# CM2019

# International AAC Conference

September 8 - 10
University of Leeds

2019

Communication
**Matters**
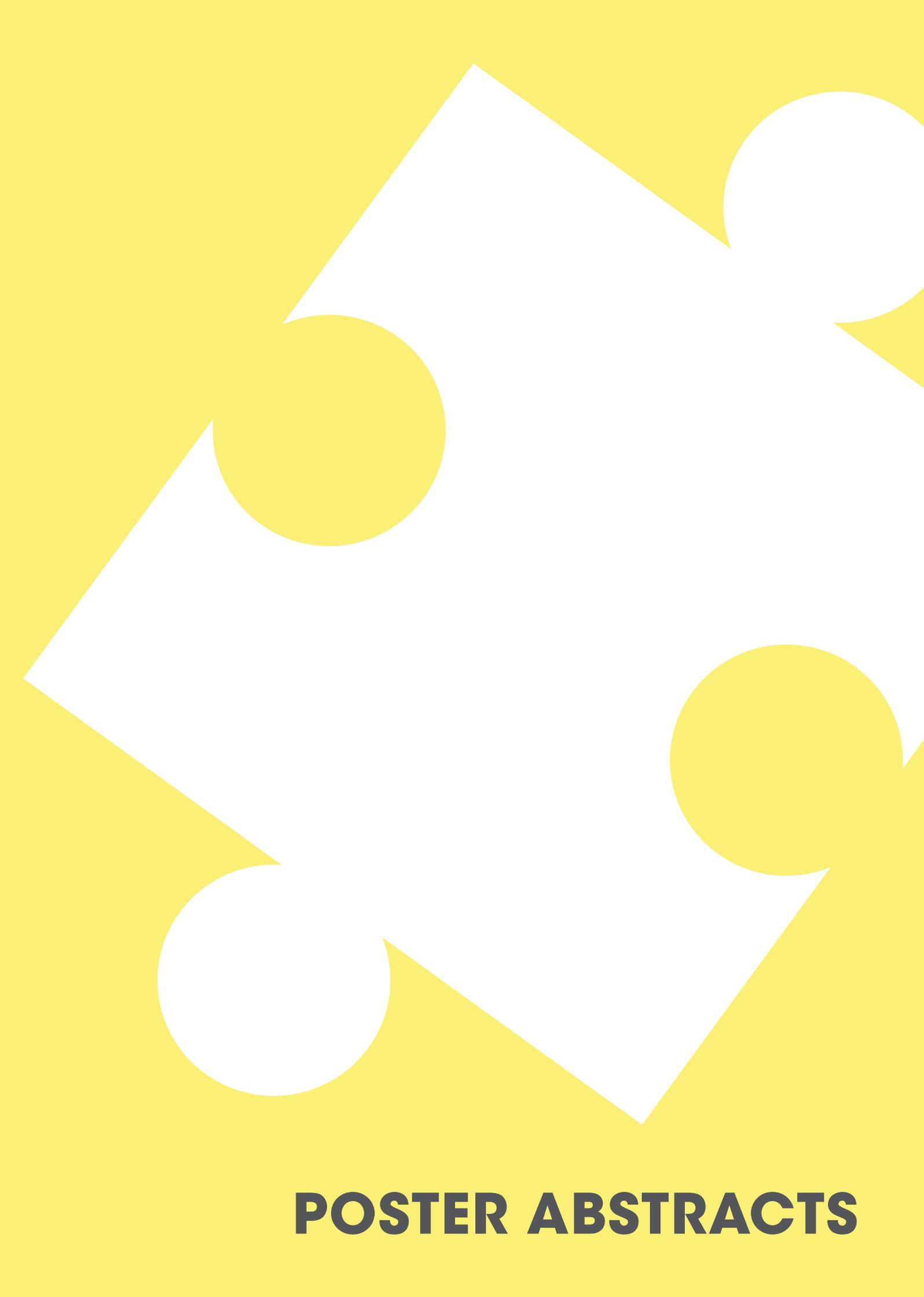
# POSTER ABSTRACTS

# Poster Abstracts

**POSTER 1**
**AAC Cruise on HMS VOCA - An exciting AAC adventure to explore and learn new vocabulary**
Gillian Rumble (Independent Speech and Language Therapist), Judy King (Independent Speech and Language Therapist)

The Vocabulary Implementation Plans (VIP) aim to get the learner communicating with a core 'survival' vocabulary. They are designed to provide structured teaching plans set around the theme of a cruise. The VIP are presented in a fun, modular format to give the user a sense of achievement as they progress through the programme. During the cruise they will visit topical islands and socialise with their fellow passengers, learning to meet, greet and ask for help. The VIP are aimed for the learner of primary school age and above who has a relatively good understanding of language. The activities can, however, be adapted to suit those who require a slower pace and more repetition. The plans are designed to be taught by a teacher, teaching assistant or parent but may also be a useful resource for a SLT. As the vocabulary is graded by frequency of use and need, they will serve the user for a lifetime. The ultimate goal for any well-designed vocabulary is that the person using AAC develops automaticity through strong motor planning.

The plans are designed to take a prescriptive approach, selecting vocabulary that is of high frequency and relevance to most learners. On completion, the plans will have taught the learner a 350 word core vocabulary, plus fringe vocabulary and 20 pre-stored phrases. In addition, he/she will have learnt how to express grammatical tenses, plurals, negatives, comparatives, superlatives and question form and will know the primary function keys. Depending on ability and accessing method it is anticipated that these plans will take 40 – 100 teaching hours to complete with additional daily practice.

There are 20 plans each introducing

vocabulary, phrases and sentences with a simple test. There is a 'Practice makes Permanent' plan built into the programme which reviews previously taught words.

Marvin, C. A., Beukelman, D. R., & Bilyeu, D. (1994). Vocabulary-use patterns in preschool children: Effects of context and time sampling. Augmentative and Alternative Communication, 10(4), 224-236.

Hill, K. (2001), The development of a model for automated performance measurement and the establishment of performance indices for augmented communicators under two sampling conditions. Dissertation Abstracts International, 62(05), 2293. (UMI No. 3013368).

Balandin, S., & Iacono, T. (1999), Crews, wusses, and whoppas: Core and fringe vocabularies of Australian meal-break conversations in the workplace. Augmentative and Alternative Communication, 15, 95-109.

Banajee, M., Dicarlo, C., & Stricklin, S. B. (2003). Core vocabulary determination for toddlers. Augmentative and Alternative Communication, 19, 67-73.

**General Session - All Ages**
**Clinical and Professional Experience**

**POSTER 2**
**"The AAC Factor!: An all inclusive talent show for Adult AAC Users"**
Aisling Hughes (Daughters of Charity Intellectual Disability Support Services), Niamh O'Keeffe (Daughters of Charity Service)

The Speech and Language Therapy Department in the Daughters of Charity Disability Support Service are committed to promoting inclusion for individuals of all abilities and disabilities. We, as a department, aim to prioritize AAC as a means to support service users in all areas of their lives. AAC can support people to communicate, but it can also help service users to represent themselves in other areas of life. As part of our ongoing

endeavor to promote AAC, our department organised and hosted an all inclusive talent show for Adult AAC Users, named "The AAC Factor". This was a fantastic opportunity to collaborate with service users, (AAC users), staff, colleagues and families. The show made a platform for AAC users to get creative, and by all accounts was a resounding success. We would now like to share our experience with others.

**Introductory Session - Adult**
**Clinical and Professional Experience**

**POSTER 3**
**Researching VOCA users' experiences of community**
Ria Bayliss (Cardiff Metropolitan University), Jenny Mercer (Cardiff Metropolitan University), Calum Delaney (Cardiff Metropolitan University), Amanda Hynan (Leeds Beckett University)

My doctoral research is investigating what participation and inclusion within community means to people who use AAC. The focus of the research is on how adult voice-output communication aid (VOCA) users experience, or identify with, community and their understanding of that relationship.

Our participation and inclusion within communities relies on our interactions with other people, be that face-to-face or more remotely. Research has indicated that for adults who use AAC their communication device holds personal meaning as it 'restores their ability to be participants in society [and] enables humanness'[1]. It also affords them the potential to make decisions independently and maintain social roles and relationships[2]. This research project aims to increases understanding of the lived experience of AAC users by giving the participants the opportunity to define these experiences for themselves.

The poster will discuss the consideration given to the relationship between the research

aim and the method to be employed at a theoretical level. This phase of the research will take a hermeneutic approach to the collection and analysis of data from semi-structured interviews. Two iterations of interviews will be conducted with each participant to support the co-construction, and then extension of, meaning and understanding through use of dialogue[3]. 'Lived experience' research stresses that only those that have experienced a 'phenomenon' can communicate it to the outside world. The way participants express and reflect on their lived experiences is critical to their descriptions and interpretations when constructing meaning from their experiences[4]. Therefore, the way in which the research facilitates and interprets the communication of the participants will be a crucial element in how those participants then go on to construct meaning[5].

1. Dickerson, A., Stone, V., Panchura, C., & Usiak, D. (2002). The meaning of communication: Experiences with augmentative communication devices. Rehabilitation Nursing, vol 27 (6), pp 215-220.
2. McKelvey, M., Evans, D., Kawai, N., & Beukelman, D. (2012). Communication styles of persons with ALS as recounted by surviving partners. Augmentative and Alternative Communication, Vol 29, pp 232-242.
3. Grbich, C. (2013) Qualitative Data Analysis. London: SAGE.
4. Mapp, T. (2008). Understanding phenomenology: the lived experience. British Journal of Midwifery, Vol 16(5), pp 308-311.
5. Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. London: Sage Publications.

**General Session - Adult**
**Best Research Evidence**

# Poster Abstracts

## POSTER 4
### Romeo Romeo, wherefore art thou an AAC user?
Caroline Casula (Treloar School and College), Leo Carstensen (Treloar School)

The 2019 Treloar School Sixth form production was Romeo and Juliet, with the lead role of Romeo given to Leo, who is an AAC user. Preparing for the play has given Leo opportunities to extend his AAC skills and his confidence as a communicator. The project provided a framework for communication work over a six month period, and was supported by a range of professionals within the MDT service at Treloars including teachers, staff from Speech and Language Therapy, Occupational Therapy, Physiotherapy, and Assistive Technology. Leo is now completing a piece of work reflecting on his skill development in Light and McNaughton (2014)'s domains of communicative competence (linguistic, operational, social, strategic, and psychosocial), and the poster will illustrate this in a way which is meaningful for him.

Leo says:
"My name is Leo Carstensen and I am an AAC user. I use an Accent 1400 device. I also use my voice, signing, and a low tech alphabet chart to communicate. I am going to make a poster which shows how I worked on my communication for the play. I used my device to sing "Make You Feel My Love" by Adele. It was the first time an AAC user had sung in a play at Treloars'. I learned lots of things, like how to programme lines, and how to change my voice and timing. I had to organise a lot. I felt happy to be in the play, and I would like to tell people about it."
The poster will be produced as a joint initiative between Leo Carstensen (AAC user) and Caroline Casula (Leo's SLT). Leo may be able to attend the Conference to jointly present the poster but this is not yet confirmed.

Janice Light & David McNaughton (2014) Communicative Competence for Individuals who require Augmentative and Alternative Communication: A New Definition for a New Era of Communication?, Augmentative and Alternative Communication, 30:1, 1-18, DOI: 10.3109/07434618.2014.885080

**General Session - All Ages**
Personal Stories and Preferences

## POSTER 5
### Using the BBC Micro:bit as AAC - three solutions (so far)
Matthew Oppenheim (Lancaster University)

The BBC Micro:bit is a small, light and programmable computer board given to all 11-12 year old students in British schools to learn programming. We completed, tested and presented two projects that use this platform as AAC and are working on a third. This poster presents how this simple and cheap platform has proven to be useful and versatile as AAC.
The first project enables individuals to operate AAC by detecting their hand motion. The target user group are people with cerebral palsy who are unable to use physical controllers such as buttons and joysticks but who are still able to make intentional hand movements. A trigger is sent to the AAC when the participant moves a hand above an adjustable threshold of acceleration.
The second project implemented a system that visually indicates when communication software is in use. This enables a more natural interaction and encourages good communication practice; giving adequate time for composition and respecting personal space. The visual feedback reassures others in the conversation that the AAC user is actively involved.

We are now working on using the BBC Micro:bit to recognise when an individual makes a small sideways hand motion. This is to enable a student to interact with his AAC software. This third project uses a cheap flex sensor, which easily and safely connects to the board.

As the BBC Micro:bit is designed for education, it contains a number of features that enable it to be used for these projects. The programming platforms are designed for education, enabling the boards to be easily programmed. As the boards are readily available and designed to be safe for school children to use, there is little barrier to these solutions being implemented elsewhere.

https://microbit.org/

**General Session - All Ages**
**Clinical and Professional Experience**

### POSTER 6
**Symbolising in PowerPoint: creating communication boards, books and other resources without the need for additional specialist software**
Neil Thompson (Commtap)

Creating communication boards and books which can be easily shared and adapted across a range of settings – such as at home, in schools, in community settings, in NHS services – can be highly frustrating: people having different incompatible bits of software or not having any software at all. This can mean that communication supports are way out-of-date, or worse, don't exist at all. And, if what is needed is an eye gaze communication book, the pain of creating and updating is on a completely different level.

As a frustrated speech and language therapist (with a technical background) the solution I came up with was to create software that allows you to do all of this in PowerPoint. Nearly everyone with a computer can open a PowerPoint file – so nearly anyone can edit any boards/books/resources made in this way – even if they don't have the additional software.

The Commtap Symboliser gives you six more buttons in the PowerPoint ribbon. Select some text and click "Symbolise" – and a picture

symbol will appear above or below the text. To make a grid of cells: create one cell, select it all and then click "Make Into Grid". It works with free symbol sets (such as the impressive Arasaac symbol set), purchased symbol sets, or sets of pictures you have created yourself. With the free Commtap Eye Gaze Communication Book Maker you only need to make the pages that will face the person using their eyes to communicate. Click a button, and all the pages facing the other way are automatically created – in the correct order for printing out double-sided – along with page turn instructions (for where gazing to a cell means go to another page). More information: symboliser.commtap.org

**General Session - All Ages**
**Clinical and Professional Experience**

### POSTER 7
**Get people on board with AAC implementation**
Barbara van 't Westende (AssistiveWare)

In the Netherlands, AAC is not always a priority in educational settings. AAC systems may be basic and students do not progress beyond choice making and requesting. To get AAC 'going' we started a school pilot project to increase knowledge and to implement core vocabulary. Key activities in this project included school visits and workshops to teach AAC best practice.

The school pilot project served as a 'play-ground' for exploration and testing. We learnt what works well to guide professionals and parents towards AAC best practice. Based on Jung's theory of personality, not everybody learns in the same way. By understanding how different people learn, we can better guide them towards AAC best practice. We found this strategy works well, and believe it will also be relevant outside of the Netherlands. In the first part of this session we will share what we learned from the school pilot project. What were positive outcomes and where did we see room for improvement? How can

# Poster Abstracts

we best support schools to implement best practices in AAC?

The poster will show how we explored different learning styles and how we can best support each one. There will be an opportunity for attendees to look closely at the strategies we use to guide different people using AAC.

Join us as we take a close look at what it takes to get people onboard with AAC implementation!

https://www.assistiveware.com/learn-aac/get-the-team-on-board

The Naked Consumer Today: Or an Overview of why Consumers Really Buy Things, and what this Means for Marketing.

Jan Callebaut, Hendrik Hendrickx, Madeleine Janssens
Garant, 2002

**General Session - Adult**
**Clinical and Professional Experience**

**POSTER 8**
**Assessing and Supporting Communication: a visual guide - The 'ASC Poster' & 'Situational-Circle' Planning Tool**
Diana Mountain (Beaumont College, Ambito Education), Irene Leber (Sonderpädagogik)

Where to start with AAC?  When and how to use photos, symbols or objects?  Working in this field, these are questions we have all asked.

The ASC Poster by Irene Leber, AAC Specialist Teacher, links stages of communication development with the relevant support strategies and AAC approaches.  It covers development from pre-intentional communication to verbal communication (using words, signs or symbols).  It has been available in German for several years and remains popular with educators and therapists in Europe.  It has been updated

and is now available in English!

The visual format provides a structured guide to assessment of communication skills for AAC.  It can be used with children and adults, and is most useful when assessing the communication of those non-verbal individuals who cannot respond in formal assessments or demonstrate their understanding through formal means, although the author clearly states it is NOT designed for those with Autism, who may have a spiky developmental profile.

The ASC Poster identifies behaviours that one would expect to observe at each stage of communication development and suggests questions to ask family/carers, to confirm an individual's responses and preferences in familiar settings, such as how they respond to different people or activities.

Via columns and colour-coding each stage is linked with a list of relevant support strategies and potential AAC interventions, helping inform decisions about when and how to use objects for communication, visuals for understanding, photos or symbols for expressive communication, how to adapt our interaction styles, etc.

Record Sheets are available with which to profile an individual's communication skills.  In addition Guidance Notes with case examples are included, along with the 'Situational-Circle', a tool for planning realistic ways to implement AAC involving family/carers.
This poster presentation will give an overview of The ASC Poster's structure and examples of its use.

„Kommunikation einschätzen und unterstützen - Förderdiagnostik Unterstützte Kommunikation"
Leber, I, 2012

**General Session - All Ages**
**Clinical and Professional Experience**

## POSTER 9
### TOMs for AAC: A review from the National Outcome Measures Working Party
Vicky Styles (Bristol Communication Aid Service)

This poster presentation will provide an overview of the work produced by the national outcomes working party who were tasked by the AAC Advisory Group to standardise the use of outcome measures across all 14 specialised AAC Assessment services in England.

The poster will provide examples of how the Therapy Outcome Measures (TOMs) tool can be used to provide valuable evidence at the...

- Patients Level: How clinicians can use TOMs data to discuss change scores following the provision of AAC equipment
- Service Level: How service managers can use the data to explore trends and consequently improve the AAC services they deliver
- Commissioner Level: To enable NHSE to have tangible data regarding the outcomes of the services they fund

The poster also gives details regarding the steps of the working party

Enderby , P. John, A. Therapy outcome Measures - Third Edition (2014) J and R Press

### General Session - All Ages
**Clinical and Professional Experience**

## POSTER 10
### Evidence-Generation for Mobile AAC Technologies in Autism Intervention
Oliver Wendt (University of Central Florida)

The proliferation of inexpensive mobile technology has made a strong impact on AAC interventions for individuals with autism. Mobile computing devices have never been more user-friendly, cheaper, or universally available. Using the example of mobile technology in AAC, this presentation will discuss two approaches to generate research support. An autism-specific mobile application was designed for communication and social training and evaluated for treatment effects. The purpose of the app was to move the beginning communicator with autism from prelinguistic behaviors to a level of symbolic and functional communication (e.g., forming simple sentences for indicating wants/needs, commenting, and labeling). Clinical validation sought to generate:

1. Behavioral evidence to document intervention effects on acquisition of functional communication skills and natural speech production.

2. Neurophysiological evidence to document overall benefits of an intervention package combining behavioral instruction and mobile application.

Evidence generation involved: (a) Single-subject experimental designs to evaluate treatment efficacy through repeated measurement of behavior and replication across and within participants; (b) quantitative electroencephalograms (qeeg) to assess improvement in speech and language related symptoms pre- and post-intervention.

Single-subject data were collected for a total of N=16 participants ranging in age from 6-23 years. Treatment and generalization effects for functional communication and speech production measures were replicated across

# Poster Abstracts

and within participants. Treatment effects were replicated resulting in effect sizes of NAP=80-100% (Non-overlap of all Pairs, Parker & Vannest, 2011). Neurophysiological data were obtained for four participants from this subject pool and indicate resolving anomalies of electrical brain activity and increased connectivity as shown in a qeeg map.

Comprehensive evidence-generation revealed a fine-grained picture of behavioral and neurophysiological effects to guide clinical practice. It also allowed identifying critical app features that enhance skill acquisition such as randomization of graphic stimuli, a lock function to prevent self-stimulating behaviors, or access modes for users with motor control difficulties.

Parker, R. I., & Vannest, K. (2009). An improved effect size for single-case research: Nonoverlap of all pairs. Behavior Therapy, 40(4), 357-367.

**General Session - All Ages**
**Best Research Evidence**

## Poster 11
## From key words communication to sentences
Iveta Power (Chailey Heritage School)
Claire Bird (Chailey Clinical Services)

Three students aged 8-9 years old have been using symbols to express key words communication for some years alongside traditional literacy programme with a view to using communication programmes which combine the two.

The class teacher and speech and language therapist designed a simple activity which allowed students to create sentences from symbols and sight words.

The activity required TA training on Grid3. The speech and language therapist led the first of two weekly 30m morning sessions. The second session after break was led by TAs. Symbols were elicited in the first session and then

staff found out what the student wanted the symbols to express eg earth blue sea = The earth looks blue because of the sea.

In the second session TAs used Grid3 to put 8 symbol supported key words and sight words into a grid on a computer or plasma screen but in a random order. The student's task was to order the symbols/words correctly using best access method to produce a correct sentence on the sentence bar. If the student made mistakes this information was collected before the student had another try. If symbols and sight words were familiar students had a high success rate which made the activity very motivating for them. The sentence was then printed out, one copy put in their literacy books and one copy sent to parents in school diary.

Outcomes after a year were as follows:
- Increased knowledge of sight words
- Increased knowledge of correct word order in simple sentences
- Increase knowledge that a sentence require an action word.
- Increase in use of sentence starters in own communication system

**Specialist Session - All Ages**
**Clinical and Professional Experience**
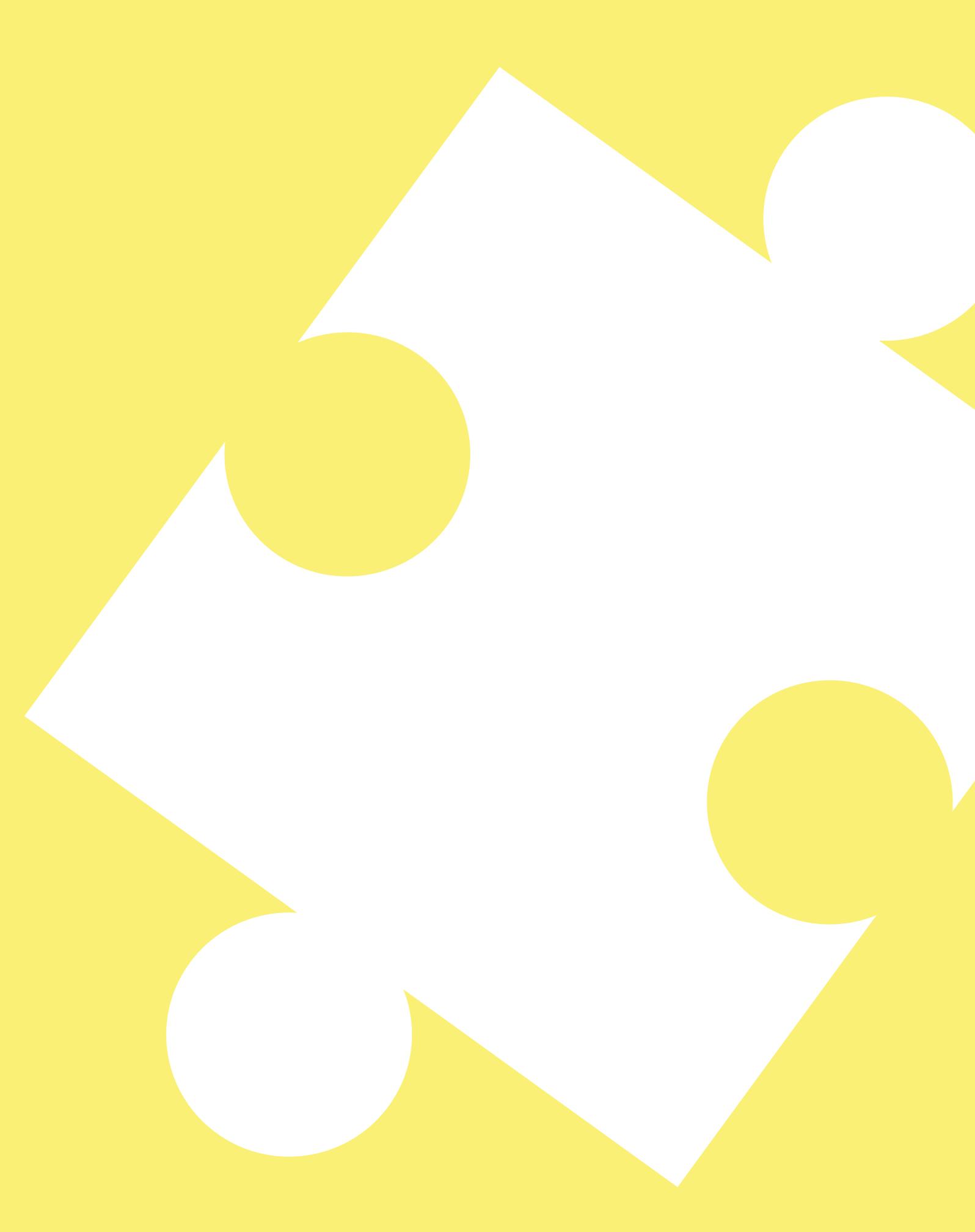
PLATFORM ABSTRACTS

# Platform Abstracts

**KEYNOTE**
**Why is Literacy Critical in AAC?**
Karen Erickson (University of North Carolina Chapel Hill)

The only symbol set that allows individuals to communicate anything they want is the alphabet. Without the ability to spell and write, individuals who use AAC are restricted by the vocabulary others provide and the ability of their communication partners to interpret their intended message. However, the most successful AAC use typically involves the integration of graphic symbols with spelling. This keynote will address the importance of spelling and writing as an integrated component of AAC.

**Introductory Session - All Ages**
**Clinical and Professional Experience**

**PLENARY**
**The Shouting Mute: Communicating Through Creativity**
Dave Young

Hello my name is Dave Young The Shouting Mute. I am a poet, a theatre maker and a trustee for a charity called Diverse City, which is a theatre company promoting inclusive practise in the performing arts sector. I am a white straight man with brown hair and brown eyes, wearing a comic book hero suit. I use a wheelchair and I am an eye gaze communication aid user. My Journey started at my school. I went to Victoria which is a special school in Poole. My fantastic drama teacher had a conversation with me about a half term residency that was coming up. It involved Candoco Dance Company and Graeae Theatre Company and was an integrated residency. Children were involved from Victoria School and from the mainstream schools in Poole and Bournemouth. I remember my teacher saying they had support staff available and my sister would also take part and that she thought I should try it out. The rest of my life was

history. One day in a TV show on channel five, I saw a debate about emojis in education and a side question of that debate was 'can you use emojis to tell a story?' I will probably do some more research on this, but the two key ingredients of story telling, for me, is action and activism. Emojis can't do that, but you can. Writers are just observers of their world.

**General Session - Adult**
**Personal Stories and Preferences**

**SESSION 1.1**
**Core Vocabulary: What is it? How are we using it? What is the evidence base?**
Catherine Hale (Communication Aid Service East of England), Karen Young (Communication Aid Service East of England)

Core vocabulary is generally considered to be a set of high frequency words that can be used flexibly to communicate a variety of different messages, across many different situations (Lee, 2001; Wood et al., 2015)

While the concept is not new, over recent years there has been a general trend towards recommending AAC systems which offer access to a variety of core vocabulary, particularly for those continuing to develop their language system. This is often reflected in the advice we give as clinicians and in the software packages available from a variety of companies.

We are undertaking a project to better understand the rationale behind this approach and hope to determine what evidence is available on the impacts of using core vocabulary in an AAC system. While this project is still in its early stages, we will share our progress so far, alongside our personal reflections from using core vocabulary within our clinical practice. As this is an on-going project, we invite any feedback, contributions or directions on other available sources.

Our planned methodology includes a multi-database search using a search strategy designed with support from medical library staff.

We plan to triage the articles gathered and critically appraise those relevant to the research question. We plan to extrapolate key themes and findings and discuss the resulting implications for current clinical practice.

Lee, D. Y. (2001). Defining core vocabulary and tracking its distribution across spoken and written genres: evidence of a gradience of variation from the British national corpus. Journal of English Linguistics, 29(3), 250-278.
Wood, C., Appleget, A., & Hart, S. (2016). Core vocabulary in written personal narratives of school-age children. Augmentative and Alternative Communication, 32(3), 198-207.

**General Session - All Ages**
**Best Research Evidence**

## SESSION 1.2
**Development and evaluation of a mobile app to assist people with autism and intellectual disability to engage in social conversation**
Katherine Jackson (University of Dundee), Bernadette Brophy-Arnott (NHS Tayside), Dearbhail Whittles (NHS Tayside), Nicola Stewart (NHS Tayside), John Arnott (University of Dundee)

The social relationships and interactions of people who have autism and intellectual disability (ID) are affected by their communication and cognitive difficulties. Difficulty in developing relationships can increase social isolation and affect mental health. The communication of people with autism and ID can be supported using AAC systems accessed through mobile technology (Ganz, 2015). Such devices provide benefits, being easy to use, inexpensive and easily adapted while providing access to voice output and flexible representations of language (e.g. symbols, images, videos). They are socially valued by users and their peers. People with autism and ID have difficulties in using a range of communication acts, including those which facilitate social conversation (e.g. greetings, questions, responses). There is a continuing need for the development of AAC systems which enable users to engage easily in social communication

(Arnott & Alm, 2013).

A prototype app has been developed to provide access to a range of conversational communication acts for adults with autism and ID. It was designed to help a user to perform greetings, follow-ups, topic initiations/changes, wrap-ups and goodbyes and also remind the user when to wait for responses. Symbol-based and promoting a 'no failure' approach to participating in a simple conversation, it was developed using user and carer feedback and evaluated with a group of people with autism and ID. Evaluation materials were adapted to suit the users' cognitive and communication abilities and included a Talking Mat to investigate their opinions on the app and the supporting symbol-based information and consent documentation. Evaluation outcomes were positive and have shown potential for further investigation in this area.

Ganz, J.B. (2015) AAC Interventions for Individuals with Autism Spectrum Disorders: State of the Science and Future Research Directions, Augmentative and Alternative Communication, 31:3, 203-214.

Arnott, J.L. & Alm, N. (2013) Towards the improvement of Augmentative and Alternative Communication through the modelling of conversation, Computer Speech and Language, 27:6, 1194-1211.

**General Session - Adult**
**Best Research Evidence**

## SESSION 1.3
**What Next?: What you can be and do in the future**
Gregor Gilmore, Amy Jamson, Helen Whittle (Manchester Metropolitan University), Janice Murray (Manchester Metropolitan University), Helen Bell (Manchester Metropolitan University), Janet Edwards (Manchester Metropolitan University)

Young AAC users who attend school and college often have amazing opportunities for taking part

# Platform Abstracts

in activities and trips. When they leave education the same opportunities are more difficult to find. There are a few organisations that support younger AAC users but they are unable to offer opportunities for older AAC users.

With the support of some money from an Impact award from Manchester Metropolitan University we were able to get a small committee together to plan an event to explore how AAC users can take part in new activities. It was decided that having the opportunity to look at employment and volunteering would be a useful area to include in this one-day event.
Traveling and working with PAs successfully was another session included in the day. This day was planned to take place for up to 20 AAC Users who have left college and school.

During our presentation the feedback received on the day will be discussed as will the opportunities found to be of most interest to the attendees.

Transition Strategies for Adolescents and Young Adults Who Use AAC (Augmentative and Alternative Communication Series) Paul H Brookes Publishing, 2010.

## General Session - All Ages
### Personal Stories and Preferences

### SESSION 1.4
### Quality of Life - the icing on the cake!
Judy King (Independent Consultant Speech and Language Therapist), Lisa-Marie Eastwood

This workshop has been put together by Lisa-Marie and her Speech and Language Therapist. Lisa-Marie has cerebral palsy, is blind and uses a Mobi Communication aid with a personalised programme on it. After completing her foundation degree and BA honours in Inclusive Performance at Chicken Shed, Lisa-Marie decided to take on another challenge to research people's ideas about Quality of Life. Lisa-Marie spent many months discussing different aspects of life and created a questionnaire to discover the level of importance

people put on different aspects of life including; health and fitness, emotions, people, activities, places, money, technology and social media.

Despite her many challenges, Lisa-Marie is confident that she has a great quality of life and aims to share this and her reasoning during the workshop. The inclusive workshop will encourage participants to complete a questionnaire, make comments and discuss with others. The questionnaire results will be shown along with some interesting comments.

Sadly, we have been advised by health and safety that we cannot provide cake which was our original plan!

## Introductory Session - All Ages
### Clinical and Professional Experience

### SESSION 1.5
### Please don't underestimate my rare child from a 'pushy parent'
Loretta Haughey, Kim Whapples

I want to share our journey as the mother of a now 9 year old boy called Ryan who was recently diagnosed with a rare genetic syndrome called GATAD2B syndrome. Ryan is non verbal but as parents we always knew he could understand far more than he could communicate and we could see his strong urge to communicate with others but having no real way of doing this. For many years we have tried to seek out an alternative way for him to communicate when physically talking seemed unlikely and makaton was not an option due to Ryan's poor motor skills. We researched AAC online and we just knew this was something we needed to explore further. We asked for his (special needs) school and speech and language therapist to start the process. This took quite a bit of time, effort and nagging as sadly, they did not believe he was capable. After 2 years of pushing, Ryan had an AAC assessment in November 2017 and we were delighted that he was awarded a high tech device with Wordpower 60 in January 2018. Ryan has made phenomenal progress and is now able to use his talker to communicate whatever he wants, to

whoever he wants, whenever he wants. We are learning so much more about him as a person and are very proud of him given how severely underestimated his abilities were. I want others to know that our rare kids need our help, support and importantly our belief.

**Introductory Session - Adult**
**Personal Stories and Preferences**

### SESSION 1.6
**"Next steps on your AAC journey"; a film for the team around a child, who are preparing for a specialist AAC assessment.**
Chris Sherlock (ACT WMRC BCHC), Catriona "Cat" Burke (ACT)

"Next steps on your AAC journey; what to expect and how we will work with you" is a film created by Access to Communication and Technology with help from children, young people, families and professionals with whom we have worked to provide a specialist assessment of AAC needs in the context of an NHSE service.

The purpose of the film and accompanying workbook is to prepare those around a child or young person for the process of assessment and possible provision by a specialist regional AAC assessment team. Evidence from a 2017 service users survey showed that ACT needed to improve the quality and accessibility of the information we provided to teams approaching us to make a referral and take part in assessment in the hope of receiving a voice out put communication aid. A "DVD" was often mentioned and this chimed with hopes that we had held for sometime. A CQUIN (Commissioning for Quality and Innovation) was implemented by our NHS Trust During 2018-19 a film has been created and workbook written. Next the film will be reviewed and piloted by previous and new client related teams. This presentation will include how and why we reached the point of creating the film, some of the process and plans for next steps, plus a showing of the film which is approximately 23 minutes long.

https://www.england.nhs.uk/nhs-standard-contract/cquin/cquin-17-19/ accessed 31.3.19

**Introductory Session - All Ages**
**Clinical and Professional Experience**

### SESSION 1.7
**Shared Interaction In AAC: A Pilot Training Programme For School Staff**
Emma Barrington (Barnsley Assistive Technology), Andrea Lee (Barnsley Assistive Technology Team)

#### Aims
As part of our specialised service in Barnsley we asses some children who seem to have the potential to be fantastic AAC users in terms of their ability and motivation. However, in some situations, these children do not use their communication aids to their full potential. Our service delivery pathway enables us to support implementation through local teams by providing advice and training.

We know that inadequate support can be a barrier for successful use of powered communication aids (Baxter, Enderby, Evans & Judge, 2011). This paper investigates the potential for supporting implementation of AAC by interaction training for key partners working with AAC users.

#### Methods/Activities
We developed and piloted a training programme based on strategies similar to those in the Hanen (Pepper & Weitzman, 2004), and Parent Child Interaction Therapy (Eyberg, 1999) programmes. The aim of the pilot is to assess if this programme would benefit AAC users and if it would be valid to include as part of our service delivery.

To develop the programme we reviewed the relevant literature. The Hanen programme has been previously found to benefit children with physical impairment, but has not specifically been trialed with AAC users (Pennington & Noble, 2009). The programme was delivered to key staff members in one school.

# Platform Abstracts

## Results/Findings

A number of measures were taken, with the aim of evaluating the pilot: Therapy Outcome Measures (Enderby & John, 2015) and the C.O.D.E.S framework (Jans, Wise & Goodwin, 2011). The lead clinician from the Barnsley team also kept a reflective diary.

## Conclusion

Interaction training for key partners working with AAC users has the potential to support implementation of AAC and outcomes for children. At the time of writing the programme was yet to be delivered. The conference presentation will share our findings, experiences and case examples of delivering this programme.

Baxter, S., Enderby, P., Evans, P. & Judge, S. (2011) Barriers and Facilitators to the use of high-technology augmentatve and alternative communication devices: a systematic review and qualitative synthesis. International Journal of Language & Communication disorders,47; 115-129

Enderby, P. & John, A. (2015) Therapy Outcome Measures for Rehabilitation Professionals (3rd Edition)

Eyberg, S. M. (1999) PCIT Manual. Available online at www.PCIT.org [see PCIT Information and Material]

Jans, D., Wise, R., Goodwin, S. (2011) C.O.D.E.S. Framework. Creating Effective and Competent Communicators. Cracking the Code to Communication Through AAC. Keycomm Resource Centre.

Pepper, J., & Weitzman, E. (2004) Making Hanen Happen: It Takes Two to Talk- The Hanen Program for Parents. Leader's guide for certified speech-language pathologists. Hanen Centre, Toronto, Canada.

Pennington, L., & Noble, E. (2009) Acceptability and usefulness of the group interaction training programme It Takes Two to Talk to parents of pre-school children with motor disorders

## General Session - Child
### Clinical and Professional Experience

## SESSION 1.8
## Factors Contributing to Successful AAC Provision: Insights from a Case Series

Lisa Morsley (Communication Aid Service East of England (CASEE), Tom Griffiths (Communication Aid Service East of England)

The Communication Aid Service East of England (CASEE) is a specialised service covering six counties, with an active caseload of over 350 clients. The service uses the AAC subscale of the Therapy Outcome Measures (AAC-TOM, Enderby, 2014) to monitor outcomes for patients and to provide information on the efficiency of the service. At last year's conference, we presented service-level data on the outcomes for patients known to our team (Griffiths & Hale, 2018).

In this paper, we will present a case series of ten patients known to the CASEE Team: five patients who made the largest gains in the Activity and / or Participation domains and five who made no change. The authors will present each case using the ICF as a descriptive framework (Pennington, Marshall & Goldbart, 2007), and discuss the commonalities and differences between them, providing a thematic analysis of both groups. Possible contributing factors such as diagnosis, environment and levels of support will be discussed.

We will also review the goals set by the team during assessment for these clients and consider whether these were well aligned with the individual's needs and preferences. We will analyse the skills targeted by the goals using Light's model of communicative competence (Light, 1989; Light & McNaughton, 2014) and review whether a focus on any particular competency is related to gains observed in the TOMs domains across the group. We will also discuss the similarities and differences in goal setting as part of the assessment process and the onward therapeutic journey, considering the function of goal setting in the assessment process.

The presentation will summarise the themes which emerge from analysing the goals and

# Platform Abstracts

AAC-TOM outcome data, seeking to identify factors that may have contributed to the functional success or failure of these episodes of matching person and technology.

Enderby, P. (2014). Introducing the therapy outcome measure for AAC services in the context of a review of other measures. Disability and Rehabilitation: Assistive Technology, 9(1), 33-40. http://doi.org/10.3109/17483107.2013.823576

Griffiths, T. & Hale, C. (2018). "A Case of CASEE" - How Does Outcome Data Guide the Development of a Specialist AAC Service? Paper presented to the CM2018 International AAC Conference, Leeds, 9-11 September, viewed 11th September 2018.

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. http://doi.org/10.1080/07434618912331275126 Light, J., & McNaughton, D. (2014).

Communicative Competence for Individuals who require Augmentative and Alternative Communication: A New Definition for a New Era of Communication? Augmentative and Alternative Communication, 30(1), 1–18. http://doi.org/10.3109/07434618.2014.885080

Pennington, L., Marshall, J., & Goldbart, J. (2007). Describing participants in AAC research and their communicative environments: Guidelines for research and practice. Disability and Rehabilitation, 29(7), 521–535. http://doi.org/10.1080/09638280600902794

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 1.9
## Project Click - Always considering switching with people with physical disabilitlies.

Jon Rouston (Electronic Assistive Technology Service Lincoln)

The last decade has seen a slow but steady refinement of eye gaze technology and a decrease in the price of such solutions, leading to eyegaze being a commonplace solution in special schools, day services and other settings and often top of the list of choices of parents and people who use AAC. However, this has, in some cases, led to switches being overlooked as an access method. This presentation aims to outline the issues with overlooking switching as an access method and aims to share some ideas and resources to promote awareness. Although a concerned clinician, the presenter is by no means an expert in switching and the session is intended to be interactive. It is hoped that by the end contributions from the group will have contributed to Project Click - an open web based resource for gathering information about switch access, aiming to de-mystify the use of switches in AAC.

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 2.1
## Eyes on communication. A Delphi study to reach consensus on clinical practice guidelines for eye-gaze control technology for people with cerebral palsy

Petra Karlsson (Cerebral Palsy Alliance, The University of Sydney), Tom Griffiths (Cambridge University Hospital & University College London), Elegast Monbaliu (KU Leuven – University of Leuven, Department of Rehabilitation Sciences Campus Bruges), Michael Clarke (Div of Psychology & Lang Sciences, University College London), Kate Himmelmann (Department of Pediatrics, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg), Saranda Bekteshi (KU Leuven – University of Leuven, Department of

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Rehabilitation Sciences Campus Bruges), Abby Allsop (Cerebral Palsy Alliance Research Institute, Discipline of Child and Adolescent Health, The University of Sydney), René Pereskles (Cerebral Palsy Alliance Research Institute, Discipline of Child and Adolescent Health, The University of Sydney), Claire Galea (Cerebral Palsy Alliance Research Institute, Discipline of Child and Adolescent Health, The University of Sydney), Margaret Wallen (School of Allied Health, Australian Catholic University, Sydney)

## Background and Objective(s)
Limited literature exists to guide clinical decisions about trialling, selecting, implementing and evaluating eye-gaze control technology. This study aimed to build stakeholder consensus to inform the content of clinical practice guidelines.

## Study Participants & Setting
One hundred and twenty-six participants completed Round 1 of the survey. Participants came from 17 countries (38% from UK), including clinicians (71%), educators (11%), family (10%), and people with cerebral palsy (2%).

## Materials/Methods
A 3-round online Delphi survey was developed and circulated using a snowball sampling, in consultation with an international Stakeholder Advisory Panel which included people with cerebral palsy and their families. Round 1 invited responses to 6 questions seeking information to inform clinical practice guidelines. Responses were coded thematically, and themed statements sent to participants in Round 2 for rating the importance of their inclusion in these guidelines. Items were retained for Round 3 if ≥70% of respondents rated them as "of critical importance", and <15% rated them "unimportant".

## Results
Over the 6 questions 1,995 codable units were derived; resulting in 148 codes. The most frequent responses were:
- Eye-gaze control technology should be trialled with people of any age and skill level

- At assessment, it is important to establish the availability of support and demonstrate use of eye-gaze control technology
- Training for the user, family and other supporting staff is critical in carrying out a device trial
- Practice is best in frequent, short sessions
- Goal Attainment Scaling is recommended to measure outcomes

## Conclusion/Significance
Outcomes of this project can inform the process of selecting and implementing eye-gaze control technology, and help define skills and resources required to support a person with cerebral palsy to use eye-gaze technology for communication, play, learning and participation.

## General Session - All Ages
Best Research Evidence

**SESSION 2.2**
**Effects of a Parent-implemented AAC Intervention Protocol on Functional Communication and Natural Speech Production in Minimally-verbal Children with Autism**
Oliver Wendt (University of Central Florida)

Two popular interventions in augmentative and alternative communication (AAC) for prelinguistic children with autism are picture exchange communication system (PECS) and speech-generating devices (SGDs). Research demonstrated positive effects on functional communication when these two strategies were combined (Boesch et al., 2013). Furthermore, AAC interventions may be enhanced through parent involvement (National Research Council, 2001).

This study aimed to answer: (a) what effects does a parent-implemented intervention have on developing functional communication and speech development; (b) to what extent can parents implement AAC with high fidelity; and (c) to what extent are parents satisfied with intervention outcomes?

A multiple probe design across participants evaluated treatment effects. The protocol contained the first five phases of PECS, followed by generalization and maintenance phases. Dependent measures were: (a) The number of correct requests during a 20-trials session; and (b) the number of vocalizations or word approximations.

Inter-observer agreement (IOA) for dependent measures and treatment implementation was determined for 40% of all sessions. IOA was 99% for requesting, and 92% for emerging speech. Treatment integrity ranged from 82- 98% across parents.

Children 1 and 2 mastered all five phases of the parent-implemented training, whereas child 3 achieved phase 3. All three participants showed generalization to untrained items. Effect size estimates indicated a "highly effective" intervention. Results differed for emerging speech: Whereas child 1 made noticeable gains, moderate gains were observed for child 2 and no gains for child 3. Effect sizes were "fairly effective", and "ineffective", respectively. Results suggest parents can implement an AAC protocol with sufficient fidelity. Treatment effects are most noticeable for requesting skills. A facilitative effect on natural speech development seems likely for participants with some pre-treatment speech ability. Results underscore the potential of including parents for maximizing AAC benefits. Practitioners may promote joint parent-professional partnerships, and develop expertise for parent training.

Boesch, M., Wendt, O., Subramanian, A., & Hsu, N. (2013a). Comparative efficacy of the Picture Exchange Communication System (PECS) versus a speech-generating device: Effects on requesting skills. Research in Autism Spectrum Disorders, 7, 480-493.

National Research Council (2001). Educating children with autism. Washington, DC: National Academy Press.

**General Session - Child**
**Best Research Evidence**

## SESSION 2.3
## 1-Voice role models and friendship networks
Amanda Hynan (Leeds Beckett University), Janet Mayes, Gregor Gilmour, Helen Hewson, Kate McCallum, Lois Thompson, Jemima Hughes

The AAC-focused charity 1Voice Communicating Together started as a family fun weekend in Blackpool in 2000 and became an established charity in 2001. The objective of the charity is to provide opportunities for families who use AAC to come together and support one another. The social perspective at the heart is guided by a role model philosophy that recognises the dedication it takes to learn to use alternative communication. Role models who successfully use AAC are central to everything that the charity organises and aim to inspire children new to AAC and their families to succeed.

This strong member-led support network has created positive and lasting friendships which have continued to develop outside 1Voice. It is not always easy for children who use AAC to find a friendship group in which their communication needs are understood. Some of the young people who have grown up during their time with 1Voice have developed strong peer networks which they have subsequently maintained through social media. They value these relationships and support each other's aspirations as they move into adult life. Parents have also formed strong bonds, enabling them to share experiences and challenges: many friendships have continued to develop through social media and informal meet-ups between families. One of the most consistent feedback themes is how relaxed and comfortable everyone feels at the events and how enjoyable it is to be in an environment where everyone understands their needs and works to maximise communication and participation. This is something participants want to extend beyond an annual weekend.

This presentation will share stories and ideas to illustrate how the role model philosophy is sustained and embedded into activities, how

# Platform Abstracts

friendships promote mutual support and raise aspirations, and communicate the joy of the national and regional events to a wider audience.

**General Session - All Ages**
**Personal Stories and Preferences**

## SESSION 2.4
**A collaboration between an NHS Assistive Technology Service and its Service Users and a University School of Computing – working together to improve accessibility and apps for people who use AT and AAC**
Rebecca Leedale (Barnsley Assistive Technology Team), Jamie Preece (Barnsley Assistive Technology Team Service User Representative), Andrea Lee (Barnsley Assistive Technology Team), Peter O'Neill (Sheffield Hallam University), Emma Barrington (Barnsley Assistive Technology Team), Simon Judge (Barnsley Assistive Technology Team), Victoria Johnson (Barnsley Assistive Technology Team)

The accessibility of software can be highly significant to many people who use AAC, individuals may have unique needs which are not supported by currently available software and software developers may not be aware of the need to consider accessibility of apps. [1] For several years there has been collaboration between Sheffield Hallam University, School of Computer Science and Barnsley Assistive Technology Team with the aim of supporting the school in incorporating accessibility into their curriculum and stimulating innovation in AAC and AT product design.

This collaboration involves the delivery of a lecture on accessibility in technology by a member of Barnsley AT Team. Barnsley AT Team then provide a number of project briefs of identified user needs or innovations and students are encouraged to develop projects, incorporating accessibility, AAC or AT, as part of their final year assessment.

This presentation will describe the process and we will also review the impact and outcomes of

this work from the range of perspectives. Some of the apps, developed this year, will be demonstrated, as case study examples of the process.

Identified benefits of this collaboration to AT users and clinicians, include, the promotion of the importance of accessibility in software design at an early stage in the careers of software developers and the ability to have apps developed which may be of benefit to service users and AT users in general. Identified benefits to the university, include, opportunities for students to work on projects which are relevant to real potential users, receiving feedback on development from clinicians and users and developing an awareness of the challenges of developing accessible and relevant apps. We will also discuss the challenges of this process and consider potential future developments that could support more students in learning accessibility or lead to more sustainable AAC/AT apps.

Putnam, C., Dahman, M., Rose, E., Cheng, J., & Bradford, G. (2016). Best Practices for Teaching Accessibility in University Classrooms. ACM Transactions on Accessible Computing. 8. 1-26. 10.1145/2831424. Available at: https://www. researchgate.net/ publication/298910278_Best_ Practices_for_ Teaching_Accessibility_in_ University_Classrooms/ stats [Accessed 24 April 2019]

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 2.5
**Implementing the Four Blocks literacy model at home.**
Jules Whicher, Tracey Campbell

This presentation outlines the journey of two families in pursuit of a comprehensive literacy strategy for their children who experience complex communication and learning needs. Charlie, 11, and Leia, 13, both live with Angelman Syndrome and are PODD users. After attending an intensive five day literacy and AAC

course three years ago with Jane Farrall and Dr Sally Clendon, both families began implementing the Four Blocks model at home. Jules and Tracey will share their experiences through discussing activities and resources for the each of the Four Blocks areas: guided reading, self-selected reading, writing, and working with words.

Both Charlie and Leia find engagement difficult, therefore this session will also explore the challenges and discoveries regarding teaching techniques for these two students to be able to learn effectively. Charlie additionally has brain-based vision impairments (CVI), so he requires adaptations to allow him to access his literacy materials. Leia is now a teenager, so finding age appropriate material can be a further challenge. Jules and Tracey will discuss how they have met those challenges by sharing their practical advice and stories of their children's literacy successes.

**General Session - All Ages**
**Personal Stories and Preferences**

**SESSION 2.6**
**Moving to a Different AAC System:  A Proposed Framework for Decision-Making**
Bethany Diener (Tobii Dynavox)

Moving from one AAC solution (e.g., device, strategy, vocabulary) to another is a common occurrence in the lives of augmented communicators.  Yet, there is little published suggesting when and how such transitions should take place apart from Frost & McGowan's articles (2011, 2012) on transitioning from the Picture Exchange Communication System to a speech-generating device.  In this session, we will propose a decision-making process for transition and encourage participant feedback.  Any examples of AAC referenced will be fictitious or generic (e.g., communication book, device A, device B) to maintain focus on the framework.

The first step in transition is to determine whether it is necessary and/or appropriate.  Factors may

include changes in the individual's needs, skills, and environment or simply aging technology, but must also involve reflection on the level and quality of support for the current system.  Once the decision is made to transition, we must review the current use of AAC and its effectiveness. This information will help us determine the path we choose for transition – moving directly to a new system, combining systems, using both simultaneously, or gradually moving from one to the other.  Finally, best practices must be used when carrying out any transition including evidence-based strategies such as modeling and providing opportunities for communication.

Transition is not a one-time event in the lives of most augmented communicators.  A clear and intentional process for carrying them out offers the user much needed support and partners the assurance of having offered thoughtful intervention.

Frost, L., & McGowan, J. S. (2011). Strategies for transitioning from PECS to SGD. part 1: Overview and device selection. Perspectives on Augmentative and Alternative Communication, 20(4), 114-118.

Frost, L., & McGowan, J. S. (2012). Strategies for transitioning from PECS to SGD. part 2: Maintaining communicative competency. Perspectives on Augmentative and Alternative Communication, 21(1), 3-10.

Hartmann, A. (n.d.) Transitioning from symbols to text-based AAC.  Retrieved from https://www.assistiveware.com/blog/transitioning-from-symbols-to-text-based-aac.

Perkins, Margaret (2014, May 6). Transitioning for AAC.  Retrieved from https://aaclanguagelab.com/blog/transitioning-for-aac.

**Specialist Session - All Ages**
**Clinical and Professional Experience**

# Platform Abstracts

**SESSION 2.7**
**Collaborate to innovate: an open approach to assistive technology development**
Will Wade (Ace centre), Paul Hewett (Ace Centre)

Developing assistive technologies that effectively serve the needs of their users is challenging.

Intellectual property protection, such as patents, does not serve the greater social good as it restricts the development of novel low-volume technologies (Harwin 1998). A specific requirement for the grant of a patent is that the invention is not in the public domain and thus has to take place behind closed doors. Closed design processes can promote premature obsolescence if a technology relied on by a user is discontinued by the manufacturer for commercial or other reasons and slows development. Some commercial organisations make the decision, for the greater good, not to enforce patent protection (Volvo, 2009).

Assistive technology development, is commonly:
- Inefficient, as the activity is duplicated by different organisations
- Cost prohibitive, as prices are maintained at an unnecessarily high level to cover development & potential ongoing support costs
- Selective, as solutions that may have value but are perceived to be uneconomical to develop further are often discarded
- Commercially blind, as market demand cannot be adequately assessed.

A collaborative open design approach is needed that encourages innovation through effective collaboration that may also stimulate the assistive technology market.

An open design can be developed anywhere in the world but use either cutting-edge or more traditional low volume production to manufacture the device locally. As the design is open, other collaborators are free to contribute to the solution, to adapt it to local or cultural needs. Any further development to the design is fed back to the community and obsolescence is reduced.

We suggest that by developing innovative peer networks & facilitating the publication of open designs ensures solutions that better match users' needs are more readily available, at a lower cost, and for a longer period of time.

Anderson C (2013) Makers: The New Industrial Revolution. Random House Business Books. Volvo (2009) https://www.media.volvocars.com/global/en-gb/media/pressreleases/18405 Accessed 1st May 2019.

Harwin (1998) Niche Product Design, a New Model for Assistive Technology. Improving the Quality of Life for the European Citizen.

**General Session - All Ages**
**Clinical and Professional Experience**

**SESSION 2.8**
**Developing a commissioning toolkit for local AAC services**
Anna Reeves (Ace Centre), Vicky Styles (BCAS)

Despite the current climate of public sector cuts and dwindling resources, local AAC services are being commissioned to provide support, equipment and training for children and adults who do not / do not yet meet NHSE specialised AAC service eligibility criteria; however, there is still considerable variability nationally and UK-wide. The recent developments in commissioning specialised AAC services in England has led to the establishment of a Local AAC Services working party, which aims to assist local AAC professionals and commissioners to better understand the level of need and the services required to meet this. This working party comprises members of specialised AAC services in England and Wales and representation from Communication Matters on behalf of all AAC stakeholders.

A toolkit of resources is currently being mapped, which will become available to professionals who want to champion the establishment and

# Platform Abstracts

development of AAC services provision in their area. Plans for the toolkit include: identifying need, data gathering and reporting, approaching commissioners, understanding the local agenda and using Individual Funding Requests, how to develop a service specification for a local AAC service, including eligibility criteria for local AAC services and examples of business plans and care pathways as well as establishing a local AAC service, including policies, processes and equipment examples. This presentation will provide an update on the toolkit and working party activity to date, including plans for accessing the resources, requests for additional resources to submit and will provide an opportunity for attendees to discuss ideas and suggestions for the future.

## Specialist Session - All Ages
## Clinical and Professional Experience

### SESSION 2.9
### Computer assistive technology and associations with quality of life for individuals with spinal cord injury: a systematic review
Valéria Baldassin, Emerson Fachin-Martins, Helena Shimizu

### Study design Systematic review.
Objective The purpose of the study was to identify and organize evidence regarding quality of life influenced by assistive technology related to computers for people with traumatic and non-traumatic spinal cord injury (SCI).

### Setting Distrito Federal, Brazil.
Methods A search strategy was conducted on the PubMed, PEDro, LILACS, PsycINFO, and SCIELO. All types of study designs considering assistive technology to improve quality of life for individuals with SCI were included. After search strategy procedures, ten references were included to review. The methodologic quality of each study was evaluated using the Level of Evidence proposed by the Oxford Centre for Evidence-based Medicine.

Results Most of the studies showed that devices

for computer access improve the quality of life of people with SCI, regardless of the level of injury and type of resource. However, the positive outcomes in the quality of life should be interpreted with caution, as several methodological limitations were observed in the articles.

Conclusions Despite the scarcity of studies and their methodological limitations, there is evidence that assistive technology for computer access favors the quality of life of people with tetraplegia due to SCI, since it improves participation, independence, and self-esteem.

## Specialist Session - Adult
## Best Research Evidence

### SESSION 2.9
### Using the BBC Micro:bit as AAC - three solutions (so far)
Matthew Oppenheim (Lancaster University)

The BBC Micro:bit is a small, light and programmable computer board given to all 11-12 year old students in British schools to learn programming. We completed, tested and presented two projects that use this platform as AAC and are working on a third. This presentation explores how this simple and cheap platform has proven to be useful and versatile as AAC.

The first project enables individuals to operate AAC by detecting their hand motion. The target user group are people with cerebral palsy who are unable to use physical controllers such as buttons and joysticks but who are still able to make intentional hand movements. A trigger is sent to the AAC when the participant moves a hand above an adjustable threshold of acceleration.

The second project implemented a system that visually indicates when communication software is in use. This enables a more natural interaction and encourages good communication practice; giving adequate time for composition

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and respecting personal space. The visual feedback reassures others in the conversation that the AAC user is actively involved.

We are now working on using the BBC Micro:bit to recognise when an individual makes a small sideways hand motion. This is to enable a student to interact with his AAC software. This third project uses a cheap flex sensor, which easily and safely connects to the board.

As the BBC Micro:bit is designed for education, it contains a number of features that enable it to be used for these projects. The programming platforms are designed for education, enabling the boards to be easily programmed. As the boards are readily available and designed to be safe for school children to use, there is little barrier to these solutions being implemented elsewhere.

**General Session - All Ages**
**Clinical and Professional Experience**

### SESSION 2.9
### Creating support materials using AAC emulation software - ideas factory!
Emily Gabrielle (Liberator Ltd)

PC based vocabulary softwares are great for familiarising oneself with vocabularies and editing vocabularies without needing a client's device present.

But did you know you can also use them to create totally awesome support resources??? Never fear - a bolt of inspiration is on it's way in this lightning talk!

The session focusses on the free emulation softwares from Liberator but the ideas will work with any PC based package.
Give me 6 minutes of your time and I'll give you a wealth of great ideas you can go away and create easily to support language learning. The only limit is your imagination!

**Introductory Session - All Ages**
**Clinical and Professional Experience**

### SESSION 2.9
### Tele-AAC: A literature review of parent, professional and AAC user's perspectives
Kate Duggan (The Seashell Trust)

What is Tele-AAC? What value can it add compared to in-person AAC intervention? What are the potential barriers to offering effective AAC support remotely? These questions will be answered through an exploration of current literature relating to how tele-practice can be used to support AAC users.

Tele-practice is common practice in Australia and the US where geographical boundaries limit provision of specialist services. Different perspectives will be considered to inform whether practitioners in the UK should consider embracing this as a new way of working, alongside existing methods of service delivery. In the literature reviewed, researchers address the benefits and barriers to tele-AAC from the perspective of service users, parents and practitioners.

Benefits including cost savings, reduced travel, flexibility of services, geographical reach of services, reduced parental stress and anxiety, improved compliance and attendance at appointments, generalisation of skills and higher levels of parental responsiveness are cited. Barriers which limited the effectiveness of tele-AAC included confidence with technology, poor internet connection, physical limitations, lack of evidence, need for multitasking, requirement for remote describing of adjustments, AAC devices not supporting screen sharing and significant troubleshooting associated with early sessions. Conclusions drawn broadly identify tele-AAC as an acceptable and useful service delivery method to supplement other service delivery methods.

Anderson, K. Balandin, R., Stancliffe, J. and Layfield, C. (2014) 'Parents perspectives on Tele-AAC support for families with a new speech generating device: Results from an Australian pilot study'. Perspectives on Telepractice. 4(2) pp. 52-60.

Curtis, T. (2014) 'Case studies for telepractice in AAC'. Perspectives on Augmentative and Alternative Communication. January 23(1) pp. 42-54.

Dimian, A., Elmquist, M., Reichle, J. and Simacek, J. (2018) 'Teaching communicative responses with a speech generating device via telehealth coaching' Advances in Neurodevelopmental Disorders. 2(1) pp. 86-99.

Hall, N., Boisvert, M., Jellison, H. and Andrianopulos (2014) 'Perspectives on telepractice'. 4(2) pp 61-70

Hall, Boisvert and Jellison (2014) An investigation of the efficacy of direct AAC service provision via telepractice: A case study. Presented at RESN annual conference (2014) The CARE Consortium in collaboration with Commūnicāre, LLC* and Worldtide, Inc

Lopresti et al (2015) 'Consumer satisfaction with telerehabilitation service provision of alternative computer access and Augmentative and Alternative Communication'. International Journal of Telerehabilitation. Fall 7(2) pp 3-14.

**General Session - All Ages**
**Clinical and Professional Experience**

**SESSION 2.9**
**Speaking our Language: Computer Voices for Children using AAC in Scotland**
Gillian McNeill (CALL Scotland)

Choice of voice, is an important factor for users and their families in the AAC decision making process. Most users will have a strong preference for a voice that reflects their age and gender, as well as the regional accents of family and friends. This was the starting point for a CALL Scotland project, to support the development and distribution of male and female Scottish child voices for use with voice output communication aids.

This talk will focus on…
-   the rational for Scottish child voices (and other UK regional accent voices)
-   the process for developing 2 new Scottish child voices
-   the availability of the voices within AAC devices and apps
-   sample communication messages spoken with the 2 new Scottish child voices

In addition, there will be reference to the development and distribution of male and female Scottish accent voices, suitable for teenagers and older children, on communication aids.

Gorenflo, C., Gorenflo, D., & Santer, S. A. (1994). Effects of synthetic voice output on attitudes toward the augmented communicator. Journal of Speech and Hearing Research, 37, 64–68.

Nass, C., & Lee, K. M. (2001). Does computer-synthesized speech manifest personality? Experimental tests of recognition, similarity-attraction, and consistency attraction. Journal of Experimental Psychology: Applied, 7, 171–181.

**General Session - Child**
**Clinical and Professional Experience**

**SESSION 3.1**
**Living with unspoken voices: developing our understanding the communication experiences of people who use augmentative and alternative communication (AAC)**
Patrick Bates (), Jamie Preece (), Katherine Broomfield (Sheffield Hallam University & Gloucestershire Care Services NHS Trust), Karen Sage (Sheffield Hallam University), Claire Craig (Sheffield Hallam University), Georgina Jones (Leeds Beckett University), Simon Judge (Barnsley Assistive Technology Team)

Background: AAC can help people to access work or education, build social relationships, be more independent, or to avoid social isolation (Smith and Murray, 2011). Services and professionals who provide AAC devices and

# Platform Abstracts

support people to use them need to understand the priorities of each individual in order to be able to offer helpful and effective services. There is no consensus on what outcomes are important to people who use AAC (Baxter et al., 2013) nor are there suitable tools that capture outcomes from the perspective of the person using AAC (Broomfield et al., 2019).

Aim: To develop a greater understanding of what outcomes are important to people who use AAC.

Method: A systematic literature search was carried out using consistent methods to collect, sort through and summarise all the research papers relevant to this topic. Information relating to the experiences of communicating using AAC and information about important outcomes were highlighted within the papers identified. Initial findings were discussed with the project expert advisory group. Their observations, alongside reports of their personal experiences, formed the basis for a model which will be used to continue to search the research papers for common themes.

Results: Important outcomes, as described by participants who used AAC in the research papers, related to:
1. the equipment that that they use;
2. the communication that AAC enables;
3. the wider impact of the AAC;
4. factors that influence AAC use;
5. and perspectives or attitudes towards AAC.

Discussion: The outcomes described by participants in the reviewed research papers were felt to be broadly representative by the expert advisory group. This review will provide an initial framework on which future research will build in order to develop a tool that will allow patients to report their experiences of the use of AAC.

Smith, M. M., & Murray, J. (2011). Parachute Without a Ripcord: The Skydive of Communication Interaction. Augmentative and Alternative Communication, 27(4), 292–303. https://doi.org/10.3109/07434618.2011.630022

Baxter, S., Enderby, P., Evans, P., & Judge, S. (2012). Barriers and facilitators to the use of high-technology augmentative and alternative communication devices: a systematic review and qualitative synthesis: AAC barriers and facilitators review. International Journal of Language & Communication Disorders, 47(2), 115–129. https://doi.org/10.1111/j.1460-6984.2011.00090.x

Broomfield, K., Harrop, D., Judge, S., Jones, G. and Sage, K. (2019) Appraising the quality of tools used to record patient-reported outcomes in users of augmentative and alternative communication (AAC): A systematic review (in submission to Journal of Quality of Life Research)

**General Session - All Ages**
**Best Research Evidence**

**SESSION 3.2**
**The AAC Exams Access Working Group**
Saffron Murphy-Mann (Teacher), Marion Stanton (CandLE)

The AAC Exams Access Working Group is a nationwide group of professionals, AAC users and parents which was set up to look at the current system of exam access in the education system.
We have met several times in London to share best practice, experience and work on a document to highlight a way forward to enable AAC users to access external qualifications. Having looked at what is available at the moment, our next step is the process of drafting a set of guidelines for schools, exam officers and exam boards to provide information to ensure an AAC user has the most efficient way of approaching exams.

**Specialist Session - All Ages**
**Clinical and Professional Experience**

# Platform Abstracts

## SESSION 3.3
### Challenging Attitudes: Changing communication … the AT Mentor way
Francesca Sephton (ATtherapy), Jodie Turner, Laith Ritchie, Gregor Gilmour, Afonso Ramalhoso

Just as a dance couldn't possibly be a dance unless people moved to it, so language doesn't become communication until people grow to understand and express it back. It has to be a two-way exchange. This is why communicating is an action word.

### Staehely, 2000, AAC user
The AT Mentor Team know at first-hand what it is like to learn to use AAC, and they are acutely aware of the barriers users face and how to overcome them. They work with the multidisciplinary team, and by sharing their own stories they are able to challenge perceptions of AAC, embed positive attitudes, and describe effective practice and techniques.

Attitudes towards AAC may predispose the use (or lack of use) of AAC within social situations. Moreover, in some academic settings, attitudinal barriers to AAC continue to exist such as "we don't do AAC" or "we don't have the resources". As Williams (2000) suggested, too often attitude barriers result in reduced expectations and limited opportunities for participation.

Typically, academic institutions are resistant to change (Harris, Brewster & Sparrow, 2003). According to Rear Admiral Grace Murray Hopper, "The most dangerous phrase in the English language is 'We've always done it that way'." New emerging AAC research and products are continually becoming available, opening doors to enable communication for ever more individuals with complex communication needs. Without access to effective communication, such individuals are consigned to live their lives with minimal means to express their wants/needs, develop social relationships, and exchange information with others (Blackstone, Williams & Wilkins, 2007). In this presentation, the team will share information about their input across different academic settings (Mainstream and Special schools). Tools have been designed to explore staff beliefs, attitudes and knowledge of AAC pre and post training and capture changes in perceptions and practice.

Blackstone, S., Williams, M. B., & Wilkins, D. P. (2007). Key principles underlying research and practice in AAC. Augmentative and Alternative Communication, 23, 191–203. Harris, H.; Brewster, C. & Sparrow, P. (2003). International human resource management. London: CIPD.

Staehely, J. (2000). Prologue: The communication dance. In M. Fried Oken & H.A. Bersani (Eds.), Speaking up & spelling it out (pp. 1–12). Baltimore, MD: Paul H. Brookes.

Williams, B. (2000). More than an exception to the rule. In M. Fried-Oken & H. Bersani (Eds.), Speaking up and spelling it out (pp. 245–254). Baltimore, MD: Paul H. Brookes.

### General Session - All Ages
### Clinical and Professional Experience

## SESSION 3.4
### AAC, Gaming and Independence
Colin McDonnell, Paula Spencer
(Ace Centre North)

Our seminar aims to show how promoting the positive role of AAC and gaming empowers people with complex communication needs. I met Paula when I was at High School in a group called The Lost Boys. She introduced me to switch accessible toys, games and some simple environmental controls. She then came to a group run by our Speech and Language Therapist, set up to encourage use of our communication aids. We had ¾ hour gaming and ½ hour using our AAC to chat about the games, who was the best player (Me of course!) and what adaptations were needed. We can talk, when we have something to talk about!! I worked with Paula to identify what aspect of gaming was important to me. We looked at my abilities and the games I wanted to play, and found the equipment needed to play Formula 1

# Platform Abstracts

on a Playstation 2. I was hooked!

Funding is available from NHS England for AAC and Environmental Controls for people with complex physical conditions and we need to make sure people have the skills to be able to access the equipment available. Gaming helps people develop switch or joystick skills, learn to anticipate, hit targets, make choices, learn timing skills – all the skills needed to use AAC. I now promote gaming at the centre to young people, showing them how gaming skills can enable them to communicate, control their environment, including their mobile phones and their powered wheelchair. My video's show how my life – and my ability to communicate - has changed since the day I became a gamer.

**Introductory Session - All Ages**
**Personal Stories and Preferences**

**SESSION 3.5**
**Developing Dialogic Reading Strategies for Children with Speech, Language and Communication Needs.**
Joanna Courtney (CALL Scotland)

When most adults share a book with a pre-school age child, they read and the child listens. In dialogic reading, the adult helps the child become the teller of the story.

There is a significant body of evidence which demonstrates that dialogic reading improves language development in normally developing children, as children learn most from reading books when they are actively involved. Strategies include Prompting the child, Evaluating the child's response, Expanding the child's response by re-phrasing and adding information to it and Repetition of the prompt to ensure the child has learned from the expansion; the PEER sequence. There are five types of prompts that are used in dialogic reading to begin PEER sequences; Completion prompts, Recall Prompts, Open-ended prompts, Wh-prompts and Distancing prompts; known as CROWD.

So, how do we develop dialogic reading

strategies for children who have speech, language and communication needs (SLCN)? Since 2015, CALL Scotland have created symbolised resources to accompany our accessible digital copies of The Bookbug Picture Book Prize shortlist. These 3 books are gifted to P1 (reception) age children in Scotland each year by Scottish Book Trust, as part of National Book Week in November.

The symbolised resources come in printed and digital format (PDFs and SoundingBoards for iPad) using SymbolStix symbols and including alternative access, enabling children with SLCNs to participate in dialogic reading and facilitating the adult in developing PEER sequences using CROWD prompts.

In this presentation I will
- Explain the rationale and benefits of using symbolised resources in dialogic reading.
- Demonstrate the accessible digital books and symbolised resources available, showing how they can be used to develop dialogic reading.
- Facilitate the participants to develop a dialogic reading symbol resource of their own.

**General Session - Child**
**Clinical and Professional Experience**

**SESSION 3.6**
**Aphasia and AAC - encouraging social engagement following Aphasia.**
Emily Gabrielle (Liberator Ltd)

People with aphasia often have trouble with the 4 main ways people understand and use language, including reading, listening, speaking and typing or writing. Aphasia can present in multiple ways and with differing severity.

The most common cause of Aphasia is stroke and there are more than 100,000 strokes in the UK each year - around one stroke every five minutes.

Around a third of stroke survivors experience

some level of aphasia and between 30-40% of those affected will remain severely affected in the long term.

The impact of Aphasia for an individual can be wide-reaching, extending beyond communication skills to affect areas such as social engagement, emotional well-being and sense of self. Increased social isolation can often present and this can impact general health and emotional well-being further.

For those with significantly affected skills, who may be partner-dependent for successful communication, it can be hard to think about how to reengage in much loved activities following a diagnosis of Aphasia. The Life Participation Approach to Aphasia focuses on acceptance of abilities and encourages social re-engagement.

The Communication Journey: Aphasia vocabulary template embraces the Life Participation Approach to Aphasia and has been designed to allow users to easily customise the content, layout and operational functions to best meet the needs of each individual. Available on either a dedicated device or apple platform (iPad, iPhone, iPod touch) it means the best fit can be found for each individual.

In this session we will look at the statistics behind the impact of Aphasia and think about how Aphasia may present for different individuals. We will think about how we can support individuals who are severely affected and how we can use the Communication Journey: Aphasia vocabulary template to help support engagement, social inclusion and self-advocacy.

Chapey, R., Duchan, J. F., Elman, R. J., Garcia, L. J., Kagan, A., Lyon, J. G., & Simmons Mackie, N. (2000). Life Participation Approach to Aphasia: A Statement of Values for the Future. The ASHA Leader, 5(3), 4-6. doi: 10.1044/leader. FTR.05032000.4.

Garrett, K. & Lasker, J. (2005). AAC Aphasia Categories of Communicators Checklist. RCSLT (Royal College of Speech and Language

Therapists) (2009) RCSLT Resource Manual For Commissioning And Planning Services For SLCN - Aphasia

Stroke Association (2018) State of the Nation: Stroke statistics – February 2018 www.nhs.uk/conditions/aphasia/

**Introductory Session - All Ages**
**Clinical and Professional Experience**

### SESSION 3.7
**Accessible and meaningful work for people with motor/communication impairments.**
Hilde Fresjarå (Digjobb)

The Digjobb.no project (2017-2020) provides custom and meaningful work tasks to people with motor and/or communication disorders. The project focuses especially on those who need assistive technology to service a computer, e.g. switch control, eye gaze control or alternative mouse and keyboard. At www.digjobb.no, the target group and relevant clients can meet and exchange work assignments and services.

We will present the project. This will be presented using lectures and stories on video with participants in the project.

It is now 15 participants in Digjobb. They do different tasks - for example:
- Develops educational and information materials with visual symbols
- Tests the availability of digital learning materials, games, websites and apps with assistive technology
- Develops music and animation movies.

Clients are developers who creates custom software, apps or webpages. At digjobb.no, they can meet AAC-users who can assist with development and testing.

The project lasts for three years (2017-2020), and involves several participiary groups; Isaac Norway, NAV, software-developers and several labor market companies and training arenas.

# Platform Abstracts

When the project period is finished, work is being done to find a permanent owner of Digjobb and the website.

Lecturers: Hilde Fresjarå and Brynja Gunnarsdottir.

Synnøve Flatebø Hoelseth

Daniel Scheidegger

**Specialist Session - Adult**
**Clinical and Professional Experience**

## SESSION 3.8
**Tips for developing a business case for a local AAC service and engaging with commissioners**

Julie Atkinson (Access to Communication & Technology), Siobhan Murphy (Access to Communication & Technology), Jo Cartwright (Access to Communication & Technology)

Since NHS England became responsible for commissioning the 14 Specialised AAC Services, the gap in resourcing between these Specialised AAC services and local AAC service provision in some areas feels to be increasingly apparent. Although NHS England has absolutely no influence over local AAC funding streams such as Clinical Commissioning Groups (CCGs), education or social care commissioners, one of the objectives of the delivery of specialised AAC services is "To support the development of effective local AAC teams and care pathway procedures by which to manage referrals to specialised AAC services" [NHS England Service Specification Complex Disability Equipment – Communication Aids (Specialised AAC Services) 2016]

This presentation is a summary of a whole day 'Developing Local AAC Services workshop' created by Access to Communication and Technology (the West Midlands Specialised AAC Service) as part of the range of training courses we offer to support the delivery of the above objective. It will provide practical ideas and identify useful resources to help attendees:

- Map your local AAC care pathway
- Identify your local AAC 'service specification'
- Audit your workforce skills profile
- Carry out a gap analysis comparing your local AAC service to that recommended in the "Guidance for commissioning AAC services and equipment"
- Identify equipment/resources required by a local AAC service
- Develop a comprehensive business case to request additional funding/resources
- Provide tips regarding commissioner engagement

We will also briefly summarise the results of the impact questionnaire which was sent out to the workshop attendees 3 months later, thus identifying the achievements and challenges reported by those attendees who attended the full day workshop in December 2018.

"Guidance for commissioning AAC services and equipment" NHS England (March 2014) https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/03/guid-comms-aac.pdf

"Service Specification Complex Disability Equipment – Communication Aids (Specialised AAC Services)" NHS England 2016 https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/03/aac-serv-spec-jan-2016.pdf

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 3.9
**Getting you to the right switch activity quickly and easily**

Marc Viera (The Children's Trust)

The Children's Trust (TCT) provides residential-rehabilitation and school-based services for children and young people (CYP) with a brain injury. These services often include assistive technology imbedded within educational and therapeutic curricula. Switch-based assistive technology provides relatively quick and easy

access for CYP with a wide variety of skills in a wide variety of contexts. A common onscreen resource used by therapy and education professionals across the UK is the HelpKidzLearn (HKL) website, which provides a variety of accessible activities.

Considering the subtleties of how a switch activity is presented and what happens when the switch is pressed can reveal how an activity might challenge a user with a brain injury or with profound and multiple learning difficulties. At TCT, we have found it quite helpful to identify relevant skills needed when looking to match a learner's abilities to an HKL activity. To that end, a table was developed internally that helps staff working with people learning switching skills to get to the right activity at the right level quickly, without having do a detailed activity analysis on every single HKL activity for each individual student.

This paper reviews key skills involved for successfully complete switch activities on HKL. Then these skills are cross referenced on our HKL table to match specific activities to a particular CYP. Armed with this table, a facilitator can vary presentation of activities between those that play to a CYP's strengths and those that present a specific challenge relevant to their individual educational and therapeutic objectives. Finally, this paper critically compares and contrasts the skills of a functionally competent single-switch user to the skills of a functionally competent two-switch user for consideration of switch skills pathways that might most benefit the CYP we encounter.

CookAM & PolgarJM (2007) Cook and Hussey's Assistive Technologies: Principles and Practice, 3e, Maryland Heights: Mosby

HelpKidzLearn (2017) Games and Activities. Retrieved (09April2019) from https://www. helpkidzlearn.com/early-years

SchererMJ & CraddockG (2002) Matching person & technology (MPT) assessment process. Technology and Disability, 14(3) 125-131
World Health Organization (2001) International Classification of Functioning, Disability and Health (ICF), Geneva: World Health Organization

**Introductory Session - All Ages**
**Clinical and Professional Experience**

**SESSION 4.1**
**Bringing AAC to the next level**
Ian Foulger (TechCess Communications Ltd)

The ultimate goal of AAC is to offer solutions that allow the user to achieve fluent and spontaneous communication. This is a complex process with many variables, both on the input as well as on the output side.

At the input side, a well-developed and efficiently-structured language system like Score is one of the critical components. But it's also crucial to provide the user and support teams with a clear roadmap and comprehensive detailed implementation plans. Our session will explain about the tools and resources we offer to achieve this.

Also discover the 2-step version of Score. This version offers eye tracking and switch users access to the power of Score.

At the output side we have the innovative Vibe, the first symbol based speech generating device that has a dual display. We learned from our Allora users that the second partner display supports communication in noisy environments. It also allows private conversations and facilitates participation in the classroom.

With the same goals in mind, we have also developed the HEY_ our wireless message display and speech box.

**General Session - All Ages**
**Exhibitor Presentation**

# Platform Abstracts

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## SESSION 4.2
### No one left without a voice
Dougal Hawes (Smartbox Assistive Technology)

What is needed for an individual to successfully start using an AAC device?
In 2019 Smartbox has been running a pilot project to identify what is needed to give people in the UK the opportunity to try AAC for the first time and to maximise their chances of success. The project is built on our 'SIMPLE AAC' framework that outlines fundamental strategies for implementing AAC and informed by the latest research. This framework is designed to remove jargon and help everyone understand what is required to help someone learn how to speak with AAC. This talk will discuss how we have delivered this framework as a series of workshops in school and care home settings. We will also explore what we have learned from the people we have met and the big impact this is having on our product and service development. At CM 2019 we will be showcasing some of these including:
- Affordable Eye gaze and iPad Essentials bundles
- Super Core Communication Book
- Alpha Core grids for literate users

**General Session - All Ages**
**Exhibitor Presentation**

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## SESSION 4.3
### Personalization of the EyeControl Product to Improve User Experience
Laurie Silver (EyeControl), Or Retzkin (EyeControl), Tania Suares (EyeControl)

The EyeControl is a wearable, screenless, assistive communication device, which enables locked-in individuals to communicate using eye movements alone. The AI technology enables personalization to each user's eye movements and eliminates the need for calibration.
The EyeControl is CE marked, FDA listed, and ISO certified. The innovative technology is recognized and supported by government health authorities, including the Israel national "Health Basket", the UK NHS Supply Chain and Medicare/Medicaid in the USA.

The EyeControl is constantly undergoing evolution based on individual customer needs; product personalization plays a unique role in improving overall user experience. With the goal of making the device universally accessible, the company uses knowledge gained through working with patients as a catalyst for product updates and modifications. A challenge for one individual ultimately manifests in increased EyeControl usability for the masses.

The EyeControl was originally developed with a left eye tracking camera; subsequent to meeting users with limited left eye movement, who maintain right eye control, a mirrored model was created. Additionally, it became obvious that every user has varying limitations in their range of eye movements; therefore, the EyeControl was adapted for a range of up to five gestures (up, down, left, right, blink), or as few as one. This update was particularly relevant for individuals, who previously couldn't use screen-gazing devices for their communication needs. Further customization options offered via each user's personal web portal also evolved from customer needs.

In this session we introduce the EyeControl's unique features through the personal stories of our users, pinpointing how their special needs contributed to product development and enhanced the user experience platform. EyeControl empowers patients and restores self-expression; we will explain how the EyeControl works and open discussion about new applications under development.

**General Session - All Ages**
**Exhibitor Presentation**

## SESSION 4.4
## Communication Support for Students with Access Difficulty
Marion Stanton (Candle)

CandLE is a not-for-profit organisation serving the learning and communication needs of students across the UK who rely on AAC. Sales@ CandLE is a commercial company and a member of the CM Suppliers network. Our two companies have combined to provide free training, support and resources alongside commercial options.

This session tells participants about our accredited training, available to students who rely on AAC, in their communication skills. The award is available at Entry Level's 2 and 3 and Level 1 (which is the equivalent of a GCSE). The programme of study guides students through a range of communication skills including responding, initiating, requesting, commenting, listing, instructing, complaining, arguing, warning, repairing misunderstandings, using social media and organising their own communication aid.

We will also be showcasing our new, completely free, communication vocabularies designed for students who have complex access issues. 12 Talk is a comprehensive vocabulary with extensive core and fringe vocabulary with only 12 cells on a page to support those who find conventional vocabularies difficult to access without errors. We will describe why the extra navigation required may be preferable to constant mis-hits that need repairing when there are more cells on a page. Core Talk is our new high and low tech communication vocabulary that is aimed at the AAC user who has some basic literacy skills.

We will be sharing our 'Communication Access for All' low-tech communication book whose unique design enables more accurate physical targeting and combines pragmatics with core words and fringe vocabulary. We are able to provide an off-the shelf version of this communication book or, for slightly more cost,

can tailor it to individual needs.

Finally, we will show you our extremely durable, waterproof, high contrast letter-board which supports the AAC user who has literacy skills.

## General Session - Adult
## Exhibitor Presentation

## SESSION 4.5
## CALL Scotland - Supporting learners with communication difficulties since 1983
Gillian McNeill (CALL Scotland), Joanna Courtney (CALL Scotland), Claire Harrison (CALL Scotland)

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 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 resources, and our online professional learning materials from the

# Platform Abstracts

AAC Scotland website. We will update on new and ongoing projects including the brand new Scottish children's computer voices for AAC, Andrew and Mairi, which we will be demonstrating following their recent release.

**General Session - All Ages**
**Exhibitor Presentation**

### SESSION 4.6
### AAGI: Augmentative and Alternative Gesture Interface

Ikushi Yoda (National Institute of Advanced Industrial Science and Technology (AIST)), Tsuyoshi Nakayama (Research Institute, National Rehabilitation Center for Persons with Disabilities), Kazuyuki Itoh (Research Institute, National Rehabilitation Center for Persons with Disabilities), Hiroyuki Awazawa (National Center of Neurology and Psychiatry), Katsuhiro Mizuno (National Center of Neurology and Psychiatry), Yoko Kobayashi (National Center of Neurology and Psychiatry)

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 226 gestures from 58 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 Finger, Head, Wink, Tongue, Shoulder, Knee, and Foot. The two recognition modules are Front object and Slight movement.

We experimented on five testers with four recognition modules (Finger, Head, Foot, and Slight movement) in a long-term experiment (over three months). The user of the Foot recognition module is now using this system daily. Our original software and the RGB-D camera have been installed in the user's own PC, and he uses WORD and WEB browser by foot gesture every day.

We call this software the Augmentative and Alternative Gesture Interface (AAGI) and will open it sequentially. All software will be supplied freely from our HP. http://gesture-interface.jp/en/
http://gesture-interface.jp/en/

**General Session - All Ages**
**Exhibitor Presentation**

### SESSION 4.7
### Find out about the updated Possum Qwayo

David Crockford (Possum Ltd), Jon Graham (Possum Ltd)

An opportunity to learn about the updated Possum Qwayo – a device that allows users to have full control of their immediate environment. You will see how the device can be customised – from a simple presentation to a more advanced set-up. Each Qwayo is tailored to the user's specific requirements.

Learn how the Qwayo can be used to control Assistive Technology products – including switching on and off a lamp, using an intercom and raising an alarm. We will show you how the Qwayo can also act as a communication device - sending and receiving calls, e-mails and SMS text messages. Users can also browse the web using Possum's accessible web browser and access apps including Kindle.

The unique technology behind Qwayo takes

the user experience to the next level and most importantly, the Qwayo is designed so that the user can independently and reliably activate an emergency alarm whenever required, regardless of the status of any available wireless connection with the internet or android smart device, or in the case of mains power failure.

**General Session - All Ages**
**Exhibitor Presentation**

### SESSION 4.8
### Using Crick Software Products to Support Communication and Literacy
Nicola Wilson (Crick Software Ltd), Jordan Butel (Crick Software Ltd)

Taking a look at Clicker Communicator on both iPad and Chromebook to support learners' communication and using Clicker 7 to develop core writing skills.

Clicker Communicator, described as "one of the most exciting things in the way of AAC apps," has been specifically designed to help children take an active vocal role in the classroom, with a bank of ready-made lesson resources and intuitive 'on the fly' editing features.

For users ready to take their first steps towards independent writing, Clicker 7 for Windows/Mac provides thousands of differentiated curriculum activities and multiple input options, including eye gaze and switches.

**General Session - Child**
**Exhibitor Presentation**

### SESSION 4.9
### The Tobii Dynavox Ecosystem: Updates to supporting communication, education and access
Rob Gregory (Tobii Dynavox Ltd)

Come and join us for a for a session looking at the Tobii Dynavox Ecosystem. See how we support communication, education and

access with a joined-up approach and intuitive thinking.

We will update you on all aspects of the Ecosystem working together including: Hardware: If you prefer iOS or Windows we have you covered! We'll take a look at everything from the iPad to the I-Series.

Software: See what's new with Snap + Core First, Communicator 5 and Boardmaker Online as well as how they work together. We've bilingual AAC users covered too. We'll show you how to easily change languages as well as typing in one language and speaking in another. Symbols: We're growing everyday! We'll take a look at the latest updates and gather your suggestions for what we should do in 2020. Implementation: Pathways, webinars, lesson plans and more! We'll point you in the direction of free resources that will help you make the most of you AAC system and avoid abandonment.

Curriculum: Supporting the literacy development of AAC users is our main focus … come see first-hand how we support them with engaging content like Core First Learning, Boardmaker Activities to Go and Reading Avenue

Access: We'll show you Google Home implementation, from turning on lights to checking the train times from within your AAC software. AccessIT is here we'll show you how to use your AAC to control a classroom whiteboard or secondary laptop AND take full control of your Android phone!

**General Session - All Ages**
**Exhibitor Presentation**

# Platform Abstracts

**SESSION 5.1**
**Questioning Our Defaults – Looking at AT Features to Support AAC Use and Learning**
Bethany Diener (Tobii Dynavox), Tina Voizey (Tobii Dynavox)

"I always setup AT/AAC this way for people with [diagnosis]." "We always start at a 2x2 grid size when we introduce AAC." "We always use a QWERTY keyboard with word prediction." While people in a particular age group or with a certain diagnosis may have similarities, each AT/AAC user is unique; they have different skills, needs, and goals. Gratefully, AT/AAC systems have a lot of features which can and should be used flexibly to serve the user. This session will review the benefits and challenges of common features in high tech AAC devices from scientific evidence as well as expert opinion and user perspective. Features reviewed will include word predication, symbolic representation, approaches to growth, linking to new pages, and adding vocabulary among others with the aim of encouraging purposeful use of features to facilitate success of those using AT and AAC.

Abbreviated reference list:
Dukhovny, E. & Zhou, Y. (2016). Effects of icon size and location on speed and accuracy of SGD access. Augmentative and Alternative Communication, 32(4), 241-248.

Erickson, K.A., Hatch, P., Clendon, S. (2010). Literacy, Assistive Technology, and Students with Significant Disabilities. Focus on Exceptional Children, vol. 42, no. 5, pp. 3-5.

Harzem et al. (1976). The effects of pictures on learning to read. British Journal of Educational Psychology, 46(3), 318-322.

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.

Koester, H.H., & Levine, S. (1997). Keystroke-level models for user performance with word predication. Augmentative and Alternative Communication, 4, 239-257.

Meneses, M., Reyes, C., Siobal, K & Dukhovny, E. (2016) Effects of Stability of Icon Location on SGD-Based Labeling in Typical Children Seminar presented at the annual American Speech, Language and Hearing Association (ASHA) Convention, Philadelphia, PA.

Trnka, K., Yarrington, D., McCaw, J., & McCoy, K. (2007). The effects of word predication on communication rate for AAC. Proceedings of NAACL HLT 2007, Companion Volume, 173–176.

**General Session - All Ages**
**Clinical and Professional Experience**

**SESSION 5.2**
**Communication Access UK**
Catherine Harris (CAUK)

Communication Access UK is a partnership between charities and organisations that share a vision to improve the lives of people living with communication disabilities. The Steering Group includes the Royal College of Speech and Language Therapists, Communication Matters, the Motor Neurone Disease Association, the Stroke Association, Headway – the brain injury association, Disability Rights UK, the Business Disability Forum and the National Network of Parent Carer Forums.

The aim of the Steering Group this year has been to coordinate the early adopter phase. If a business displays the symbol it means that people with communication difficulties will be supported and are welcome.

A two-phase consultation was launched in January 2017 to gather both quantitative and qualitative data on a potential Communication Access symbol for the UK.

The design brief stated that the symbol needed to be more concrete than abstract, reflecting looking, listening, understanding, communication as being 'more than just talking'

and reflecting inclusive communication. It also had to fit with the style and colour of the existing disability symbols. The symbol was soft-launched in September 2018.

During the early adopter phase there has been engagement with Health, Education, Local Authority, Retail and Leisure Organisations who have received training in inclusive communication. Work to establish the first 'Communication Accessible Highstreet' is well underway! The 'TALK' prompt (TIME/ASK/LISTEN/KEEP TRYING) is used to reflect the more important elements identified from the consultation where participants were asked 'What helps your communication'. A framework of organisational standards has been developed to support the Monitoring Framework produced by Disability Rights UK.

The aim is to launch an e learning resource to ensure maximum reach and impact. The plan is to have an interactive accessible programme with videos which can be embedded into existing induction and mandatory training. This will be show-cased in the session.

**General Session - All Ages**
**Clinical and Professional Experience**

### SESSION 5.3
**Mentoring Project 2019**
Verity Elliott (Creativity in Practice Ltd)

Communication Matters have been awarded a grant from National Lottery Communication Funds to develop mentoring opportunities for disabled young people through training and development. This 5-year project will include access to Level 1 and Level 2 Award in Mentoring, development opportunities for those young people who have completed Level 2 in Mentoring and sharing best practice events for organisations who run a mentoring service or who you are interested in developing a mentoring programme.

We will be working with Creativity in Practice who helped to deliver our first Level 2 in Mentoring in

2017. We are planning to deliver in different areas across England so please let us know if you would like any further information and if you are interested in any of the training opportunities. We are interested to hear from young people, parents and professionals.

For further information, please email mentoringproject@communicationmatters.org.uk And come and visit us in the Exhibition area on Monday 9th September or come along to the workshop to find out more and take part in a taster session.

This is an exciting project for Communication Matters and we are really pleased to develop and support mentoring activities for young people.

**General Session - Adolescent**
**Personal Stories and Preferences**

### SESSION 5.4
**A creative approach to Total Communication with one young person with MSI**
Olly Robinson (Seashell Trust), Beccy Timbers (Seashell Trust)

Ferris is a 19 year old man who loves music and outdoor activities such as horse riding and climbing. He has severe hearing loss and no functional vision. Historically he had a large number of Objects of Reference (OR's) which he understood but did not use expressively. He understands some signs but only uses one or two expressively. The presentation describes the use of tactile markers and a Language Acquisition through Motor Planning (LAMP) approach in Ferris's development of expressive languages using both OR's and switches. Initially Ferris used big point switches on a sound wall with tactile markers. He used the location of the switches and the tactile markers to remember what the switch meant. He has now progressed to using two switches with tactile markers to scan and select. He has three menus and for really motivating items knows the pattern of the switches to press to say the word he wants. The way information and choices are presented to

# Platform Abstracts

Ferris with his OR's has completely changed. He now has a tactile calendar in a folder which he can work through to know what's happening. Choices are presented on the back of the calendar. Initially a PECS approach was used to teach him to use the OR's expressively with tactile prompting. Discussion on the benefits of these systems for Ferris, the contributions of the multi-disciplinary team and how strategies were developed will be included.

**General Session - Adult**
**Clinical and Professional Experience**

**SESSION 5.5**
**The Literacy Journey for children with additional needs**
Claire Harrison (CALL Scotland, University of Edinburgh)

What does literacy teaching for children with additional needs look like?
Acquiring communication and early literacy skills are key milestones in the development of all children. Developing literacy skills for the purpose of writing, reading to learn, reading for pleasure, speaking and listening is a fundamental goal of education.

Emergent literacy is central for many children as they begin to develop phonological awareness and word recognition. For children with additional needs, the journey to literacy may need to take 'the tourist route' visiting other stops along the way. Dr Penny Lacey developed a concept of 'Inclusive Literacy', which broadens conventional definitions of literacy allowing for the inclusion of other experiences beyond traditional methods.

Participation in inclusive literacy ranges from multi-sensory stories to shared reading and more. In addition, children who use AAC will typically need more time; to engage with materials, communicate, consolidate and evidence their learning. Opportunities to experience pre-teaching of concepts, access to vocabulary, repetition and more are important. We will explore how using an inclusive approach

to literacy with all the rich experiences it offers can create a path through to emergent literacy to learning to read.

We will examine how these different levels of literacy development are not separate 'stages', but form part of a continuum. We will explore a new CALL Scotland info-graph which visually represents elements of the literacy journey for all children, including those with profound and multiple learning difficulties, complex needs, other additional needs and those who use AAC.

Lacey, P. (2006) Inclusive Literacy PMLD-Link 18, 3, 11-13

**General Session - Child**
**Clinical and Professional Experience**

**SESSION 5.6**
**Providing a flexible communication aids service for people with MND: Voice Banking in a day**
Richard Cave (MND Association)

Voice Banking technology has moved on. We present our learning from voice banking over 200 people living with MND. These days voice banking is usually completed the same day, frequently in two hours start to finish and we provide remote support only to over half of our clients. We share our learnings and recommendations for how this can be done for your service.

**General Session - All Ages**
**Clinical and Professional Experience**

**SESSION 5.7**
**The Importance of Earnest Abbreviations (A Collaborative and Ongoing Approach to Achieving and Maintaining Optimum AAC Outcomes)**
Damhnait Ni Mhurchu (Central Remedial Clinic), Kathleen Kent (), Mark Street (Liberator)

The aim of this presentation is to demonstrate a

client-led but collaborative assessment and intervention process, leading to achieving optimum AAC outcomes for the user, and was equally a shared learning experience for the professionals involved, jointly presented by all three stakeholders.

Advice and recommendations from the AAC user has guided the product specialist in product development and further adaptations to software and increased the speech and language therapist's awareness of maximising features and system components.

The AAC user will provide a personal perspective on their AAC journey, AAC requirements, and the role and necessity of their device for communication and participation, and what guided their recommendations and suggestions around programming changes to support efficiency in communication.

The product specialist will outline the programme in use and how practical experience and real customer feedback has provided input into ongoing advances. Data collected from the Realize software allows analysis of the time and positive practical impact of the most critical feature in use on the communication programme, namely abbreviations.

The SLT will discuss briefly how the above underpins the theoretical framework in terms of using system components, particularly those impacting on functionality and availability, in the pursuit of communicative competency (Light 1989; Light & McNaughton 2014) for the user. Each perspective in the process is presented, led out by the AAC user, to represent the circularity and mutual benefits of the working relationships, as well as the reciprocity between theory and practice.

**General Session - All Ages**
**Personal Stories and Preferences**

**SESSION 5.8**
**Toms, Tommy and Thomas: Understanding outcome measures through case studies**
Vicky Styles (Bristol Communication Aid Service), Catherine Hale (CASEE)

Overview: The National Outcome Measures working party for specialised services have continued to work on use of TOM AAC. This session will present

Detail: The National Outcome Measures working party for specialised services was formed in 2016 at the request of the AAC Advisory Group with the aim of standardising the way in which AAC OM's are used. The group is represented by clinicians from the majority of the specialised AAC assessment centres in England and meet twice a year.

This year as a group, we have been able to evaluate what the data is telling us and act on this to improve outcomes for service users.

The session will:
- Briefly introduce everyone to our work to date
- Present broad brush/overview demonstrating that overall specialised AAC services are making a difference; especially for activity and participation
- Present shared trends from national data collected by specialised AAC services, including difference in outcomes for people with CP (children; adults new to power- based AAC; existing adult users) and those with acquired conditions (stroke; MS and MND)
- Present several case studies to illustrate in detail the data revealed by TOM-AAC when the person makes improvements following intervention; when intervention maintains skills where they would otherwise have been likely to decline and where intervention has not made an impact and why.

**General Session - All Ages**
**Clinical and Professional Experience**

# Platform Abstracts

## SESSION 5.9
## It's the thought that counts: One girl's path to independent language production
Paul Andres (Semantic Compaction Systems)

From the initial conception of an idea until that idea has been communicated to a partner, the user of SGD must master a complex series of steps. Only a few of these steps are specific to the use of an SGD. Most are natural aspects of language production. Nevertheless almost all of them are influenced in some way by the use of the device. Questions of what, where and when communication with an SGD takes place are regularly discussed. In this presentation we will consider exactly how the utterances of one child are constructed.

Selma is a 12 year-old German girl, who has used an Accent 1400 with eye-gaze for about 7 years. She currently uses an 84 location German MINSPEAK® program. The initial idea for this presentation arose from an experience that many clinicians will share. In conversation it became apparent that Selma was frequently constructing utterances using homophones even when the "correct" word-meaning was available. Initially these were regarded as being clever puns on her part, but the question arose as to whether they might be an aspect of natural language production as it is "refracted" through the prism of SGD use.

The automatic data-logging function, which creates a log of all device events, was activated in Selma's device. Using this log it was possible to identify numerous examples of individual utterances and to analyze them keystroke for keystroke. By examining her path to individual utterances, including corrections and apparent inefficiencies, it was revealed that these homophones were part of a broader range of self-taught phonological rules that Selma had developed without, or in fact in spite of, professional AAC intervention in order to become an independent communicator. Seemingly inefficient or unnecessarily complex paths became understandable from her point of view. Intervention and her vocabulary were adapted accordingly.

## General Session - All Ages
## Clinical and Professional Experience

## SESSION 6.1
## Comprehensive Literacy Instruction for Emergent Learners: Translating Theory into Practice
Maureen Donnelly (TobiiDynavox), Karen Erickson (University of North Carolina Chapel Hill), Tina Voizey (TobiiDynavox)

From the time we are born, every individual is in the process of becoming increasingly literate, just by virtue of living in a literate society. This process is ongoing; it occurs across the lifespan; and it includes individuals of all abilities, including those who use AAC. As they grow and accumulate experiences, children absorb the forms and functions of both language and literacy through daily exposure. These experiences and interactions are a critical as a foundation to later conventional reading and writing. Without this foundation, the ultimate ability to read and write conventionally will remain elusive (Geist, Erickson, 2015). For many reasons, including but not limited to access to the materials that support learning, beliefs about individual learning potential, and daily exposure to the experiences and instruction that facilitate growth, many individuals who use AAC fail to progress. Regardless of age, these students both require and benefit from literacy experiences and instructional routines that provide daily, cumulative exposure and exploration within all aspects of communication, listening, reading and writing. This presentation will identify and describe five key instructional routines that support the growth and development of emergent readers and writers of all ages. It focuses on delivering comprehensive instruction with an emphasis on application and use rather than skill mastery. This session will include a model for how to combine literacy and AAC instruction by implementing these routines. The presenters will then demonstrate one software solution that supports the needs of

emergent readers and writers and provides a framework for daily, accessible and comprehensive literacy instruction for individuals who use AAC.

Erickson, K. A., & Koppenhaver, D. A. (1995). Developing a literacy program for children with severe disabilities. The Reading Teacher, 48(8), 676-684.

Hatch, P., Geist, L., & Erickson, K. (2015). Teaching Core Vocabulary Words and Symbols to Students with Complex Communication Needs. Assistive Technology Industry Association.

Koppenhaver, D. A., Coleman, P. P., Kalman, S. L., & Yoder, D. E. (1991). The implications of emergent literacy research for children with developmental disabilities. American Journal of Speech-Language Pathology, 1(1), 38-44.

**Introductory Session - Child**
**Best Research Evidence**

**SESSION 6.2**
**Nurse training and AAC: What can nurses and AAC users teach us?**
Helen Paterson (Compass)

For individuals with communication difficulties, staying in hospital can be a distressing experience and they are three times as likely as those without communication difficulties to experience an adverse event (Bartlett, Blais, Tamblyn, Clermont, and Macgibbon 2008). Many are endangered by not having a method to communicate with nurses (Hemsley et al 2016). Yet we know that the use of AAC systems in interactions saves time and eases frustration with communication in hospital settings (Hemsley and Balandin 2014). Nurse training in AAC therefore needs to be developed and evidence-based.

Currently, nurses and patients are passive recipients of training with no previous research exploring their views on AAC training and what they feel would be effective.

The objective of this research is to develop a nursing staff training programme in AAC based on the views of AAC users and nursing staff in a rehabilitation and long-term care hospital. The study has included a literature review exploring the topic of training communication partners in AAC. The mixed methods research undertaken includes focus groups with nursing staff using a Talking Mats wall to gain their views on current training and their wishes for future training. AAC users will be interviewed both face to face and via email to gain their views on nurses' use of AAC with them. The data will then be analysed and used to develop a training package. Training will be evaluated using surveys to nurses both pre and post training, as well as interviewing the AAC users following the nurse training.

This talk will cover the literature review, current practice in AAC nurse training at the the Royal Hospital for Neuro-disability and this research which is currently underway. Preliminary results will be described.

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.

Hemsley, B., and Balandin, S., (2014) A Metasynthesis of Patient-Provider Communication in Hospital for Patients with Severe Communication Disabilities: Informing New Translational Research. Augmentative and Alternative Communication 30 (4) 329-343 Hemsley, B., Georgiou, S.H.,Rollo, M., Steel, J., and Balandin., S., (2016) An integrative review of patient safety in studies on the care and safety of patients with communication disabilities in hospital Patient education and counselling 99 501-511

**General Session - Adult**
**Best Research Evidence**

# Platform Abstracts

**SESSION 6.3**
**What we built with £45,000 from Comic Relief: a heroic adventure in three acts with guest appearances from snotty crying, legal threats, and occasionally useful bits of AAC knowledge.**
Joseph Reddington, Kate McCallum

Last year Comic Relief gave us £45,000 to make copyright-free resources for AAC. We made what we thought would work, interviewed some AAC VIPs and then found out that we'd built the wrong thing. So we made them again. We repeated that process a couple of times and rewrote The Open Voice Factory (our free open source AAC-software) completely from scratch. In this talk we'll show you the software and pagesets we made. We'll talk about the many ways we messed up. We'll talk out being on the wrong end of fraud, being prepared to bankrupt our own organisation, crying down the phone at regulators, and about how it's easier to talk to Lee Ridley than it is the RCSLT. This talk is for anyone who wants to share their work, anyone who has written a pageset, and anyone who's ever been enraged by red tape.

**General Session - All Ages**
**Personal Stories and Preferences**

**SESSION 6.4**
**When to Introduce AAC? - At What Stage of Communication Development? Irene Leber's Visual Guide: 'Assessing and Supporting Communication'**
Diana Mountain (Beaumont College, Ambito Education), Irene Leber (Sonderpaedagogik)

Working in AAC, we often ask the question, 'At what point in communication development is it relevant to introduce AAC?'

The visual guide 'Assessing and Supporting Communication' (ASC) by Irene Leber, offers a systematic overview of the support strategies and potential AAC approaches for each stage in communication development: from the initial steps which support a person's early understanding, to the introduction of a complex communication system.

The guide has been available for several years in German as a Foldable Poster with Guidance Notes, Record Sheets and the author's Situational-Circle planning tool. These tools remain popular with educators and therapists in German-speaking countries and have recently been updated and are now available in English!

The Poster covers communication development from pre-intentional communication to verbal communication. It gives examples of behaviours to observe at each stage of development, and allows profiling of a person's communication skills.

The guide can be used when working with children or adults and is most useful for assessing those non-verbal individuals who cannot respond in formal assessments or demonstrate their understanding through formal means, although the author clearly states it is NOT designed for those with Autism, who may have a spiky developmental profile.

The ASC Poster is also useful in discussions with colleagues and families, especially when wishing to agree communication targets, interventions or relevant support strategies for an individual.

This presentation will explain the ASC Poster's structure, the reason and evidence-base for its development, and give examples of its use with children in a kindergarten and a school setting. The presenter is Diana Mountain, SaLT, who translated the guide into English with support from the author, Irene Leber, AAC Specialist Teacher in Germany, who is unable to attend.

Kommunikation einschätzen und unterstützen, Förderdiagnostik Unterstützte Kommunikation, Leber I. (2012)

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 6.5
## Increasing the use of Core Words in a special school setting and at home: Challenges and successes!

Nicky Ford (NHS Lothian & KeyComm), Annie Welsh (NHS Lothian & KeyComm)

Do YOU LIKE Core Words? Do YOU WANT to know MORE about how we enhanced the use of Core Words at our school, and supported families with this at home?

Oaklands School in Edinburgh is a school for children with complex Additional Support Needs. Core Words are high frequency, powerful, useful, flexible words that we all use everyday in our language (Boenisch & Soto, 2015). During the 2018-19 school year, we embarked on a whole school Quality Improvement project, to develop the use of Core Words with our pupils at school and at home. We wanted to increase modelling of Core Words with symbols, AAC devices and signs. We carried out a pilot with the Core Word "more" in May 2018 and gathered feedback from staff and families. We then planned a year of different interventions to enhance and support the use of Core Words across the school and at home, including…
- training for staff
- workshops for parents/carers
- monthly resource packs for class teams
- online videos for families
- posters and symbols around the school
- postcards for families to use at home
… We would like to share these resources and the outcomes of the project. Come along to our talk to find out which resources worked best, and which didn't; what outcome measures we used; and find out how our SLT colleagues working in the community across Edinburgh are implementing Core Words with a wider variety of children in different settings.

Almirall, D., DiStefano, C., Chang, Y. C., Shire, S., Kaiser, A., Lu, X., … & Kasari, C. (2016). Longitudinal effects of adaptive interventions with a speech-generating device in minimally verbal children with ASD. Journal of Clinical Child & Adolescent Psychology, 45(4), 442-456.

Banajee, M., Dicarlo, C., & Buras Stricklin, S. (2003). Core vocabulary determination for toddlers. Augmentative and Alternative Communication, 19(2), 67-73.

Boenisch, J., & Soto, G. (2015). The oral core vocabulary of typically developing English-speaking school-aged children: Implications for AAC practice. Augmentative and Alternative Communication, 31(1), 77-84.

Cafiero, J. M. (2001). The effect of an augmentative communication intervention on the communication, behavior, and academic program of an adolescent with autism. Focus on Autism and Other Developmental Disabilities, 16(3), 179-189.

Siller, M., & Sigman, M. (2002). The behaviors of parents of children with autism predict the subsequent development of their children's communication. Journal of autism and developmental disorders, 32(2), 77-89.

## General Session - Child
## Clinical and Professional Experience

## SESSION 6.6
## Powerful insights from Adult AAC users that challenge how we practice AAC

Willemijn Wetzels (AssistiveWare)

This presentation will share key findings and insights from a research project aiming to better understand not only the needs of adult AAC users but also their perspective on AAC. After conducting a comprehensive literature review, we realised how little specific support and knowledge there is. Following this we conducted interviews with a range of AAC users and their supporters, including users with developmental disabilities and Autism, acquired physical disabilities, aphasia, and traumatic brain injury. The insights and knowledge gained from the group of AAC users changed many assumptions we had made about AAC.

The presentation will outline some of the key

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factors essential for taking a person-centred approach to supporting AAC users. It will highlight the importance of social media in AAC and how it should and can be an essential communication tool. Valuable insights about part-time AAC use will be discussed. A broad range of essential topics to plan and support for all AAC users emerged, eg. planning for communication in medical settings, removing barriers to communication, AAC mentorship, etc. Some practical checklist tools will be shared that can be used to make plans and support AAC users more effectively.

Finally, we discuss how the valuable insights from AAC users should change our own thoughts about how we can better support ALL AAC users, including those who are still learning to use AAC.

Beukelman, Ball, & Fager (2008) An AAC personnel framework: adults with acquired complex communication needs. Augmentative & Alternative Communication, 24(3): 255:67 Paterson, H. (2017) The use of social media by adults with acquired conditions who use AAC: current gaps and considerations in research. Augmentative & Alternative Communication, 33(1), 23-31.

Mirenda, P. (2008) A back door approach to autism. Augmentative & Alternative Communication. 24(3), 220-234.

Light, J., McNaughton, D., Beukelman, D., Koch Fager,  S., Fried- Oken M.,  Jakobs, T. & Jakobs, E. (2019) Challenges and opportunities in augmentative and alternative communication: Research and technology development to enhance communication and participation for individuals with complex communication needs, Augmentative and Alternative Communication, DOI: 10.1080/07434618.2018.1556732

**General Session - All Ages**
**Clinical and Professional Experience**

**SESSION 6.7**
**Using eye gaze technology as an assessment tool to inform vision use with learners who have complex needs and visual impairments.**
Beccy Timbers (Seashell Trust), Sarah Keddy (Seashell Trust)

Eye gaze technology has been used for various different functions in recent years including increasing individual's accessibility to their environment and developing communication. Following a generous donation of an eye gaze system we considered how to use this technology in a complex needs setting. It was not felt that any of the children or young people that we supported would benefit from this type of technology as a communication system but were keen to utilise this technology in a practical way.

Many of the cohort at the setting have sensory impairments affecting vision, hearing and many with dual sensory loss. Developing effective communication systems for this population can be challenging as many 'traditional' interventions require individual adaptations to ensure that they are accessible to them.

The eye gaze system enabled us to record their eye movements when watching 'preferred' video's or participating in on screen activities. These recordings gave information about each of the individuals about where on the screen they were looking, for example, did they only focus on the top of the screen, the left side? Did they track moving items and at what point did they pick up the image on the screen? It also enabled us to identify specific colours that drew their gaze more. How we used this information to develop resources and communication systems will be discussed through individual case studies.

Some interesting discoveries were made, particularly in terms of historical 'preferred' clips and video's and we reflected on our practice as a setting to ensure that more choice is given. We were also able to get a clearer idea of what functional vision each individual had. This was

reported back to key staff to ensure that visual items were presented correctly to the learners during the day.

**General Session - All Ages**
**Clinical and Professional Experience**

### SESSION 6.8
**AAC and GDPR - What should organisations be doing?**
Fil McIntyre (Beaumont College / TechAbility)

Development of AAC usage and skills is often supported by organisations which provide paper and electronic devices for people to utilize while they are being assessed or awaiting funding. As the device belongs to the organization it is subject to The General Data Protection Regulation (GDPR).

AAC devices are likely to contain data about the AAC user and others. A key example of this data is photographs and names. Any loss of data must be reported to the Information Commissioners Office.

This session will present the approach taken by Ambito Beaumont College to ensure young people have access to the communication they need while minimising the risks of data loss. Also discussed in the session will be:
- The GDPR as a positive – does it force consideration of the data issue?
- Does the human right to say someone's name override the GDPR?
- Communi-gate - covering up is worse than fessing up!

Organisations which provide AAC can use this session to discuss their issues with the GDPR and possible resolutions to ensure regulation requirements are met.

https://ico.org.uk/for-organisations/report-a-breach/
https://eugdpr.org/

**General Session - All Ages**
**Clinical and Professional Experience**

### SESSION 6.9
What do we do with the children with ASD?
Alison Battye (Kent and Medway CAT Service)

Students with ASD sit uneasily within the criteria for referral to a Specialised AAC Assessment Hub. What do we do with them if they do not tick all of the boxes? If they cannot demonstrate (before having experience of using a high-tech device) that they understand the purpose of a communication aid? If they are not motivated to use a low-tech aid? Do we leave local services to deal with them? Should they stick with PECS?

We are Kent and Medway CAT Service, a Regional AAC Assessment Hub, and these questions have been troubling us. We decided to make ASD a focus of our Service Development Plan. We set out to find out:
- which ASD students meet our criteria? Can we refine the questions we ask at referral in order to assign them to the right pathway?
- what can we offer for these students if they do not meet the referral criteria for full assessment?
- which factors predict success with high-tech AAC? (communication environment, partners, vocabulary package, peer group, individual personality/traits)
- can we support local services and schools to get a student to the stage where they are ready for assessment from the Hub Service?
- for those student who do not meet our criteria, can we support local services to move a student on from simple requesting? In the words of Janice Light, 'there is more to life than cookies!"

**General Session - Child**
**Clinical and Professional Experience**

### SESSION 7.1
**Quick guide: AAC Vocabualries, and a free pen!**
Mark Street (Liberator Ltd)

This is a great opportunity to learn about the exciting range of vocabularies available from

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Liberator. We offer a wide selection of text or symbol based (Widgit/SymbolStix and PCS) vocabularies, suitable for both children and adults. This session will explore a range of AAC vocabularies including; easyChat, WordPower, LAMP Words for Life, Unity, Grid 3 and useful resources and ideas for implementation. We will also explore the Accent and "Chat" high-tech devices.

A raffle prize for those who attend with a chance to win a LAMP Words for Life app code with training and of course a free pen!

**General Session - All Ages**
**Exhibitor Presentation**

**SESSION 7.2**
**Introducing Reading Avenue: An Accessible and Comprehensive Literacy Instructional Program**
Tina Voizey (Tobii Dynavox), Maureen Donnelly (Tobii Dynavox), Alice Langley (Tobii Dynavox)

Evidence suggests that students who use AAC benefit from instruction that leverages the transactional nature of literacy, language, and communication. This session will address the learning profiles, needs, and challenges of students who use AAC and how best to deliver instruction that supports their literacy, language, and communication development in ways that are integrated, meaningful, and comprehensive. We'll look at five instructional routines that promote positive outcomes, all of which are the basis of our newest Boardmaker Instructional Solution; Reading Avenue.

Reading Avenue is an accessible, comprehensive literacy instructional program that supports all beginning readers and writers regardless of their communication skills as they learn to read. Developed in partnership with the Center for Literacy and Disability Studies at University of North Carolina, Chapel Hill, which is headed by Karen Erickson, it is designed to support all learners, in both general and special educational classrooms. We'll look at how Reading Avenue provides a roadmap for implementing instructional routines in predictable

ways, as well as a methodology for integrating them so that learners have daily exposure to all components of early literacy instruction.

**General Session - All Ages**
**Exhibitor Presentation**

**SESSION 7.3**
**A 'No-tech' round-up from Ability World: resources for communication, choice-making, access and learning support**
David Weatherburn (Ability World Ltd)

Ability World's 'no-tech' product range has expanded considerably during 2019.
There are new versions of our popular communication books and portable/wearable aids, new styles of activity / time planning schedule, new switch / AT mounts, new iPad carry bags and more ...

'No-tech' resources are often a vital part of AAC strategies used to support communication, whether you are working with people who are experiencing PMLD or SLD, learners who are just starting to develop their communication skills en-route to a higher-tech AAC system, or adults with acquired communication conditions.
We are going to look at some of our new and more popular resources in this session, which can be used on their own or alongside low-tech and high-tech AAC systems.

A primary focus will be on their practical use to support communication, choice-making, literacy, learning and time planning for people of all ability levels.

**General Session - All Ages**
**Exhibitor Presentation**

# Platform Abstracts

## SESSION 7.4
**Literacy Learning Support for Students who rely on AAC and/or have complex needs**
Marion Stanton (SCandLE)

CandLE is a not-for-profit organisation serving the learning and communication needs of students across the UK who rely on AAC. Sales@CandLE is a commercial company and a member of the CM Suppliers network. Our two companies have combined to provide free training, support and resources alongside commercial options.

This session tell participants about our literacy program developed through many years of practice in the successful teaching of literacy to students who rely on AAC. Our program is grounded in research having taken inspiration from many, well researched programs such as Four-Blocks from the USA and Read Write Inc. in the UK. We have tailored our program to the needs of the UK national curriculum so that students in mainstream and special schools can have outcomes that the UK Departments for Education advocate.

Our literacy program is not just about the words you read or what you can spell or write. It gets to the heart of how students develop their thinking and, through our assessment battery, how we can find the specific literacy level at which students needs to enter the program. It ranges from emergent literacy, where we have no idea whether the student has the potential to develop literacy skills but would like to find out, through conventional literacy development and beyond to sophisticated access to the mainstream curriculum at a speed and a level than aims to stop the student who relies on AAC from being left behind.

Our 'Phonics for All' program, available since 2017, supports the development of spelling and comprehension. We will also be introducing our new 'Leap to Literacy' program which helps students to develop silent reading with comprehension as well as engaging in conversations about what they read.

**General Session - Adult**
**Exhibitor Presentation**

## SESSION 7.5
**Introducing simPODD, a new integrated PODD solution for iPad**
David Niemeijer (AssistiveWare)

PODD, Pragmatically Organized Dynamic Displays, is one of the most well-known AAC vocabularies, developed over the last 25 years by Gayle Porter and colleagues. More than "just" a vocabulary, PODD is an approach to AAC intended to make AAC vocabulary for communication available at any time, to individuals who have a wide variety of access methodologies. To achieve this, it is recommended that electronic PODD users also have access to an appropriate, customizable, non-electronic PODD communication book. Not every situation lends itself to using an electronic communication device.

Up to now, English PODD users have had to use different products to make changes to electronic and print vocabularies. Customizing vocabulary to suit individual needs can be challenging to sync between their print book and electronic PODD.

In this session we will take a look at the first integrated English PODD solution that brings electronic and print books together. Unlike other electronic PODD solutions, this new iPad app was designed exclusively for PODD. Here, PODD is not a vocabulary add-on for an existing AAC app. It is its own app. Similarly, the integrated PODD book printing and editing features were designed exclusively with the needs of PODD in mind. The result is a seamless, smooth and fast experience that will facilitate the ease of keeping electronic and print books up-to-date and in-sync.

This app also represents a good option for anyone wanting to use the PODD language organization with SymbolStix representation. During the session, the presenter will introduce

# Platform Abstracts

the attendees to the features of the integrated PODD app, the individualizing features of customizability, the printing options, and the unique frameworks of keeping both electronic and printed PODD books synchronized.

**General Session - All Ages**
**Exhibitor Presentation**

## SESSION 7.6
### Introducing Predictable 6
Rebecca  Bright (Therapy Box Ltd)

The session will provide an overview of Predictable 6 including new features, as well as exploring head tracking, voice banking, message banking.

**Introductory Session - All Ages**
**Exhibitor Presentation**

## SESSION 7.7
### Personalization of the EyeControl Product to Improve User Experience
Laurie Silver (EyeControl), Or Retzkin (EyeControl), Tania Suares (EyeControl)

The EyeControl is a wearable, screenless, assistive communication device, which enables locked-in individuals to communicate using eye movements alone. The AI technology enables personalization to each user's eye movements and eliminates the need for calibration.

The EyeControl is CE marked, FDA listed, and ISO certified. The innovative technology is recognized and supported by government health authorities, including the Israel national "Health Basket", the UK NHS Supply Chain and Medicare/Medicaid in the USA.
The EyeControl is constantly undergoing evolution based on individual customer needs; product personalization plays a unique role in improving overall user experience. With the goal of making the device universally accessible, the company uses knowledge gained through working with patients as a catalyst for product

updates and modifications. A challenge for one individual ultimately manifests in increased EyeControl usability for the masses.

The EyeControl was originally developed with a left eye tracking camera; subsequent to meeting users with limited left eye movement, who maintain right eye control, a mirrored model was created. Additionally, it became obvious that every user has varying limitations in their range of eye movements; therefore, the EyeControl was adapted for a range of up to five gestures (up, down, left, right, blink), or as few as one. This update was particularly relevant for individuals, who previously couldn't use screen-gazing devices for their communication needs. Further customization options offered via each user's personal web portal also evolved from customer needs.

In this session we introduce the EyeControl's unique features through the personal stories of our users, pinpointing how their special needs contributed to product development and enhanced the user experience platform. EyeControl empowers patients and restores self-expression; we will explain how the EyeControl works and open discussion about new applications under development.

**General Session - All Ages**
**Exhibitor Presentation**

## SESSION 7.8
### Rehadapt Mounts, Specialist Switching, Controls & Drivedeck
Esther Dakin-Poole (Smile Smart Technology)

Smile will present the Rehadapt range of mounts and introduce key products from both their in-house range including Flexirods and Softytops and invite questions on mounting and switch and control solutions.
Smile will demonstrate a Drivedeck. A motivational device for assessing and teaching switch and control access.

Rehabilitation centres and schools primarily use Drivedeck for developing skills through the

powerful motivation of movement and reducing costs by facilitating early accurate assessments. With focus upon the use by colleagues at centres of excellence, the Drivedeck will be introduced along with its key functions, motivational outcomes and educational benefits in today's progressively interdisciplinary AT/AAC landscape.

**General Session - All Ages**
**Exhibitor Presentation**

## SESSION 7.9
### Your world on your device
Dougal Hawes (Smartbox Assistive Technology)

Introducing new apps in Grid, connecting people in the modern world.

One of the most significant cultural changes of the past 50 years has been driven by the use of smartphones, tablets and apps. Imagine spending the next 24 hours without yours… How would you listen to your music, wish a friend happy birthday on their Facebook page or check your Whatsapp messages? Most people start to feel quite nervous at the thought of going offline. So how can we do more to support AAC users to live and participate in this new world?

In this talk we will explore the Accessible apps in Grid software that are available to AAC users on their device. We will also demonstrate how these apps can be operated by any kind of alternative access.

At CM2019 we will be launching all-new Facebook, Spotify and Netflix apps. We will see these in action and share a deeper understanding of how they work.

**General Session - All Ages**
**Exhibitor Presentation**

## SESSION 8.1
### Comprehensive Literacy Instruction for Students with Beginning Conventional Skills: Translating Theory into Practice
Maureen Donnelly (TobiiDynavox)

The highest educational priority of students who use AAC should be literacy since it is the primary method by which these individuals communicate (Erickson, 2017). Conventional reading and writing allow individuals with language impairments to communicate precisely and autonomously. Without the ability to read and write, the ability to express who you are, what you think, and how you want to contribute to the world remains elusive.

Increasingly, there is consensus that all students can learn to read and write, and that comprehensive instruction is the evidence-based approach by which students do so. This approach to instruction has been proven across ages, abilities and even cultures. As a result of daily independent and supported explorations within all domains in reading, writing, listening, and communicating, new skills and understanding emerge. These may include engaging and interacting with others, identifying most of the letters or the alphabet, and demonstrating a beginning understanding that print carries meaning. This cohort of students benefits when they have access to instruction that provides guided and independent practice in decoding and spelling words, reading with comprehension and fluency, and writing using letters and words to communicate with others. This presentation will offer an instructional framework for supporting the literacy and communication needs of students who use AAC who have some independent skills yet still require guided support and practice from more knowledgeable others. It focuses on delivering comprehensive instruction with an emphasis on application and use rather than skill mastery. This session will include a model for how to combine literacy and AAC instruction by implementing five key instructional routines. The presenters will then demonstrate one software solution that provides

# Platform Abstracts

a methodology for delivering daily, accessible and comprehensive literacy instruction to students who use AAC.

Erickson, K. A. (2017). Comprehensive literacy instruction, interprofessional collaborative practice, and students with severe disabilities. American journal of speech-language pathology, 26(2), 193-205.

Erickson, K. (2003). Reading comprehension in AAC. The ASHA Leader, 8(12), 6-9.

Koppenhaver, D. (2000). Literacy in AAC: What should be written on the envelope we push?. Augmentative and Alternative Communication, 16(4), 270-279.

**Introductory Session - Child**
**Best Research Evidence**

## SESSION 8.2
## Meeting the Complex Communication Needs of Patients in Acute Care

Tami Altschuler (New York University Langone Medical Center)

The inability to communicate in the acute care/intensive care setting can be a terrifying experience but may also negatively impact patient care, recovery, and satisfaction. The need for bedside augmentative and alternative communication (AAC) assessments and interventions in the acute care/intensive care hospital settings, across the continuum of a patient's care, has been recognized as an essential component for positive patient outcomes. The literature shows that reduced patient-provider communication threatens patient satisfaction scores, length of hospital stay, active patient participation, discharge compliance, quality of care, personal well-being, and contributes to sentinel events. Therefore speech-language pathologists (SLPs), AAC specialists, and hospital employees have a unique role and responsibility in addressing the needs of these patients with communication vulnerabilities. Still, many hospitals may not have action plans in place to best support the needs of these patients.

This session offers practical education to empower speech-language pathologists and other healthcare professionals to champion patient-provider communication change at their hospital. Participants will gain an increased awareness of their role within the inpatient setting and a sense of urgency to begin implementing communication supports hospital wide. The presenter will review current practices, recommendations for bedside assessment and intervention, and common barriers that may challenge efforts to develop an inpatient AAC service delivery program. Participants will be encouraged to participate in an interactive discussion regarding potential action plans which for resources, evidence based practice, practical strategies for gaining acceptance, and suggestions for shifting culture and attitudes based on histories of successful implementation. Provision of communication enhancement in the acute care setting is paramount to patient outcomes and patient satisfaction/experience, and the ability to participate in their own care and decision making.

Blackstone, S. W., Beukelman, D.R., & Yorkston, K.M. (2015). Patient-Provider Communication: Roles for Speech-Language Pathologists and Other Health Care Professionals. San Diego: Plural Publishing.

Cohen S, Sprung C, Sjokvist P, Lippert A, Ricou B, Baras M. et al. Communication of end-of-life decisions in European intensive care units. Intens Care Med 2005; 31(9), 1215-1221.

Costello, J.M., Patak, L., & Pritchard, J. (2010). Communication vulnerable patients in the pediatric ICU: Enhancing care through augmentative and alternative communication. Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary Approach, 3, 289-301.

Happ MB, Swigart VA, Tate JA, Hoffman LA, Arnold RM. Patient involvement in health-related decisions during prolonged critical illness. Res Nurs Health 2007;30(4):361-72.

**General Session - All Ages**
**Clinical and Professional Experience**

# Platform Abstracts

## SESSION 8.3
### Amy Jamson: How A.A.C. has introduced me to a world full of fantastic people
Amy Jamson

My name is Amy. I am 26 and I have cerebral palsy which means I can't walk or talk but that makes me special.

I have always made my presence felt and my feelings known. Even when I was very small and had no idea about reading or writing I didn't let that stop me enjoying life.

Although I was quite happy with non-verbal communication a very special speech therapist decided I could do better and took me, and my family, in hand.

Everybody had homework and that kept my family involved which was really important.
I would like my presentation to tell you about the 'communication' journey I have been on since my first meeting with that speech therapist 24 years ago.

Initially it wasn't easy as I couldn't actually read or write - that didn't click properly until I was 14. Before that I was using a mix of paper based and electronic communication devices, but they were still symbol based.

Once I had learnt to read and write I developed an interest in word processing and PowerPoint slide presentations which meant I could 'talk' to the Board of our local Community Healthcare Trust, Healthcare professionals, Speech and Language undergraduates, Teachers and of course children.

How I prepare these talks/presentations, the equipment involved, how it has been adapted to my needs (and how I have adapted) will all form part of my presentation.

Each step has brought me in contact with new people and I have had to change my style but not my personality.

I like people and try to break down the disability barrier by demonstrating that we all use non-verbal communication through gestures, facial expressions etc.

Thank you
Amy

**General Session - Adult**
**Personal Stories and Preferences**

## SESSION 8.4
### AAC – who "owns" what I have said when I die?
Hannah Griffiths (Chailey Communication Aid Service), Helen Baines (Chailey Communication Aid Service)

Communication software offers the user different features to make "talking" using alternative access methods as quick, easy and personalised as possible. These features include the ability to save phrases and recall previously used utterances, so minimising the effort and maximising the speed of communication. However, recording of such information can cause problems.

Sussex Community NHS Foundation Trust were faced information governance questions when Chailey Communication Aid Service had been asked to provide a family member with the messages their loved one had written on their VOCA following the passing away of the AAC user. What at first seemed like a regular request soon became more complicated with legal advice having to be sought.

Other features of communication software designed to benefit the user also raise questions such as voice banking.

The aim of the presentation is to highlight this area of information governance and start a discussion on this potentially sensitive subject.

**Specialist Session - All Ages**
**Clinical and Professional Experience**

# Platform Abstracts

## SESSION 8.5
### Opportunities for Core - bringing core vocabulary into the classroom through reading and play
Kerry Vacara (Smartbox Assistive Technology)

In this session we will share lots of practical ideas for integrating core vocabulary more widely into classroom instruction, to support AAC learning and literacy development. We will specifically look at ways to model, and incorporate opportunities to learn core, during reading activities.

Ideas from this session will be applicable for use across a wide range of resources. We will explore a core vocabulary AAC system and how to build the learning of core into all aspects of the classroom.

To support this, we will look at new technology such as Look to Read from Smartbox, in addition to both high and low tech resources. We will also cover useful, free resources so you can get started straight away:
- Tar Heel Reader created by The Center for Literacy and Disability Studies, UNC
- Simple AAC framework created by Smartbox
- Project Core modules created by Dr Karen Erickson and Dr Lori Geist

We will support you in how you can use these materials to form a full learning experience, enhancing and consolidating the skills learners gain through reading onscreen books. And answer questions such as 'How do we increase opportunities for learning core vocabulary?' www.project-core.com

Shared Reading: Focus on Interaction, Jane Farrall 2015, www.janefarrall.com
Literacy for All Instruction/Shared reading, Literacy Instruction for Students with Significant Disabilities, http://literacyforallinstruction.ca
Literacy for All Instruction/Symbol-based Communication, Literacy Instruction for Students with Significant Disabilities, http://literacyforallinstruction.ca

**Introductory Session - Child**
**Clinical and Professional Experience**

## SESSION 8.6
### Providing a flexible communication aids service for people with MND: how we provide communication apps for short-term loan on a person's own iPad/iPhone and provide loan iPads that need no AppleID and minimal setup
Richard Cave (MND Association)

Loaning iPads and apps for communication has moved on. We present how we now 'push' communication apps to iPads or iPhones and then 'pull' them back when no longer needed (or swapped for another more appropriate app). The same app is then available to another person with MND on another iPad or iPhone and no personal data is shared. Recycling apps in this way helps to ensure we provide a flexible person-centred service, maximising the limited funds we have available as a charity. Communication apps are loaned in the same way onto a person's own iPad or iPhone too – people often prefer this as they can use the device they already know. We show you how this is done

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 8.7
### The AAC Language Lab in Action
Jane Odom (AAC Language Lab), Emily Gabrielle (Liberator)

Once a device is secured, it is our job to create a comprehensive plan of action for teaching a language system to a student. In this session we will look at real classrooms and show how to implement a plan to teach language based on research and specific data.

When considering the needs of the student, Drager, Light and McNaughton, 2010, purpose 8 areas of considerable developmental risk for those with complex communication needs: A. functional communication skills, B. speech development, C. language development, D.

cognitive/conceptual development, E. literacy development, F. social participation, G. access to education, and H. overall quality of life. Given these areas of risk, it is important to know where each student presently performs across these domains. From there, appropriate AAC system decisions and intervention goals can be determined.

Determining the current language level of a student is imperative in an evaluation as well as when teaching a student how to use their AAC device. The new website has an online Language Screener that can be used by anyone interacting with a student to determine where to start and how to progress.

The data from this evaluation is then used to support a student is the classroom. We will explore this process by highlighting activities done in that classroom. Low tech boards for modeling and literacy tools will also be discussed. Techniques including adaptive books, carryover at home, game and activities from the AAC Language Lab will be included. Supporting student use of AAC needs to be thoughtfully planned and executed to help individuals achieve success. AAC support includes considering the needs of the students, the design of the learning environment, and the practices of the classroom staff. Through demonstration and examples of actual classrooms of students who use AAC, these three areas will be discussed.

Drager, Light and McNaughton, 2010

**Introductory Session - All Ages**
**Clinical and Professional Experience**

**SESSION 8.8**
**An 'It takes a Village' Journey – Multi-agency Working, Building Foundations for Successful Provision of Voice Output Communication, with Eye Gaze Access**
Andrea Bell (KM CAT Team), Friedl vanVuuren (KM CAT Team)
As a service, our ultimate aim is to provide technology, to enable service users to

communicate and access/demonstrate learning. Since eye gaze technology for communication became more widely available, the KM CAT Service has considered this as an option, in multidisciplinary assessments with service users with complex physical access needs.

We have many schools and individuals in our area that have access to leisure activities, using Eye Gaze as an access method - schools have supported this process through the purchase of equipment. We have been able to provide support to schools interested in developing the use of this access method for communication. Through training, mentoring and support, schools were better informed as to the building blocks that lead to CYPs successfully using eye gaze as an access method, to support communication. When CYPs were then referred in to the KM CAT service, the CYP had completed the foundation work required before meeting specialised services' criteria for provision, allowing our service to successfully support CYPs through assessment and provision processes. In this specific case study, there were many factors that contributed to this success. Through the provision of an assessment loan device, (Tobii I-12+) weekly support into school, clear guidelines for school and local therapy staff related to daily implementation of the trial, and a tight review of evidence produced through the daily sessions with TA (including use of heatmaps), we were able to gather the evidence that the CYP was using the loan device for communication. The heatmaps were crucial in providing objective information that the CYP, albeit with slower processing speed, was responding to questions appropriately.

We would like to discuss in more detail, the factors that played a role in successfully determining the CYP's purposeful communication, where previously the evidence was not clear enough to support provision.

Bowen, C. (1998). Ages and Stages Summary: Language Development 0-5 years. Retrieved from http://www.speech-language-therapy.com/ on 28/03/19

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Charlier, J., Vermandel, S. and Defoort-Dhelemmes, S.  Adaptation of eye gaze communication aids for users with « visual » problems.  Retrieved from www.wiki.cogain.org/images/8/85/Visual_problems.pdf on 28/03/19
Sargent, J., Clarke, M., Price, K., Griffiths, T. and Swettenham, J. (2011) Use of eye-pointing by children with cerebral palsy: what are we looking at?

Lenz, S. and Nadene Krack, N.  ACETS Eye gaze technology screening checklist
The Tobii eye gaze learning curve.  Retrieved from www.tobii.com/en/assistive-technology/global/education/eye-gaze-learning-curve/ on 28/03/19

Stokes TS, Roden P. Establishing the key components of an eye gaze assessment for a child with a severe neurodisability using nominal group technique. Edorium J Disabil Rehabil 2017;3:62–68.

**General Session - Child**
**Clinical and Professional Experience**

**SESSION 8.9**
**Evaluation of the Impact of Functional Communication Training on Behaviors of Concern for students at a Non-Maintained Special School**
Kate Duggan (The Seashell Trust)

This presentation will discuss a service evaluation relating to the use of a Functional Communication Training approach (FCT). Behaviours of concern demonstrated by individuals with Autism Spectrum Conditions (ASC) frequently have a communication function. When contributing to Positive Behaviour Support (PBS) plans, Speech and Language Therapists and other professionals working with individuals with ASC need to identify alternative communicative behaviours which are equally reinforcing as the existing behaviours of concern. FCT (Carr and Durand, 1985) aims to reduce behaviours of concern by teaching more effective ways to communicate. It requires consideration of the function of the behaviour of concern followed by identification of appropriate communicative alternatives. Successful implementation of FCT is dependent on an effective 'response match'. The new way of communicating must be equally as effective as the behaviour previously used and require the same amount, or less effort from the individual. It must also be understood by communication partners and appropriate to communicative contexts.

A structured protocol for FCT as described by Martin et al (2005) was used with students attending a non-maintained special school. The case studies were described and analysed using a response match framework (Durand, 1993) to evaluate the effectiveness of FCT in reducing behaviours of concern.

The service evaluation demonstrated that FCT can be used as part of a PBS approach for students within this setting. Case studies reviewed demonstrated 'response success' in that the desired response was gained from the new behaviour. However, in some instances the new behaviour could not be consistently understood across all communication partners, reducing 'response recognisability'. Increased physical or cognitive difficulty in employing the new communicative behaviour reduced the 'response effectivity'. Successful use of 'thinning schedules of reinforcement' (Durand and Moskowitz, 2015) taught students to tolerate a delay to reinforcement once the new communication behaviour was learnt.

Carr, E. and Durand, V. (1985) 'Reducing behaviour problems through functional communication training'. Journal of Applied Behaviour Analysis. 18(2) pp. 111-126.
Durand, M. (1993) 'Functional communication training using assistive devices: effects on challenging behaviour and affect'. Alternative and Augmentative Communication. 9 (3) pp.168-176.

Durand, M. and Moskowitz, L. (2015) 'Functional Communication Training: Thirty Years of Treating Challenging Behaviour'. Topics in Early Childhood Special Education. 35(2) pp. 116–126.

Martin, C., Drasgow, E., Halle, J. and Brucker, J. (2005). 'Teaching a child with autism and severe language delays to reject: Direct and indirect effects of functional communication training'. Educational Psychology. 25. pp. 287-304.

**Specialist Session - All Ages**
**Clinical and Professional Experience**

### SESSION 9.1
### International Guidelines for Management of Communication in Individuals with Rett Syndrome

Gillian Townend (Rett UK, Rett Expertise Centre Netherlands-GKC & Maastricht University Medical Centre), Theresa Bartolotta (Dept of Speech-Language Pathology, Monmouth University, NJ, USA), Anna Urbanowicz (Social and Global Studies Centre, RMIT University, Melbourne), Helena Wandin (Swedish National Centre for Rett Syndrome and Related Disorders; and, Department of Public Health and Caring Sciences, Uppsala University, Sweden), Leopold Curfs (Rett Expertise Centre-GKC, Maastricht University Medical Centre)

Background: Difficulties with communication have a profound impact on the lives of individuals with Rett syndrome and their caregivers. Many families report difficulty accessing appropriate and timely information and services from professionals with expertise in the field of communication and Rett syndrome. To address this need, a 2-year project was funded by Rettsyndrome.org to develop international guidelines for assessment, intervention and long-term management of communication in individuals with Rett syndrome. Methods: Led by an international consortium, guidelines were developed by combining available evidence with expert consensus. Following systematic reviews of literature, international surveys were conducted with communication professionals and caregivers to capture lived experience of Rett syndrome. From analysis of the combined results, statements were extracted and reviewed in a 2-stage modified Delphi process by an expert panel of experienced professionals and caregivers. All statements that reached a pre-set threshold of >70% agreement were incorporated into the final guidelines. Results: More than 300 articles were analysed and 120 communication professionals and 400 caregivers from nearly 40 countries completed the online surveys, which were available in 16 languages. A panel of 36 experts contributed to the Delphi process. The final guidelines relate to: the rights of the individual; beliefs and attitudes of communication partners; professional knowledge and team work; communication assessment; goal setting; and, intervention strategies and techniques, including the use of Augmentative and Alternative Communication. Conclusion: This is the largest project of its kind to date, developing consensus guidelines for Rett syndrome. Fundamental to the effective uptake of the guidelines is the involvement of individuals with Rett syndrome, their families and professionals who work with them. The project draws on knowledge and experience from as many countries as possible. Strategies for dissemination, training and implementation include webinars, spin-off projects with parent associations, and utilisation of professional support networks.

**General Session - All Ages**
**Best Research Evidence**

### SESSION 9.2
### Implementing a legal scoping review to determine court accommodations for persons with significant communication disabilities

Robyn White (The University of Pretoria), Juan Bornman (The Centre for Augmentative and Alternative Communication, The University of Pretoria), Ensa Johnson (The Centre for Augmentative and Alternative Communication, The University of Pretoria)

Statistics have consistently demonstrated that persons with significant communication disabilities have an increased risk of becoming a victim of crime, yet these individuals continue to be marginalised in the criminal justice system. They are often denied fair and equal treatment

# Platform Abstracts

before the court, despite international treaties such as the Convention on the Rights of Persons with Disability (CRPD), advocating for their legal rights. Article 13 of the CRPD, and courtroom accommodations has received little attention by Augmentative and Alternative Communication (AAC) interventionists, legal practitioners and researchers. This presentation will demonstrate how to conduct a legal scoping review in order to select and synthesise the results of relevant research (in this case focussed on court accommodations for persons with significant communication disabilities) to provide practitioners with evidence-based information that would impact on providing court accommodations. The rationale for this proposed methodology is that it provides more rigorous evidence (e.g. case law) than anecdotes or personal opinion. This presentation will follow a detailed four-step process, namely: i) stating a clear research question, specific key terms, and clear inclusion and exclusion criteria; ii) defining and synthesising the literature that will be used with a focus on the different databases, grey literature and case law reviews; iii) explaining how the literature and legal cases in the sample will be weighted and finally iv) conducting an analysis of the sample of cases before stating the conclusion. Throughout this presentation, the value of legal scoping reviews and how they could assist AAC practitioners by lending credibility and reducing decision bias, will be highlighted. Furthermore, the discussion will also showcase how these results could assist persons with significant communication disabilities to be able to equally and fairly access the court system.

Baude, W., Chilton, A. S., & Malani, A. (2017). Making Doctrinal Work More Rigorous: Lessons from Systematic Reviews. The University of Chicago Law Review, 84(1), 37–58. Retrieved from https://search.proquest.com/docview/1924015497?pq-origsite=summon

Flynn, E. (2016). Disabled Justice? Access to Justice and the UN Convention on the Rights of Persons with Disabilities. New York: Routledge: Taylor and Francis Group.

Larson, D. (2014). Access to Justice for Persons with Disabilities: An Emerging Strategy. Laws, 3(2), 220–238. https://doi.org/10.3390/laws3020220

White, Robyn, Bornman, J., & Johnson, E. (2018). From Silence to Justice: Implications for persons with little or no functional speech accessing the criminal justice system. Acta Criminologica: Southern African Journal of Criminology, 31(1), 19–34.

White, R., & Msipa, D. (2018). Implementing article 13 of the Convention on the Rights of Persons with Disabilities in South Africa: Reasonable accommodations for persons with communication disabilities. In African Disability Rights Yearbook (pp. 99–120). https://doi.org/10.1016/SO410-6736(11)61851-5.As

## General Session - Adult
### Best Research Evidence

### SESSION 9.3
### Augmentative & Alternative Communication for patients with Progressive Supranuclear Palsy

Catherine Foy (Chailey Communication Aid Service)

Progressive Supranuclear Pasly (PSP) results in a harsh and strained voice quality, slow, monotonal and slurred speech with articulatory errors, stuttering and repeated words. By the later stages of the condition speech can be largely unintelligible.

Patients with PSP, once they have a severe/complex communication difficulty associated with a range of physical, cognitive, learning, or sensory deficits and a clear discrepancy between their level of understanding and ability to speak are eligible to be seen by a specialist NHS England funded AAC service.

Typical ways of accessing a communication aid are directly, using hands with adapted styli and /or keyguards, using switches activated by different body parts (e.g. hands, head, knees, feet), using a head mouse and using eye gaze. The way that PSP affects a person physically

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means that each of these access methods becomes difficult. In addition, cognitive and behavioural changes can affect whether a person is able to learn to use a new way to communicate and problems with vision can affect placement of a communication device so that its use can be functional. We have reviewed our caseload of approximately 20 cases with PSP to draw some indications about which approaches best match the difficulties caused by PSP and where a communication device does not meet the needs of the patient what caused the difficulty.

**General Session - Adult**
**Clinical and Professional Experience**

## SESSION 9.4
### Finding love through AAC
Helen Hewson, Toby Hewson

In this paper we will be discussing how we met at a 1 Voice event and fell in love, how our relationship developed. The beautiful way Toby proposed to me using his AAC and the last year planning our wedding together. How we decided to live together and what was involved with organising my move from Birmingham to West Sussex and organising my care needs. The challenges we sometimes face in our relationship because of the high level of care needs we both have, and how this affects the amount of privacy we can have in our relationship. how we are learning to find ways round this and developing our relationship. How I have had to start again and am building a new care team and the new communication skills . We will also be covering our wedding and the different reactions we have had to our wedding from people in the wedding industry as a severely disabled couple. We have had to work with the vicar about our communication and how the ceremony maybe slower due to our use of AAC. We will share some of our wedding memories and sharing how love can concer disability,

**General Session - Adult**
**Personal Stories and Preferences**

## SESSION 9.5
### Developing a user-centred communication book for the Super Core vocabulary
Daisy Clay (Smartbox Assistive Technology), Kat North

Children learning to use AAC often start with low-tech AAC, building their language and communication skills using paper-based symbol boards or books. Then, if they begin using electronic AAC, children are often faced with learning a new symbol vocabulary, with a new layout, and sometimes new symbols too.
This talk will explore key features of the Super Core communication book and how user feedback influenced the final design.

Super Core is an AAC vocabulary designed with a focus on making it easier for children to learn to use symbol AAC. Design decisions were made with this in mind, from consistent word locations, to presenting activity-specific vocabulary alongside core words, to help teach meaning throughout the day and across contexts.

It was hoped that the electronic version, designed in Grid, would be followed by a robust paper-based version, keeping to the same aim of being easy to learn and use. The ultimate goal was to offer Super Core in both high-tech and low-tech forms, for children who needed one or the other, or both.

User feedback confirmed that for the communication book to be successful it must be light-weight and portable; yet provide access to a full and comprehensive vocabulary. It must also be simple to navigate and intuitive to use, for both AAC learners and their communication partners. We will talk about the feedback we received during user testing, and how we resolved problems such as how to allow users to personalise the book, and how to ensure the book could be used by those with more complex access needs.

We started this process the same way that many speech and language therapists do – with hours and hours of printing, cutting, laminating,

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and sticking… But several versions, and lots of feedback later, the Super Core communication book is here.

Ace Centre. Developing & Using a Communication Book. 2nd edition. Oldham: Ace Centre. 2017.

**Introductory Session - Child**
**Clinical and Professional Experience**

**SESSION 9.6**
**AAC Options for Persons with Aphasia**
Bethany Diener (Tobii Dynavox)

Many of us would agree that use of AAC is normal. Typical communicators use it every day as part of our communication system. Yet, AAC is often overlooked as part of the tools and strategies that will facilitate full participation in life for persons with aphasia (PWA). With the Life Participation Approach for Aphasia (Chapey, et al, 2000) encouraging participation to be our goal, these tools and strategies may be the very things that open the door to returning to desired people and activities.

Kraat (1990) identified three benefits of AAC for PWA: facilitating reacquisition of speech, cueing or supplementing speech, substituting for speech. In this session, we will review strategies found to be beneficial for these purposes with PWA such as instruction cards, drawing (Sacchett, 2012), Written Choice Communication Techniques (Garrett & Beukelman, 1995), and options for presenting language in low and high tech AAC (e.g., rating scales, visual scenes, categorical, topical, remnants, etc.). Free supports to assist in identifying interests, goals, and partner training will be presented and strategies for using AAC while still working on remediation will be discussed (Weissling & Prentice, 2010).

Chapey, A., Duchan, J. Elman, R. Garcia, L., Kagan, A., Lyon, J. & Simmons-Mackie, N. (2000). Life participation approach to aphasia: A statement of Values for the Future. ASHA Leader, 5, 4-6

Garrett, K. & Beukelman, D. (1995). Changes in the interaction patterns of an individual with severe aphasia given three types of partner support. In M. L. Lemme (Ed.), Clinical aphasiology: Volume 23 (pp. 239–251). Austin, TX: Pro-Ed.

Kraat, A. (1990). Augmentative and alternative communication: Does it have a future in aphasia rehabilitation?. Aphasialogy, 4 (4), 321-338.

Sacchett, C. (2002) Drawing in aphasia: moving toward the interactive. International Journal of Human-Computer Studies, 57, 263-277. Weissling, K. and Prentice, C. (2010). The timing of remediation and compensation rehabilitation programs for individuals with acquired brain injury: Opening the conversation. Perspectives on Augmentative and Alternative Communication, 19, 87-96.

**Introductory Session - Adult**
**Clinical and Professional Experience**

**SESSION 9.7**
**Literacy Through Unity: A systematic literacy and communication instructional program.**
Jane Odom (AAC Language Lab), Emily Gabrielle (Liberator)

Literacy Through Unity is a beginning systematic, sequential phonics instructional program that also teaches core icon sequences for both Untiy and Words for Life. Both the word indentification instuction and the icon sequencing instruction are designed to teach learners strategies they can use to read, spell and say unfamiliar words. Form the beginning emphases is on generalization and the transfer of known skills to the unknown. Learners progress through a carefully sequenced set of 75 lessons that support mastery over time rather than mastery of each element as is is introduced. The strudture of the program is designed to help learners begin to think like readers, spellers and language users.

This session will show how easy it is to implement

Literacy through Unity. Lessons will be shown for using a Word Wall to teach a core set of high frequency words for reading, spelling and communicating. The Making Words with Icons lessons will show how to teach the underlying system and rules for both Unity and Words for Life to generate word for expressive communication. Making Words with Letters lessons will show how to teach decoding and spelling to students who may not initially have an understanding of the systematic manner in which letters are combined and recombined to make words. What is most important when using this system is whether or not a student can use their device to support reading, writing and communication outside of instructional time. We will provide examples of how this actually happened after completing this program.

Literacy Through Unity: Word Study The Center for Literacy and Disability Studies, Dr. Karen Erickson, Dr Gretchen Hanser

**Introductory Session - All Ages**
**Clinical and Professional Experience**

### SESSION 9.8
**Strictly Lost in Translation**
Sally Featon (SignOutLoud), Kate McCallum (SignOutLoud)

With this year's theme at Communication Matters being 'Strictly' we couldn't help but use this in this year's presentation.

On 'Strictly Come Dancing', the dancers and judges always talk about how they interpret the lyrics through their movements; this is exactly what Sign Out Loud always try to do in our song translations.

This is our 5th year presenting at conference as Sign Out Loud. This year we will deliver a workshop sharing with you how we translate songs using Makaton Signs and natural gestures.

We are seeing an increasing number of people from a variety of backgrounds and experiences translating songs into sign. Often we see a blend of BSL, SSE, Makaton and ASL depending on where or how people have sourced their material. We will discuss the pros and cons of this and share with you how and why we (Sign Out Loud) translate songs with the aim of giving true meaning to the translation and not just a pure word translation. (Sally is a Makaton Tutor and Kate is a specialist in the AAC field).

Many songs contain metaphors which is why translating songs present challenges and requires a great deal of time and experience if you are using Makaton to support receptive and expressive language.

For example, in our most recent video, 'NO MATTER WHAT' refers to loving someone without question… For this line we sign CONTINUOUSLY as the meaning of the line refers to always and forever. We also sign SAD instead of GREY. As with all of our songs, we try to include as many key signs as we can to portray the meaning behind the lyrics. We will explain how to simplify the translation to meet the needs of the individuals you are working with.

For examples of some of our song translations:
Facebook: @SignoutloudLC
YouTube: Signoutloud
The Makaton Charity: www.makaton.org

**General Session - All Ages**
**Clinical and Professional Experience**

### SESSION 9.9
**My Amazing AAC Exploration**
Clare Hands

My presentation explores aspects of my life resulting from my stroke in 2012. During rehabilitation I discovered and used various forms of Alternative and Augmentative Communication (AAC), and my presentation runs through these, starting with blinking, and finishing with eye gaze technology. Ultimately, I returned my AAC equipment but since then have been on a journey of discovery learning how AAC gives power to people. My

# Platform Abstracts

presentation includes short video clips of myself and others using AAC. I am a student, and AAC has been the subject of my Final Major Project at college. I see myself as a disabled journalist, and hope to continue both my studies and my involvement with disability issues, particularly AAC, in future.

**General Session - All Ages**
**Personal Stories and Preferences**

### SESSION 9.9
### Seeking mentors for imagining different AAC futures

Graham Pullin (University of Dundee), Katie Brown (University of Dundee)

Yesterday, AAC made the front page of The Guardian (Devlin 2019) with exciting scientific developments that also raised the profile of the field. A reader would be forgiven for thinking that the future of AAC is now defined: the promise of conversing "naturally, without extra effort" suggests that there will be nothing to debate. And yet, at the research symposium at ISAAC 2016, consensus emerged that questioned the valuing of high-tech solutions over low tech, and of involving disabled people as subjects rather than as collaborators (Pullin et al 2017).

In 2020 we begin a Wellcome Trust collaborative project called 'Imagining Technologies for Disability Futures' (Murray 2019). As medical humanities research, its role is to explore the relationships between disability, technology, society and culture.

Colin Portnuff recommended that all researchers adopt a person or community with impaired speech as a 'mentor' (Portnuff 2006). So this is a call for mentors to join us to explore together questions such as:
–   when some of the richest interactions can be through sharing a paper word sheet, how might we bring these qualities to digital technologies?
–   when the limitations of AAC are often ascribed to the person, might there actually be a value in making the role of the

technology more visible rather than 'transparent'?
–   … at the very least what could we do in the meantime, perhaps by harnessing different technologies?
–   when the politics of disability identity are also changing, could AAC let people to choose to uncover their disability (Evans 2017), making it legible and unapologetic?

Through participation with AAC users, we will build partial prototypes of different future AAC interactions that could be adopted, experienced and reflected on (Schiller 2017). And in this way to provoke and inform discussions about the different futures that we want. Please join us as mentors!

Devlin, H. (2019). Decoder turns brain waves into speech. The Guardian, 25 April.

Evans, H. (2017). Un/covering: making disability identity legible. Disability Studies Quarterly 37(1). Portnuff, C. (2006). AAC: a user's perspective. Available at http://aac-rerc.psu.edu/index-8121.php.html

Pullin G., Treviranus, J., Patel, R., & Higginbotham, J. (2017). Designing interaction, voice, and inclusion in AAC research. AAC 33(3).

Murray, S. (2019). Changing the relationship between disability and technology. Available at https://www.leeds.ac.uk/news/article/4392/changing_the_relationship_between_disability_and_technology

Schiller, J. (2018). Access+Ability: Hands of X (film with audio description). Published by Cooper Hewitt Smithsonian Design Museum, New York. Available at https://www.youtube.com/watch?v=XGjMcCkZHlw

**General Session - All Ages**
**Best Research Evidence**

# Platform Abstracts

## SESSION 9.9
## Single question Patient Reported Experience Measures
Samia Malik (Compass)

Patient reported experience measures (PREMs) captures a client's personal experience of the care they have received. Analysis of this measure allows a service to identify current strengths and areas for improvement.  Such areas can include: overall care, trust in staff, cleanliness and timeliness.

Compass is an AAC hub that provides support for adults with complex needs in West London. Previously, detailed questionnaires were used as PREMs, which included both rating questions and open questions. One criticism of the design was that it was too lengthy and time-consuming to complete.

Compass is now trialling a new questionnaire which contains only one open question: "what could we have done better?" This has been set up and used by Pam Enderby in other services. The question has yielded a range of responses which will inform service development. For example, one client felt he could have been better supported to use eye gaze so our training and support package will be reviewed.
In this talk, we will be sharing our initial findings and evaluating the overall usefulness of this new design.

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 9.9
## Better AAC Interfaces to Enhance Speech, Language, and Social Communication for Minimally-verbal Learners with Autism
Oliver Wendt (University of Central Florida)

This Lightning Talk will focus on the need for AAC interfaces particularly designed for the learning characteristics of individuals with severe autism and/or developmental disabilities. One of the core autism symptoms includes a "delay in, or total lack of, the development of spoken language" (American Psychiatric Association, 2013). Approximately 25-50% of children with autism are functionally non-verbal and will not develop sufficient natural speech or writing without ongoing and systematic AAC intervention. These impairments are closely connected to core symptoms in social communication and interaction. AAC intervention should ideally address as many of these symptoms in a comprehensive delivery model. But often proper technologies are missing.

When designing an AAC interface for severe autism, it is critical to address the specific cognitive and sensory processing characteristics. Many AAC apps appeared on the market with the sole purpose of turning an iPad into a SGD simply mimicking the SGD interface. Such apps often came with screens that overwhelmed the learner with too many visual stimuli. An important sensory processing characteristic in autism is the difficulty to filter out salient incoming stimuli from a stimulus-rich environment (Minshew & Williams, 2007). For the beginning communicator with autism, graphic symbols should be carefully selected and not be presented alongside conflicting visual stimuli. Another less ideal interface is a hierarchical organization of symbol vocabulary creating a level of abstraction too difficult to process. Previous apps also included graphics that had very little resemblance with their referents and were not easy to comprehend.

Following a participatory design approach (involving users and caretakers into the design process), this talk will present the rationale and development of a suite of intuitive and effective AAC applications that facilitate functional communication skills, natural speech production, and social-pragmatic behaviors in learners with severe forms of autism or developmental disabilities.

American Psychiatric Association: Diagnostic and statistical manual of mental disorders (DSM-V). 5th edn. American Psychiatric Association, Washington, D. C. (2013).

# Platform Abstracts

Minshew, N. J., Williams, D. L.: The new neurobiology of autism: cortex, connectivity, and neuronal organization. Archives of neurology, 64(7), 945–950 (2007).

**General Session - All Ages**
**Clinical and Professional Experience**

## SESSION 9.9
**Auditory Scanning; implementation and requirements of a high-tech system (pasco)**
Will Wade (Ace centre)

Auditory scanning communication techniques are common for those who are visually & physically impaired and can be implemented in with paper-based, "no-tech" and computer-based solutions (Blackstone (1994). Although popular with clinical staff, it is not always a preferred solution for AAC users with users reporting that it may be difficult to learn (Swift, 2012, Fried-Oken, Howard & Stewart (2009)) – but for some individuals, it may be the only solution available.  In this talk we will briefly cover some essential elements to implement auditory scanning successfully e.g. consistent pace and tone, having a reliable list (Porter, Burkhart 2004), and the different approaches of organising these lists; pragmatic (Porter, Burkhart 2004) alphabetical (Brewster & Gregory 2002) and prediction based vocabulary (aka Huffman) (Roark, Fried-Oken, Gibbons 2015) then demonstrate the features required of a high-tech system within a new application; pasco (Phrase, Auditory Scanning COmmunicator). Finally, we will discuss the aspects of cognitive demands of auditory scanning and future research directions the solution now allows us to investigate.

Blackstone, S. (1994) Auditory scanning Augmentative Communication News 7(2), 6-7 Brewster, S, Gregory N (2002) Auditory Scanning a Large Word List for Communication, COMMUNICATION MATTERS, February 2002 16:1.

Fried-Oken M, Howard J & Stewart S.R (1991) Feedback on AAC intervention from adults who are temporarily unable to speak, Augmentative and Alternative Communication, 7:1, 43-50, DOI: 10.1080/07434619112331275673

Porter G, Burkhart L (2004), Designing Light-tech and High Tech dynamic auditory scanning systems, ISAAC conference 2004 [online] http://lburkhart.com/hand_design_auditory_syst.pdf [Accessed 25 Jun. 2019].

Roark B, Fried-Oken  M & Gibbons C (2015) Huffman and Linear Scanning Methods with Statistical Language Models, Augmentative and Alternative Communication, 31:1, 37-50, DOI: 10.3109/07434618.2014.997890

Swift, S.M, (2012). Low-Tech, Eye-movement-accessible AAC and typical adults. Master of Arts. San José State University.

Burkhart, L. (2004). Aided Language stimulation for the prospective auditory scanner. In: Center On Disabilities Technology And Persons With Disabilities Conference. [online] California. Available at: https://www.csun.edu/~hfdss006/conf/2004/proceedings/64.htm [Accessed 25 Jun. 2019].

**Specialist Session - All Ages**
**Clinical and Professional Experience**

## WORKSHOP 1
**Dare To Dream**
Jane Odom (AAC Language Lab)

Throughout childhood and early adulthood, many are encouraged to "reach for the stars," "believe in your aspirations," and "do anything that your heart desires."  Young adults are often guided to acquire foundational skills for employment and develop the competencies needed to pursue personal hobbies and interests.  For individuals who have complex bodies and/or communication differences, their encouragement to form dreams desires may often times be minute.  Some dreams may go unheard, many will go unrecognized, and several may even be discouraged.

Dare to Dream will walk participants through the

step by step process of recognizing desires, setting attainable goals, and actively pursuing outcomes. The flexible framework of Dare to Dream helps to expose attainable community and familial resources and supports that can make dreams become realities. Voicing dreams can pave the way to create meaningful transition plans that will transcend beyond paper to form purposeful and intentional outcomes.

This session will feature strategic ways to empower individuals to create and voice their personal dreams and form networks of family and neighborhood supports.

Dare to Dream is based upon the work of Dr. Diane Nelson Bryen's book, Daring to Dream: Turning Dreams into Future Realities. Through the Dare to Dream scaffolds, participants are encouraged to develop dream boards, establish goals, recognize barriers, and define step by step objectives to acquire achievement. This process has brought to light personal desires that otherwise would have gone unrecognized. The utilization of augmentative alternative communication and additional assistive technology tools can allow expression and integration of the desires of those who have complex physical and communicative needs. This session will divulge tips and suggestions to utilize and integrate assistive technology and AAC throughout the transition and adulthood phases to support the development, expression, and acquisition of personal dreams of individuals who may otherwise go unheard.

Daring to Dream: Turning Dreams into Future Realities by Diane Bryen (Author)

**Introductory Session - Adolescent**
**Clinical and Professional Experience**

**WORKSHOP 2**
**Switches can be exciting too! How to get started with switching**
Zoe Clarke (Barnsley Assistive Technology Team), Sally Darley (Barnsley Assistive Technology Team), Helen Paterson (Royal Hospital for Neuro-disability)

It has been observed by various assistive technology professionals over the last couple of years that switches have potentially gone out of favour, or are not seen as perhaps such an exciting access method as other things. In actual fact switches can have many benefits for some people (like all access methods they are not for everyone). They can give more flexibility in positioning of the main device, they can enable more accuracy and hence increase efficiency. This will form the first session of two practical sessions looking at switch use. Please note you do not have to attend both sessions but can do. The idea is to get hands on and revisit switching.

The session will cover:
- Different types of switch, including newer ones such as Emego
- Setting up switches (including the importance of consistency around mounting, colour etc)
- Different types of interfaces and the things that can be done with them e.g. latching, continuous etc.
- Progression from cause and effect around switches to basic scanning
- Discussion of implementation of switch use and practice

**Introductory Session - All Ages**
**Clinical and Professional Experience**

# Platform Abstracts

## WORKSHOP 3
## Creative Poetry Writing Workshop
Dave Young

Dave Young, The Shouting Mute, describes himself on his website:
I am a performance poet and artist. I consider myself an activist in the promotion of inclusive theatre practices. I promote self-expression and creativity in everyone and by working inclusively I aim to show that the arts belong to us all. I strive to raise expectations of the capabilities of disabled people and those marginalised by society. I celebrate a culture of inclusion within my work and believe that through the arts everyone can have a voice to recount their stories and experiences in this world. I hope others see me as a role model whereby my positive actions and character help to create a more inclusive culture in the future
This creative poetry writing workshop is only for AAC Users.  Attendees will create a poem about Communication Matters and Dave will share a poem called 'I am an eye gaze' as an example of his work.  Dave will facilitate AAC users through some creative writing exercises.
This session will finish at 13.00.

**General Session - All Ages**
**Personal Stories and Preferences**

## WORKSHOP 4
## Efficient and effective switching – how to make best use of switches
Zoe Clarke (Barnsley Assistive Technology Team), Jon Rouston (Electronic Assistive Technology Service), Will Wade (ACE Centre Oxford), Lisa Farrand (ACE Centre Oxford)

It has been observed by various assistive technology professionals over the last couple of years that switches have potentially gone out of favour, or are not seen as perhaps such an exciting access method as other things. In actual fact switches can have many benefits for some people (like all access methods they are not for everyone). They can give more flexibility in

positioning of the main device, they can enable more accuracy and hence increase efficiency. This will form the second session of two practical sessions looking at switch use. Please note you do not need to do both sessions, you can come to this session if you have not done the first. The idea is to consider how we progress and 'tweak' switching to get the best outcomes. The session will cover:
- Case studies of good examples of switching
- How to develop switching – next steps once we have the basics
- Tips on increasing efficiency
    - Set up of grids
    - Scanning patterns
    - Timings
    - Etc
- Discussion of why switches can be as good/ better than other access methods

**General Session - All Ages**
**Clinical and Professional Experience**