail, beauty, and social care. These industries require physical skills that are beyond the reach of most students who rely on AAC.
- GCSE access has improved as the exam boards begin to understand what is required to offer a fair playing field to students who rely on AAC. This has been supported by the work of the AAC Exams Working Group who have produced guidance in the area. Many students who rely on AAC cannot access the learning steppingstones they need to gain appropriate qualifications utilising the software that they are most familiar with. CandLE have been working on this for many years and have now devised 5 qualifications that can support this group in working towards wider access to qualifications including:
  - Bridge to English
  - Bridge to Maths
  - World Knowledge
  - Independent living through technology and instruction
  - Personal Project

CandLE also offer the AAC City and Guilds which enables students to gain a qualification in their use of AAC. These qualifications will be explained. They are offered from entry level 1 to Level 2 (which is equivalent to a GCSE) and aim to support the student who relies on AAC to access qualifications through the most appropriate medium of their communication software.

### Level

Introductory Session

### Age Group

All Ages

## Supporting voice banking for those living with MND - A service evaluation

Judge, Simon - Author; Hayton, Nicola - Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

Voice banking allows those facing changes in their voice, including those living with Motor Neurone Disease (MND), to create a personalised synthetic voice. This presentation presents the results of a service review of the voice banking service delivered by the Neurological Enablement Service (NES) in Sheffield which provides support for creating personalised synthetic voices to individuals living with MND. A retrospective service review of existing health records from neurological services in Sheffield was carried out covering the period of 2018 and 2019. Case notes were reviewed to extract information about use of communication aids, offer of voice banking, and use of synthesised speech. Responses to a routine follow up survey were also collated. Less than half of the clients whose notes were reviewed had been informed about voice banking, one in four had completed the voice banking process, around half were using communication aids, and one in ten were using their personalised synthetic voice on a communication aid. The time taken to complete the process had a large variation. Those completing the process viewed the personalised voices positively and all were used when created. Support from professionals was noted by some as being key. This presentation will discuss the implications of this service review and other research into voice banking services. We will consider what these and other findings suggest around the best way to support those living with MND with this process. We will review the different options currently available for creating personalised synthetic voices and also review the potential future methods and technologies.

### **Level**

Specialist Session

### **Age Group**

Adult

## Taking on AAC, what I've learned as a parent and (recovering) SLT.

Holmes, Joanna - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

Joanna (Jo) Holmes was a Speech and Language Therapist (SLT) for almost 20 years before leaving the profession to take on a full time caring role for her daughter Lucy who is disabled and has complex communication needs. However it turns out she finds it very hard to leave the profession behind and continues to get her 'hit' by reading about AAC, listening to podcasts and diving into social media about AAC and basically taking any chance to learn more while supporting and chronicling Lucy's communication journey. This paper will be a combination of personal perspective and discussion of some of the interesting, enlightening and infuriating research and learning she has encountered along the way. Jo will talk about her family and how they have accessed services and support for AAC, what support there has been from statutory services and what they have had to find for themselves. She will talk about accessing services from different service provision from local community SLTs, school and specialist services. She will also discuss how this sits within the wider context of caring for a disabled child, and what skills she has used and developed. This personal narrative will be framed within the literature about: Best practices in AAC for emergent communicators. Qualitative reports of family and parent carer experience from the AAC literature and beyond. Broader psychological concepts around acceptance, grief, trust and motivation. Overall the session will aim to provide plenty of food for thought for practitioners and parents navigating AAC provision for children. Participants will be invited to consider the implications of the research presented to their own situation.

### **Level**

General Session

### **Age Group**

Child

## The digital divide - how new technology may be increasing the digital divide, and how we can help to reduce it

Cave, Richard - Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

By 2024, it is forecast people will be able to interact with over 8.4 billion devices using their voice - larger than the world's population, and double the number of devices forecast for 2020 - although smartphones are the largest group of devices that people will interact with using voice, cars and household devices such as televisions are forecast to have the highest rate of growth [1]. As voice interaction with devices becomes more normalised, individuals with impaired speech (as defined by the speech recognition technology itself) increasingly risk being excluded from these current, commercially available technologies - even though they could benefit extensively [2]. At a societal level, inequality in access to technology risks increasing the 'digital divide', worsening existing divisions and increased social exclusion [3]. Enabling people living with speech that is different to better access voice technologies is urgent, because voice interaction with devices is already ubiquitous. Additionally, devices that can interact with voice need to be accessible by other modalities, as few devices can be completely operated by voice alone [4] This presentation will discuss new and upcoming technology that may help to address some of these issues, and existing technology that could be repurposed to support our communities.

### References (Optional)

- [1] Moar J, Escherich M. Voice Assistant Devices in Use to Overtake World Population by 2024 [Internet]. 2020 [cited 2020 Jul 12]. Available from: [https://www.juniperresearch.com/press/press-releases/number-of-voice-assistant-devices-in-use?ch=voice assistants](https://www.juniperresearch.com/press/press-releases/number-of-voice-assistant-devices-in-use?ch=voice%20assistants).
- [2] Koch Fager S, Fried-Oken M, Jakobs T, et al. New and emerging access technologies for adults with complex communication needs and severe motor impairments: State of the science. *AAC Augment Altern Commun* [Internet]. 2019;35:13–25. Available from: <https://doi.org/10.1080/07434618.2018.1556730>.
- [3] United Nations. Leaving no one behind: the imperative of inclusive development Report on the World Social Situation 2016. 2016.
- [4] Cave R, & Bloch, S (2021) The use of speech recognition technology by people living with amyotrophic lateral sclerosis: a scoping review, *Disability and Rehabilitation: Assistive Technology*, DOI: 10.1080/17483107.2021.1974961

### Level

General Session

### Age Group

All Ages

## The future of eye gaze experience in Grid

Fitzgerald, Neil - Author; Mobbs, Trevor - Author

### Format

Platform

### Submission Topic

[Exhibitor Session](#)

### Abstract

Presented by: Neil Fitzgerald (Product Manager) and Trevor Mobbs (AT Resources Manager) In this talk we will explore the latest developments for eye gaze users of Grid. We'll share innovation in cameras, new accessible apps and even give you a sneak peek at a brand new Look to Learn, for young people and adults starting out with eye gaze... We'll start by looking at the Lumin-i eye gaze technology in Grid Pad devices, created with Smart Eye, who develop cutting edge technology for NASA and BMW. We will explore how Lumin-i has continued to be developed since its launch in 2021, how it is fully optimised for Grid 3 and designed for outdoor use, highly responsive and has exceptional performance across a range of eye conditions, colours and user needs. Next, we will share the results of a recent research project to help us better understand the barriers and frustrations of eye gaze users. Hear all about the outcomes of this study and some of the ways we have improved Grid to help users with these issues, from setup to personalisation, with a new positioning guide for Lumin-i, track status and calibration profiles. Finally, you can explore some of the latest ways to use eye gaze, from developing eye gaze skills to controlling any app on your device. We will exclusively preview a new Look to Learn app with motivating activities to help people of all ages to gain and develop eye gaze skills. While our tour of all new Computer Control will reveal our accessible scroll feature and new design for efficiency and ease of use.

### Level

General Session

### Age Group

All Ages

## The Include Choir - Inclusive Communication through Song

Lewer, Alix - Author

### Format

Workshop

### Submission Topic

Personal Stories and Preferences

### Abstract

The Include Choir brings Low Tech AAC into the local community in fun and engaging ways. It is an inclusive choir of people with learning disabilities, autism, speaking and understanding difficulties and those with no disabilities. It began in 2016 in Redhill, Surrey & meets weekly for rehearsals, performing at community events and health & social care conferences. The Choir brings people with communication needs, community members, families and carers together to sing, write songs, share laughter (and occasionally cake). To ensure everyone is included, the choir uses Makaton signing and demonstrates a range of other low tech communication support techniques including visual supports, Easy Read information, Talking Mats™, objects of reference and intensive interaction. iPads are used to introduce members and carers to expressive communication apps including Pictello and ProloQuo2go. Everyone who attends learns communication skills, and demonstrates them when rehearsing and performing - helping to raise awareness and skills, increase confidence and build a more inclusive and accepting community. Choir members write songs collectively about topics that matter to them; greatest hits include 'Kind Communication' and 'The Battle Hymn of the Mental Capacity Act' which reminds audiences (including healthcare professionals) of people's right to supported decision making. During the Pandemic, the choir moved online via Zoom and Facebook Live. This ensured familiar routines continued, and maintained skills and connection with their peers, which participants and families described as a lifeline. Members joined from across the UK - and the community grew. The Choir now runs a dual delivery service, both face to face and delivered simultaneously on Zoom. A second choir is starting and the community is rebuilding and growing - we love to welcome more people to the Include family. As we sing every week 'The Include Choir is here - come and join in!'

### References (Optional)

Lewer, A and Harding, C. 2013. 'From "what do you do?" to "a leap of faith": developing more effective indirect intervention for adults with learning disabilities', Tizard Learning Disability Review, Vol. 18 Issue: 2, pp.74-83.

Lewer, A. 2022. Connect for a good life. Community Living [Online] 7 January. [Accessed 22 April 2022]. Available from: <https://www.cl-initiatives.co.uk/connect-for-a-good-life/>

### Level

Introductory Session

### Age Group

All Ages

## **The role of the AT Mentor service in achieving meaningful but hard to tackle targets: A range of case studies to demonstrate and plans for the future.**

Higginbottom, Kerry - Author; Shearer, Sarah-Jane - Co-Author; Gilmour, Gregor - Co-Author; Sillars, Sam - Co-Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

The AT Mentor service was launched in 2016 and has gone from strength to strength since then. We have worked hard to deliver a high-quality service to every mentee we work with and have really upskilled as a team to continue our professional development. This year we are presenting a range of case studies to demonstrate how mentoring sessions can be used to; build confidence in AAC use and self-esteem, encourage use of AAC across environments with a range of communication partners, provide training and support for teams around the mentee and to meet other AAC users. The mentor's role is diverse and includes working in a range of situations and in an innovate manner to engage the mentee. We will share these case studies to show how we can support mentees to achieve targets and work towards their aspirations through both face to face and virtual sessions. Lastly, we will look at plans for moving forwards with the service into the future.

### **Level**

General Session

### **Age Group**

All Ages

## The science of Eye Gaze and next generation assessments

Liddle, John - Author; Gregory, Rob - Author

### **Submission Topic**

Exhibitor Session

### **Abstract**

Keep your rabbit in your hat. This is science, not magic! In this session we will discuss how to get the most out of an eye tracker, we'll also show you the very latest in assessment software and we'll bust some myths along the way. We'll address the biggest question for emergent eye tracking users 'How we develop their skills to use eye gaze as an access method?' We will explore how to use eye gaze activities in the brand new Sensory Eye FX2 to gain a wealth of information about the users skills and needs. We will show you how to use the science to gather evidence on current skills and how to progress users from the initial exploratory phases all the way to AAC access. There is a wealth of information that you can gather from using specifically designed activities in combination with features such as heat maps and screen recording. At the end of this session, you'll have the skills to get the most out of your eye gaze sessions.

### **Level**

General Session

### **Age Group**

All Ages



## The time? The time? Who's got the time? Finding opportunities to model across the day.

Gabrielle, Emily - Author

### **Format**

Workshop

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

It can often be challenging to think about when exactly you can focus on modelling AAC - especially in the early days when modelling can feel new and unfamiliar. Already hectic days, lack of experience modelling by the support team and a perceived limited range of interests from the individual learning the system are just some of the potential barriers which can appear when the question - 'When could we be modelling?' is asked. In this session, after reflecting on the above, participants will be able to spend time looking at their day and thinking about how they can fit modelling in more effectively - with minimal disruption. Using a freely downloadable planning tool, participants will be then supported to create a plan for exactly how they can do this across the day. Finally, the group will come together to share their ideas and as a group we will reflect on the importance of gradually building habits so they become lifelong.

### **Level**

Introductory Session

### **Age Group**

All Ages

### **Details of sponsorship**

I am an employee of Liberator Ltd. The planning tool used is a resource which is freely downloadable from our website.

## The world of Apps: How do I know what to use?

Langley, Alice - Author; Diener, Bethany - Co-Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

With the popularity of iPads increasing, we now can use a wider range of access methods to use a whole world of apps. Anything from social media to games to educational apps, there's a bit of everything! Has your AAC user been using Eye Gaze to access their communication software and would now like to explore more apps? Or maybe they are beginning to use a new access method and need ways to explore and practice? This session will look at choosing the best app and help you to consider which apps will best suit the AAC users' skills and current ability. We will consider the following 5 guidelines: Current ability, upskilling, motivation, Access method adjustments and App adjustments.

### **Level**

Introductory Session

### **Age Group**

All Ages

## Transferring AAC skills into sporting success

Moulam, Beth - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

In 2021 Beth realised a lifelong dream to become a Paralympian, representing GB in Tokyo at boccia. Her dream began back in 2000 as she watched the Sydney Paralympics, and after finding boccia at the age of 10 it took 17 years of determination to achieve her goal. Beth will share her Paralympic boccia journey and the importance of her keeping her eyes on the prize through commitment, mindset, and working with a multi-disciplinary support team to achieve her sporting goals. She attributes some of her success to being an AAC user, saying the skills required to train and compete on a world class platform are similar to those skills she learned as she became a functional communication aid user. Throughout her journey to Tokyo Beth juggled full time education, graduating in January 2021 to then focus full time on preparation for the games. She believes the key to her success has been to not just work hard, but to be focused, realistic, flexible and resilient around the commitments needed. Especially important was the stubbornness to not giving up when the going got tough. Boccia is an inclusive sport that can be played from community level by anyone through to international level. At the end of 2021 Beth was individually ranked 13th in the world internationally (in her classification) and 8th in the world as part of the Great Britain BC3 Pair.

### **Level**

General Session

### **Age Group**

All Ages

## Translating political enthusiasm into action on policy– a collaboration between Policy Connect, Bournemouth University and Ace Centre

Reeves, Anna - Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

The ATech Policy Lab was launched this year to bring together people who need and use Assistive and Accessible Technology with sector leaders and researchers to incubate new ideas and generate the evidence and insight that moves policymakers to action. The Government's National Disability Strategy has stated its ambition to "help make the UK the most accessible place in the world to live and work with technology" and the ATech Policy Lab aims to ensure this translates into well designed, evidence-based and funded initiatives that will transform access and support for people who need and use ATech, including AAC. The ATech Policy Lab aims to build on the success to date of the All Party Parliamentary Group for Assistive Technology (APPGAT), which has pressed Government to invest in ATech across all Government Departments, resulting in the announcement of proposals to develop the case for a National Centre for Assistive and Accessible Technology. The ATech Policy Lab is collaborating with a wide range of stakeholders to ensure that ATech is placed at the heart of Government policy design and implementation rather than an afterthought. This is being achieved through workshops, policy scrutiny and proposals and research into this rapidly evolving sector. Collaboration is at the heart of the ATech Policy Lab and this partnership between Bournemouth University, Policy Connect and Ace Centre aims to engage with a broad range of academic partners, service and industry stakeholders and people who need and use ATech to directly influence ATech policy design and implementation. This presentation aims to share progress to date since the ATech Policy lab was launched and spotlight opportunities for AAC stakeholders to influence the Government and AAC and ATech market forces in the future

### **Level**

General Session

### **Age Group**

All Ages

## User experiences of a speech recognition app for people with non-standard speech.

Ritson, Michael - Author; Elliott, Claire - Co-Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

User experiences of a speech recognition app for people with non-standard speech Topic Area - Clinical & Professional Experience Speech recognition controlled voice assistants continue to be integrated into an ever expanding array of devices that we use on a daily basis. Research conducted by Pew Research Center estimated that approximately 46% of U.S. adults use a voice assistant (Jefferson, 2019). In addition to the challenges faced when communicating verbally with less familiar communication partners, people who experience dysarthric speech often have difficulty using voice recognition technology such as Alexa, Siri and Hey Google as these use speech recognition AI / machine learning trained on patterns of standard speech. Aimed at addressing these challenges, the Voiceitt speech recognition app was developed for people with speech disabilities, disorders, or impairments. It uses machine learning to recognise specific trained phrases which it can then either speak out clearly or transmit directly as a command to Alexa voice controlled devices. In this talk, we will reflect on the outcomes of a user experience project undertaken by Ace Centre in collaboration with Voiceitt and funded by the NHS Health Innovation Manchester Momentum Fund. We will discuss and demonstrate the features of the app as experienced by our group of participants, all of whom have dysarthric speech. Through case examples, user feedback and videos we will share the participant's thoughts about the Voiceitt app, its benefits, limitations and their ideas of the functionality they would like to see from this type of technology in the future.

### References (Optional)

Jefferson, M. (2019). Usability of Automatic Speech Recognition Systems for Individuals with Speech Disorders: Past, Present, Future, and A Proposed Model. Retrieved from the University of Minnesota Digital Conservancy, <https://hdl.handle.net/11299/202757>.

### Level

Introductory Session

### Age Group

All Ages

### Details of sponsorship

Report of a joint project between Ace Centre and Voiceitt, funded by the NHS Health Innovation Manchester Momentum Fund.

## Valuing Every Language: Exploring best practice when working with multilingual clients

Sadiku, Lizzie - Author; Small, Katherine - Co-Author; Henderson, Gavin - Co-Author; Ebbage-Taylor, Meaghan - Co-Author; Martin, Suzanne - Co-Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

Recent research shows that 34% of children in Britain have at least one parent from another country, and almost 20% of primary school children speak English as an additional language (Office for National Statistics, 2018). This significant level of multilingualism in the general population should be reflected in access to AAC resources, with each individual able to access all languages required to meet their needs. Requirements will vary from person to person, with some individuals requiring a small amount of phrases (such as greetings) for speaking with specific members of the family, and others requiring a robust language system in two or more different languages. This again reflects the different levels of multilingualism present in wider society. In this talk, we will reflect on the outcomes of an audit and thematic analysis completed into Ace Centre's work with multilingual clients. We will discuss the findings in regard to common languages found in the Northwest and Thames Valley & Wessex regions and considerations as to how well we were able to meet these language needs. We will reflect on how our practices regarding bilingualism has changed over the past 18 months and present the changes we are hoping to make going forward. Through case examples and experiences, we will share the successes as well as some of the difficulties that can arise when working with bilingual clients and give ideas for overcoming them.

### References (Optional)

Office for National Statistics [2018]. Births by Parents' Country of Birth, England and Wales: 2017. UK: Statistical Bulletin

### Level

General Session

### Age Group

Adult

## What are YOUR Means, Reasons and Opportunities for communication?

Lee, Andrea - Author

### Format

Poster

### Submission Topic

Clinical and Professional Experience

### Abstract

The author has used the Means, Reasons and Opportunities model as a structure in training and in clinical work within the field of AAC and found it to be an extremely valuable tool in highlighting the three areas needed for achieving communicative competence and conveying the message that a voice output communication aid is one part of a person's overall communication system. The author has recently been challenged through observation and discussions in training to rethink what they may include in their own three segments and therefore what they should be considering for their clients' three segments. A poster will demonstrate the way the author has expanded the model to fit society's changing communication styles. Of particular interest is the move in the mainstream population away from voiced communication towards text or symbol based methods. The poster will illustrate examples such as the following:

- A previously stated reason for communication may have been to order a drink in a bar and the means may have been a voice output communication aid. In current times, the means for this communicative reason would be a phone with QR scanner and the ability to access the website options.
- The means for after school peer interaction may previously have required a robust, outdoor voice output communication aid, for example, to attend a social club. However, in the present climate, access and support to use emotes in a gaming chat may provide a more inclusive and enriching communicative opportunity.

This poster aims to display the Means, Reasons and Opportunities observed by the author without bias or judgement of the type of interactions and to embrace the changing nature of social communication. It is hoped that the poster will inspire conversation and further ideas in this area.

### References (Optional)

Money, D and Thurman, S. 1994. "Means, Reasons and Opportunities Model"  
Nottinghamshire Healthcare  
Money, D and Thurman S. 2002. "Inclusive communication - Coming soon near you" Speech and Language Therapy in Practice  
McCulloch, Gretchen, 2020. Because Internet: Understanding how language is changing. Vintage, Penguin Publishing House

### Level

General Session

### Age Group

All Ages

## What does voice output AAC offer bilingual symbol-based communicators?

Bettany, Ruth - Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

Symbol-based communication offers huge freedom to people to communicate without the need for highly developed literacy skills. However, symbolised AAC systems face a set of challenges in representing spoken language; from symbolic representation, word categorisation, sentence order, and navigation pathways across systems. In addition, AAC users who need to communicate in more than one language face additional challenges of restricted choice in symbol packages, available voices and culturally relevant vocabulary. There are a number of technical difficulties in developing systems that function similarly across different languages due to the differences in high frequency words, syntax and morphology. It is estimated 17.5% of the UK population are bilingual (1) with 7% of the population having a language other than English as their main language. The most commonly used spoken languages in the UK are Polish, Panjabi, Urdu and Bengali. It is not known how many AAC-users require access to more than one language. The aim of this presentation is to discuss the existing language options for bilingual symbol-based AAC for Single-word, Phrase level and Sentence level communicators, and examine the systems' potentials for alternating between languages, code switching and translation. We intend to use case studies and report service-user perspectives to highlight the current possibilities and exemplify the gaps between what AAC technologies offer and what AAC users need.

### References (Optional)

(1) Small scale survey, Preply, 2021, (2) Office of National Statistics, 2011 Census

### Level

General Session

### Age Group

All Ages



## What matters? Communication..., and more

Broomfield, Katherine - Author; Sage, Karen - Co-Author; Judge, Simon - Co-Author; James, Deborah - Co-Author; Jones, Georgina - Co-Author

### **Format**

Platform

### **Submission Topic**

Best Research Evidence

### **Abstract**

The Unspoken Voices Project is a research project concerned with understanding more about the experiences of people who use augmentative and alternative communication (AAC). The aims of this project were to deepen our knowledge about the expectations of people who have communication difficulties from AAC, to learn what supports people to engage with AAC and what inhibits them from doing so, and to establish how people who use AAC define success. We will share the main findings from the research concerning the important outcomes from AAC from the perspective of the people who use these tools and strategies. We intend for our research will support conversations, collaboration, and shared decision-making in AAC assessment, provision, and implementation. Aims: 1) To present an overview of the project and the background 2) To summarise the data collection and analysis methods 3) To present a framework for considering AAC outcomes from a service-user perspective Methods: We conducted over 40 interviews with people who use AAC to understand what is important to them about communication, using AAC and what supports them to do so. Results: Analysis of the results of these interviews has informed the development of a framework that sets out the important outcomes from using AAC from the perspective of people who use AAC. Results also indicate the contextual factors that need to be considered when introducing AAC to people who have communication difficulties. The framework encourages people to consider the broader impact of communication, and communication disability, and to identify what people ultimately want to communicate for. Conclusion This project has expanded our conceptualisation of communication, and the results can be used to inform further discussion about what successful use of AAC looks like to people who have communication difficulties.

### **Level**

General Session

### **Age Group**

All Ages

## When is powered AAC not appropriate? - Clinical Audit to explore reasons why people accepted for powered AAC assessment at CASEE might then be discharged without powered AAC

Martin, Catherine - Author; Blandford, Hannah - Co-Author

### Format

Platform

### Submission Topic

Clinical and Professional Experience

### Abstract

This talk will discuss the outcomes of an audit completed over the last year, exploring the reasons for people not being prescribed final AAC equipment funded via a Specialist AAC Hub. The aims of the audit were as follows:

- To evaluate the percentage of people referred to the Communication Aid Service East of England (CASEE) between March 2016 and March 2021 who complete the clinical pathway as measured by final prescription of equipment (powered AAC).
- To identify and classify the reasons for patients being discharged before they are issued with a final prescription of equipment in line with the NHSE standards acceptance criteria
- To produce evidence based information for referrers and patients who are not accepted at triage linked to the NHSE standards acceptance criteria and based on the classifications for not completing the pathway as identified above.

This audit was carried out by reviewing the notes and reports of CASEE clients who met the inclusion criteria, enabling us to identify reasons as to why these clients had not been prescribed a final AAC equipment loan. These reasons were then organised into themes and evaluated against the NHSE acceptance criteria. This audit has enabled us to better understand some important factors relating to powered AAC abandonment and non-use. It has helped us to consider what key information we require at the point of referral to our service and how we can better support AAC users, their families and referrers prior to referral to an AAC hub.

### Level

Specialist Session

### Age Group

All Ages

## When Technology Fails: the understated merits of the humble low-tech system

Dowling, Marianne - Author; Bates, Kim - Co-Author; Connolly, Tracy - Co-Author; Wray, Louisa - Co-Author

### **Format**

Platform

### **Submission Topic**

Clinical and Professional Experience

### **Abstract**

Technology seems to permeate all aspects of our modern lives, and communication is no exception. While there has been great advancement in all areas of high-tech communication devices (e.g. hardware, software, vocabulary systems), each AAC user remains a unique individual. A "one-size-fits-all" approach does not work when choosing and implementing an AAC for a child. Join us as we consider the pros and cons of different low tech AAC systems. We will also look at case studies of children and young persons who have preferred low-tech over high-tech, revisit their learning journeys, and reflect on some lessons we've learned along the way.

### **Level**

General Session

### **Age Group**

All Ages

## Who chooses my words?

Lee, Andrea - Co-Author; Preece, Jamie - Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

This abstract is written by a speech and language therapist in conjunction with an AAC user who uses symbol communication to express himself. Communication aids are supplied with a range of template vocabulary options. The clinician will match a template to the user with regard to the display and the type of language. Further decisions then need to be made around the vocabulary available; often categorised by child, teenager, adult vocabularies or sometimes by the clinical condition such as aphasia or MND vocabularies. Most AAC software is designed to be personalised by adding or deleting words and topics to suit the individual. The question raised here is the inherent bias created by both the default of the vocabularies supplied and the perpetuation of that bias through the potential different characteristics, cultural identity and judgements of the person doing the editing. This presentation will demonstrate the process of customisation from an AAC user's perspective. The AAC user will share his own symbol-based vocabulary and why he felt it was so important to make his vocabulary reflect his personality and his communication needs. Personalisation of the vocabulary for this user is an ongoing journey and he will share some of the strategies he uses to overcome his literacy and visual difficulties and ensure that he is in control of any changes made and that his vocabulary remains relevant. The AAC user presenting feels his vocabulary now reflects his identity and allows him to express his personal views, blend into his varied social communication groups and communicate in a range of forums where he would have been restricted by a standard vocabulary. He feels that many AAC users he has met do not have this level of customisation and that this holds them back from expressing their personality and developing social communication skills.

### **Level**

General Session

### **Age Group**

All Ages

## Words matter: What words should we use to talk about AAC?

Niemeijer, David - Author; Zisk, Alyssa - Co-Author; Konyin, Lily - Co-Author

### Format

Platform

### Submission Topic

Best Research Evidence

### Abstract

Words matter and word choice is often hotly debated. Preferences shift over time and different people have different preferences. Many organizations and individuals want to be respectful to people that use AAC, but are their word choices still aligned with today's preferences? Should we say disabled person or person with a disability? Should we say VOCA or AAC device? In an anonymous online survey, we asked people what words they prefer when talking about AAC and the people who use it. This presentation will be about the survey results. We plan to talk about which words people were most likely to like and use, as well as which words people were most likely to dislike and which words many people were unfamiliar with. We also plan to talk about any differences we note in preferences and awareness between people with different relationships to AAC, such as AAC users, family members, and professionals, though this is complicated by the fact that many people have multiple connections to AAC. **Methods:** The survey was created by two part-time AAC users. We decided which words to ask about based on words used or suggested by users, family members and professionals. We also checked recent issues of Augmentative and Alternative Communication, AGOSI In Focus, Communication Matters, and ASHA Perspectives SIG 12 for additional terms to include. For each term we asked about, we gave participants the options "What's that?", "I don't like it", "It's ok", "I like it", and "I use it." They could leave questions blank, so they did not need to share their opinions on words or terms they did not care about. The survey was shared through a network of over 100 organizations and individuals. Over 500 people from over 15 countries and with a variety of connections to AAC responded.

### References (Optional)

Kenny, L, Hattersley, C., Molins, B, Buckley, C., Povey, c., and Pellicano, E. (2015) Which terms should be used to describe autism? Perspectives from the UK autism community. *Autism*, 20(4): 442-462

### Level

General Session

### Age Group

All Ages

### Details of sponsorship

The research and analysis was carried out by AAC researchers working for AssistiveWare, but the content has no connection at all with any of AssistiveWare's products or services. Research such as this is part of AssistiveWare's advocacy and research work.

## Working on LLL Skills online during Lockdown and Beyond

KING, JUDY - Author; Stack, Scott - Co-Author

### **Format**

Platform

### **Submission Topic**

Personal Stories and Preferences

### **Abstract**

This presentation talks about how Scott, 43, has been using the Minspeak Application Programme (MAP), Language, Learning and Living (LLL) for over 20 years. It discusses how he was looking for further Speech and Language Therapy because it was important to him to improve his communication and say what he wanted. Scott wanted help from a Speech and Language Therapist who knew LLL and how to programme the software. He thought his carers could learn more about communication by joining the sessions. Scott also felt that he had something to teach the Speech Therapist! Scott found an old Speech and Language Therapist with many years of experience in LLL! However, with Covid, therapy had to be online. This presentation shows how successful online therapy can be, assessing language, revising sentence structure, providing homework, programming, having good social interaction and some fun! It also discusses some of the difficulties with online therapy and conversation. Finally, Scott discusses some of his hopes for the future, how online Speech and Language Therapy continues to help and finishes by giving some ideas and advice.

### **Level**

General Session

### **Age Group**

All Ages

## **Workshop inviting AAC users and their support network to share their views of the joys and challenges of learning to use symbols to communicate.**

Lee, Andrea - Author

### **Format**

Workshop

### **Submission Topic**

Best Research Evidence

### **Abstract**

The researcher has received NIHR funding to undertake an exciting research project exploring the feasibility of a novel AAC intervention. The two stages of this project are a scoping review of prior research in the field and patient and public involvement (PPI) from those with lived experience of AAC. This workshop will form part of the PPI elements. The novel AAC intervention being considered is a method of using visually represented speech sounds in place of symbolised words. The research is to explore if using a sound based system would be feasible and would more closely follow natural speech and language development and reduce linguistic and cognitive demands of learning and using symbol-based AAC. This could consequently impact on the uptake, the learning journey and the success of symbol AAC users. Before developing this new intervention, the researcher would like to explore AAC users' perspectives on the reality of learning how to use symbols to communicate. AAC users and those who have supported them in the process will be invited to share their experiences; the methods and systems they used, the learning tools and support, the joys, the challenges, and most importantly their personal reflections on their own symbol learning journey. Information will be presented in accessible formats, including use of video, images, signing and symbol supported resources. Attendees will be encouraged to either contribute during the session or to reflect on the ideas and discussions and share their thoughts at future opportunities using their preferred communication style, for example one to one discussions or online methods. The perspectives gained will influence the researcher's thinking and provide a backdrop for the development of the new AAC intervention and will directly impact the future of the project.

### **References (Optional)**

Previous presentations by the author:

Kirton A. Using Speech Sounds to Construct Messages. Communication Matters Symposium, Leeds, September 2014

Kirton, A. Using Phonemes to Construct Utterances for Aided Communication. ISAAC (International Society for Augmentative and Alternative Communication) Lisbon, July 2014

### **Level**

Specialist Session

### **Age Group**

All Ages