

# **Book of Abstracts**

## CM2018 International AAC Conference 9-11 September, University of Leeds



## **Table of Contents**

PLATFORM	1
A Challenging Case: Cantonese and AAC Mr. Konstantinos Karaoglanis, Mr. Martin Henderson	2
A how-to of how-tos: reflections on the provision of how-to videos to support the implementation of AAC Ms. Katherine Small	3
A journey to regaining autonomy and control after acquired brain injury: A parallel pathways approach Ms. Siobhan Murphy, Ms. Mary Groves	4
A systematic review to identify and appraise the quality of tools used to record patient-reported outcomes in users of alternative and augmentative communication (AAC) Mrs. Katherine Broomfield	5
AAC for a four year old. Keeping it silly and fun. For parents starting out on their journey. Dr. Danny Lim, Dr. Mary Kwok	6
AAC in school - how can services address the educational communication environment? Mrs. Claire Hayward, Ms. Siobhan Murphy	7
Access Methods for AT and Integration with Wheelchair Control Systems Mr. Marcus Friday, Mrs. Gemma Sleman	8
Access to AAC for children with Cerebral Palsy: Potential challenges and practical solutions Mrs. Helen Robinson, Ms. Jenny Scott	9
Alexa, what can you do for me ? Mr. Gary Derwent	10
An Assessment Using Auditory Scanning Mrs. Sally Conner	11
An exploration of possible factors influencing the non-provision of specialised augmentative and alter- native communication (AAC) equipment after an extended assessment period. <i>Mr. Josh Mars</i>	12
Are there similarities and differences in the content of the clinical decision-making of Biomedical Engi- neers, Occupational Therapists and Speech and Language Therapists when assessing for electronic assis- tive technology ? Dr. Sylvia Taylor-Goh	13
Are we sitting comfortably? Mrs. Kate McCallum, Mr. Craig Brown	14

Augmentative and Alternative Communication provision pathway: single item activation to linking ideas and navigating	15
Ms. Deborah Wilkinson, Ms. Catherine Bate, Mr. Marc Viera, Ms. Clare Stothard, Ms. Helle Mills	
Cause & Effect in Eye-Gaze Technology: What effect does "teaching" have on task performance? Mr. Tom Griffiths, Ms. Susannah Davis, Dr. Michael Clarke, Dr. John Swettenham	16
<b>Communication Access UK - the journey continues!</b> Mrs. Catherine Harris	17
Developing Shared Reading Resources for Children with Speech, Language and Communication Needs (SLCNs)	18
Ms. Gillian McNeill, Ms. Claire Harrison	
<b>Embedding AAC in Educational Settings</b> <i>Ms. Emma Bowers</i>	19
Evaluating the impact of a 12 week training programme for teaching assistants in using Aided Language Stimulation Ms. Kate Duggan, Ms. Emily Walsh	20
GCSEs - Exam access arrangements for an AAC user. Mrs. Saffron Murphy-mann, Mrs. Philippa Blackbourn	21
<b>Getting it right - an AAC hub case study of a teenager's transition between devices</b> Mrs. Shani Aleksandravicius, Mrs. Katherine Marchant	22
Give Me a Minute - Visual indication of message creation Mr. Fil McIntyre, Mr. Matthew Oppenheim	23
Handshake - using hand motion to control switchable communications software Mr. Matthew Oppenheim, Mr. Fil McIntyre	24
<b>Health promotion using smartphone apps for people who use communication supports</b> Prof. John Arnott, Ms. Susan Munro, Ms. Robyn McNaughton, Mr. Gareth Lloyd, Mr. Matthew Malone, Ms. Bernie Brophy-Arnott	25
High speed AAC for switch users: rethinking switch frequency keyboard layouts Ms. Jessica MacRae	26
How do augmentative and assistive communication practitioners make decisions? Quantitative evidence from a discrete choice experiment Dr. Edward Webb, Dr. David Meads, Dr. Yvonne Lynch, Ms. Nicola Randall, Mr. Simon Judge, Prof. Juliet Goldbart, Mr. Stuart Meredith, Ms. Liz Moulam, Prof. Stephane Hess, Prof. Janice Murray	27
How our communication and use of AAC impact on our care needs Ms. Helen Quiller, Mr. Toby Hewson	28
<b>Implementing School-wide Core Vocabulary Instruction: From Idea to Practice</b> <i>Ms. Maureen Donnelly, Ms. Michelle Mann, Ms. Natalie Fry</i>	29
<b>IPAACKS in action: working towards an Educational Framework for AAC</b> <i>Ms. Sara Dale</i>	30

<b>It's your turn to Rock with Sign Out Loud!</b> Mrs. Kate McCallum, Mrs. Sally Featon	31
<b>Johnny Hawko</b> Mr. Jamie Preece, Ms. Emma Sullivan	32
Language Intervention using VOCAs for Children with Partially Intelligible Speech Ms. Jessie Luckins, Dr. Michael Clarke	33
Language, learning and literacy: strategies and tools for supporting early AAC users Ms. Daisy Clay, Ms. Kerry Vacara	34
Learning English as an AAC user Mr. Gregor Gilmour	36
Living Independently Mr. Toby Hewson, Ms. Helen Quiller	37
Management of iDevices in a specialist AAC Service Ms. Abigail Attwell	38
<b>My AAC journey</b> Mrs. Sarah Seamer, Mr. Guy Carter	39
NHSE Specialised AAC Services - where are we now? Ms. Anna Reeves, Ms. Carolyn Young, Ms. Vicky Styles, Mrs. Julie Atkinson	40
<b>Oldies but goodies - are we stating the obvious with implementation?</b> Mrs. Emily Gabrielle	41
<b>Parents as Active Partners: Supporting parents/carers of children and young people who use AAC</b> <i>Ms. Nicky Ford, Ms. Debbie Jans</i>	42
Participation for young AAC users Ms. Francesca Sephton	43
<b>Proposed App for Setting and Tracking Aided Communication Targets</b> Mr. Mark Scott	44
Research Case Study – Communicating with the Wider Community Ms. Helen Quiller, Ms. Naomi Meara	45
Romsey: The first Makaton Friendly Town in the world! Ms. Hannah Anderson	46
Selecting Vocabulary for a Diverse Population Mr. Jose Perez	47
Slidey keys: An alternative method of auditory scanning. Mrs. Charlotte Akrigg, Ms. Catherine Hale	48
Switch elimination access - Method and analysis for informed grid design and proof of equitable access	49

Mr. Leo Whiteman

<b>The AAC Mentor Summer Group</b> Mr. Gregor Gilmour, Ms. Jessica Forster, Mr. Afonso Ramalhoso, Ms. Jodie Turner, Mr. Adam Lenartowicz, Ms. Francesca Sephton	50
<b>THE IMPACT OF AN IN-SERVICE AAC TRAINING ON TEACHER-PUPIL INTERACTIONS IN CLASSROOMS</b> Dr. Ana Paula berberian, Dr. Simone Kruger, Dr. Gregor Renner, Dr. Ana Guarinello	51
The Impact of Obsolescence in AAC and AT Mr. Euan Robertson	52
The Potential of Low-Cost Devices to Improve AAC Assessments, Access Methods Implementation and Development of Bespoke Solutions Based on Biosignals Mr. Hélio Lourenço	53
<b>The Same but Different: A retrospective comparison of MND AAC journeys</b> <i>Mr. Mark Scott</i>	54
<b>The Story of Core: History, Evidence, and Application</b> <i>Ms. Bethany Diener</i>	55
<b>The Unspoken Voices Project expert advisory group: Finding strength in collaboration</b> Mrs. Katherine Broomfield, Mr. Jamie Preece, Mr. Patrick Bates	56
The Use of Adapted LEGO®-Based Therapy to Develop Communicative Competency in Children Who At- tend a Specialist Educational Provision and Use Augmentative and Alternative Communication Systems (AAC) Ms. Nicola Dutton, Dr. Suzanne Gough	
The What? Why? Where? and How? of mounting. Mr. Gary Scarlett, Mrs. Nikky Steiner	58
<b>Training Mystery Customers for Communication Access UK</b> Mrs. Catherine Harris	59
<b>Triggers for success in literacy acquisition: a case study</b> Mrs. Jude Philip, Ms. Marion Stanton	60
<b>Update from the Outcome Measures Working Party: Analysing the data</b> Ms. Vicky Styles, Mrs. Nikky Steiner, Ms. Catherine Hale	61
Voice and message banking - the unvarnished truth Mr. Richard Cave	62
<b>Voice or Message Banking? A Client's Perspective.</b> Ms. Mary Groves, Mrs. Lynne Allsopp	63
What is the role of the Occupational Therapist (OT) in assisting adults who are losing speech? Ms. Mary Groves, Mrs. Lynne Allsopp	64
What's the Score? Translating a Core Vocabulary from German to English Ms. Gillian Rumble, Ms. Judy King	65
When is a sheep not a sheep? Debunking the myths around Minspeak and Semantic Compaction. Mrs. Emily Gabrielle	66

Where We Are: Old Challenges and New Opportunities in Literacy Instruction for Students who use AAC <i>Ms. Maureen Donnelly</i>	67
Smart Speakers - a game changer for AAC users Mr. Mike Thrussell, Mr. Andrew Simpson	68
<b>"A Case of CASEE" - How Does Outcome Data Guide the Development of a Specialist AAC Service?</b> <i>Mr. Tom Griffiths, Ms. Catherine Hale, Ms. Rachael Mcsweeney, Ms. Lucy Talbot, Mr. Joe Doran, Ms. Karen Young,</i> <i>Mrs. Charlotte Akrigg, Mr. Rob Smith, Ms. Jenny Druce, Ms. Amy Hemus</i>	69
<b>"To Communication and Beyond"</b> Ms. Sarah Ward, Dr. Samantha Micklewright	70
POSTER	71
<b>'Communication Matters - the impact on practice at Chailey Heritage.'</b> Mrs. Paula Marten, Ms. Helen Dunman	72
A Hub and Spoke Journey: Reflections on Implementing AAC with Children and Young People with Retts Syndrome. Ms. Charlotte Sax, Ms. Alice Gallimore	73
<b>Becoming a culturally responsive AAC practitioner</b> Mr. Charlie Danger	74
<b>Communicating Emotions for People with Dysarthria</b> Mrs. Lubna Alhinti, Dr. Heidi Christensen, Dr. Stuart Cunningham	75
Core Vocabulary: Group Intervention Using LAMP Ms. Emer Noble, Ms. Fiona Walsh	76
Hot wheels is exciting Mr. Patrick Hockaday	77
Inclusion of participants with communication and learning disabilities in a study of experiences of com- munication aid assessment Ms. Nicola Randall, Mrs. Liz Moulam, Dr. Yvonne Lynch, Mr. Stuart Meredith, Mrs. Helen Whittle, Prof. Juliet Goldbart, Mr. Simon Judge, Prof. Janice Murray	78
Introducing Communication Dictionaries Ms. Alison Matthews, Ms. Shahnaz Ashraf	79
<b>My Journey to Becoming an 'AAC Eye-gaze Pro'</b> Mrs. Sally Mosley, Ms. Sophie Beam, Ms. Emily Bird, Ms. Caroline Weighton	80
<b>Perceptions of people who use AAC about the potential of speech-generating devices to express identity</b> <i>Ms. Sarah Marshall, Dr. Amanda Hynan, Dr. Nicole Whitworth</i>	81
<b>Perspectives of AAC in A &amp; E: Points of interest from the literature</b> Mrs. Samantha McNeilly, Ms. Ruth Williams	82
<b>Teaching Early Core Vocabulary – where on earth do I start?</b> Mrs. Emily Gabrielle	83

The Vision of Teachers who Teach Children with Speach Impairments Regarding Augmentative and Al- ternative Communication (AAC) Dr. Simone Kruger, Dr. Ana Paula berberian, Dr. Gregor Renner, Ms. Rita Tonocchi	84
EXHIBITORS	85
A love story about how two become one. A tale of two companies, apart, but together in mission, mindset and heart. Mr. Dougal Hawes, Mr. Rob Gregory, Mr. Nick Ward, Mrs. Tina Voizey, Mr. Adam Waits	86
Accredited and non-accredited Ace Centre AAC training Ms. Rachel Stevens, Ms. Sara Dale, Ms. Ruth Williams	87
An overview of Ability World's 'no-tech' communication, access and learning support aids, including sev- eral exciting new products. Mr. David Weatherburn	88
CALL Scotland – Free Online Professional Learning Resources on AAC Ms. Gillian McNeill, Mr. Allan Wilson	89
Communication and Cognition Mrs. Lauren Frost, Ms. Kat Smith	90
<b>EyeControl - A Revolutionary Approach to Assistive Technology for "Locked-in" Patients</b> Mrs. Gali Halpern Wienerman, Mr. Or Retzkin, Ms. Tania Suares	91
<b>Get Started with Grid for iPad: a 'hands on' workshop</b> Ms. Natasha Roberts, Mr. Dougal Hawes, Ms. Kerry Vacara	92
Innovations from Therapy Box Dr. Rebecca Bright	93
Introduction to the new core based vocabulary called Score Mr. Ian Foulger, Mr. Bart Noe	94
LAMP and Unity - Using Minspeak doesn't have to be scary! Mr. Mark Street	95
Literacy Resources for All Ms. Marion Stanton	96
Meet the new Tellus i5 Mr. Ian Foulger	97
Mounting & Movement Ms. Esther Dakin, Mr. Billy Hunter	98
Picture Communication Symbols: Past, Present & Possibilities Mrs. Tina Voizey, Mrs. Pamela Curry	99
<b>Proloquo2Go – Your input can shape the future</b> Dr. David Niemeijer, Mr. Jose Perez, Ms. Saudamini Tambay, Ms. Yefan Wang	100
Supporting Literacy and vocabularies for the Adult Acquired market Mr. Mark Street	101

**The Tobii Dynavox Ecosystem: supporting communication, education and access** *Mrs. Tina Voizey, Ms. Alice Langley, Ms. Jeniffer DeAlmeida, Mr. Joe Naraynsingh*  102

## PLATFORM

### A Challenging Case: Cantonese and AAC

Mr. Konstantinos Karaoglanis (East Kent Hospitals University Foundation Trust), <u>Mr. Martin Henderson</u> (East Kent Hospitals University Foundation Trust)

#### Abstract

In this case study we will discuss about a Cantonese speaking client in UK, the lack of options available in Cantonese, communication issues, the use of direct and indirect access methods and the high-tech and low-tech options that we deployed in order to handle this challenging case.

From the start, we faced some rather unusual challenges in our assessment: an MND client with fast progressive symptoms, whose only means of computer access is handwriting recognition. Furthermore, the wife and daughter were able to speak and understand Cantonese, but were not able to read Chinese characters, while neither the wife nor the client himself, were literate in English. Thus, the need of a bilingual system was necessary.

When the client's speech failed, the family were relying on a messaging application group and friends to translate the client's handwriting. Our job was to find a way of supporting our client's communication as he was gradually losing the ability to control his hand movement.

We found that AAC packages typically do not support Cantonese, and had to look further afield in an attempt to put together high-tech AAC using alternative input methods, screen readers and translation software. Our team had to quickly familiarise with the Cantonese language, simplified Chinese characters and the many input methods into computers.

Low-tech AAC was also challenging; how can you use partner-assisted scanning when the carer can't read the options? We discuss our experience, what we have learned, what worked, what didn't, and what we would do differently.

## A how-to of how-tos: reflections on the provision of how-to videos to support the implementation of AAC

#### <u>Ms. Katherine Small</u> (Ace Centre)

#### Abstract

It is common these days to watch how-to videos to learn new skills and to get support at a time and place that suits you. Google (no date<sup>1</sup>) report that there was a 70% increase from 2014 - 2015 for searches containing "how to". When surveyed in 2017, 65% (of 1009 people) said YouTube videos helped them fix things and 56% said they helped them learn new things (Google, no date<sup>2</sup>). How-to videos help with everything from fixing a leaky tap to learning to make pancakes!

I work at Ace Centre who deliver the NHS England Specialised AAC Service in the North West and Thames Valley regions. In this talk I will share my experience of providing how-to videos to support the implementation of AAC. I will explain why I started making how-to videos to support local professionals in their work with people who use AAC and their families.

Case studies with example videos will be presented; I will share my learning to help others if they want to use how-to videos in their AAC practice. Feedback from those who received the videos will be described and the pros and cons of this way of working for local professionals will be discussed.

How-to videos are a feature of the "flipped classroom" model of teaching (Khan, 2011). I will outline how this model can be related to training and support for people who use AAC, their families and teams. How-to videos can be classed as 'asynchronous telehealth' - this is the use of audio or video recordings by health professionals and their clients (American Speech-Language-Hearing Association 2010, as cited by RCSLT, 2018<sup>1</sup>). The professional and ethical responsibilities for telehealth (RCSLT, 2018<sup>2</sup>) will therefore also be considered.

#### References

Khan, S. (2011) *Let's use video to reinvent education* [Online video] [Accessed on 20<sup>th</sup> April 2018] https://www.ted.com/talks/salman\_khan\_let\_s\_use\_video\_to\_reinvent\_education Google (no date<sup>1</sup>) *Think with Google - Searches* [Online] [Accessed on 22<sup>nd</sup> April 2018] https://www.thinkwithgoogle.com/data-gallery/detail/growing-demand-how-to-videos/

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RCSLT (2018<sup>1</sup>) *Role of Telehealth* [Online] [Accessed on 20<sup>th</sup> April 2018] https://www.rcslt.org/cq\_live/resources\_a\_z/telehealth/role

RCSLT (2018<sup>2</sup>) *Practical telehealth guide* [Online] [Accessed on 20<sup>th</sup> April 2018] https://www.rcslt.org/cq\_live/resources\_a\_z/telehealth/practical#ethical

## A journey to regaining autonomy and control after acquired brain injury: A parallel pathways approach

Ms. Siobhan Murphy (Access to Communication and Technology), Ms. Mary Groves (Access to Communication and Technology)

#### Abstract

As a specialist regional hub, Access to Communication andTechnology (ACT) have long used a parallel pathways approach to working withchildren with acquired brain injury or neuro-developmental needs. A parallelpathways approach focuses on developing language skills and access methodsseparately to make the client's journey to using a Voice Output Communication Aid(VOCA) as successful as possible. This approach is based on evidence of windowsof opportunity and neuroplasticity in the rehabilitation of children withacquired brain injury (Forsyth 2009).

When an adult client was re-referred to our service 8 yearspost brain-injury, we adopted a similar parallel pathways approach to supporther goals of regaining control over her environment and interaction withothers. This approach highlighted that, although time-frame in adult rehabilitation is important, factors such as support and motivation can lead to significant progressbeyond the traditional window of opportunity.

We present concrete examples of the resources and approachesused and reflect on our experiences of what made this a successful approach forour client.

Presented by: Siobhan Murphy (Speech and Language Therapist) and Mary Groves (Occupational Therapist)

#### References

Forsyth, Rob & F Salorio, Cynthia & Christensen, James. (2009). Modelling early recovery patterns after paediatric traumatic brain injury. Archives of disease in childhood. 95. 266-70. 10.1136/adc.2008.147926.

### A systematic review to identify and appraise the quality of tools used to record patient-reported outcomes in users of alternative and augmentative communication (AAC)

Mrs. Katherine Broomfield (Sheffield Hallam University)

#### Abstract Background

This systematic literature review forms part of the foundations for a research project: The Unspoken Voices Project. The main aim of the Unspoken Voices Project is to develop a greater understand about why people do and do not use AAC and how they view success in using them. The research project is based on the concept that the perspective of the individual who relies on AAC to support their communication is an equally important measure of a successful AAC intervention as an objective, clinician-recorded evaluation. There is currently no widely used clinical tool to collect outcomes of AAC from the perspective of the person who relies on AAC.

#### Review

The systematic review addresses two questions:

1. What tools are currently available to collect patient-reported outcomes in users of AAC?

2. Are the tools currently used adequate measures of patient reported outcomes? i.e. are the characteristics, conceptual framework and content validity satisfactory?

A protocol has been written and published on Prospero to inform the review. The review is searching for papers concerned with people who have communication difficulties; people 12+ years old; people who use an external aid to facilitate communication. It is searching for tools used to record outcomes from the perspective of the person using the aid, including but not exclusively: published scales & measures, questionnaires, software, descriptive outcomes, author developed tools.

The review is also capturing patient reported outcome measures that are used with people who have communication difficulties (e.g. aphasia, dysarthria, dysphonia, dysfluency) and people who use assistive technologies for comparison and completeness.

#### Results

The review is currently under-way and the results will be presented at the Communication Matters conference. The results will inform further stages of the project, including qualitative interviews with people who rely on AAC about their priorities for equipment, support and training.

## AAC for a four year old. Keeping it silly and fun. For parents starting out on their journey.

Dr. Danny Lim (Parent), Dr. Mary Kwok (Parent)

#### Abstract

I am dad to Andrew, an energetic 5 year old boy with cerebral palsy. Andrew's AAC journey started when he was 3 years old. It wasn't an easy start.

Few professionals where we lived were with familiar with AAC. There was a reluctance to refer him early on and progress was slow. Andrew wasn't provided with the right tools to maximise his communication potential. I tried pursuing AAC privately, but struggled to find someone suitable. The vast amount of information online but was overwhelming.

Matters turned a corner when I attended the Communication Matters conference last year. I thought I'd share my experiences and lessons learnt along the way.

The most important lesson is to make AAC part of daily life, not just in therapy. Use it daily to communicate, joke, play and chat with AAC at home. Find what your child's passions are and AAC to make his playtime more engaging. Make it fun and your child will realise its value and be a willing participant. Model, model, model, everywhere! At home, playground, restaurant or on holiday.

Network with AAC users and their parents on blogs, social media, gatherings and conferences; they have so much real-world experience to impart. Use their collective knowledge and online directories to find the right AAC specialist. Teach yourself the principles of robust communication including, "core vocabulary", "presumed competence", "recasting" & "prompting" from online videos and webinars.

Use AAC to help your child learn to read and do Maths. Apply for an Education Healthcare Plan early and ensure AAC is included in it.

I am presenting because I want to help other parents who are starting out on this long but very rewarding journey. This is the talk I would have like to have attended at the very beginning.

## AAC in school - how can services address the educational communication environment?

Mrs. Claire Hayward (Access to Communication and Technology), Ms. Siobhan Murphy (Access to Communication and Technology)

#### Abstract

The landscape for both AAC services and SEN policy and legislation has changed radically over the last four years. 2014 saw both the introduction of the Children and Families Act, and the implementation of NHSE specialised AAC services commissioning. Successful outcomes for children using AAC are highly dependent on immersion in a communication rich environment which values and embeds AAC. As the regional specialised AAC service for the greater West Midlands area we feel anecdotally that there has been a decline in support for children using AAC, which in turn has led to less successful outcomes.

We observe several significant shifts in schools:

- a general reduction in the level of local NHS SLT provision and an increase in the use of traded services
- schools with a more broad role, reflecting the intended scope of EHCPs
- greater role and responsibility of governing bodies
- budgetary reductions/freezes
- many schools joining MAT's and Co-operative Trusts
- an increased focus on interaction between home and school environments

These observations reflect some of the issues raised in the review of the 2008 Bercow Report, Bercow: ten years on (2018).

While the NHSE funding for specialised services has undoubtedly been transformative, there has not been matching funding for local teams who are both essential to the effectiveness of specialist provision, and responsible for the needs of 90% of the population of potential or current AAC users. This can be keenly felt in school environments where head teachers and senior management teams have to balance many competing demands, including working to improve or retain OFSTED status.

ACT clinicians present a summary of the key issues and lead a guided discussion to explore ways in which AAC services may respond to this shifting picture.

## Access Methods for AT and Integration with Wheelchair Control Systems

Mr. Marcus Friday (Barnsley Assistive Technology Team), <u>Mrs. Gemma Sleman</u> (Barnsley Assistive Technology Team)

#### Abstract

Barnsley Assistive Technology Team provide regional specialised services for the assessment and provision of AAC and EC. The team covers Yorkshire & Humber and consists of Clinical Scientists, Speech and Language Therapists, Occupational Therapists and Electronic/Mechanical Technicians.

In part, this paper provides a summary of the options available to enable integration between wheelchair control and access to AAC, computers and EC (environmental controls).

There are several wheelchair control systems, each with a range of options, to enable integration with AT. Control systems and options covered will include:

- Dynamic DX/DX2/Linx
- P&G Omni
- Quantum Q Logic
- Custom made integrator
- Add on options such as the BJoy and Tecla

Selected case examples will be presented. These will range from clients using hand operated joysticks and switches to those using head switch arrays to access their powered chair and communication aid and/or other AT. The practicalities of providing integrated systems and making optimum use of the available access method(s) from both the client point of view and within device limitations will be discussed.

## Access to AAC for children with Cerebral Palsy: Potential challenges and practical solutions

Mrs. Helen Robinson (Barnsley Assistive Technology Team), Ms. Jenny Scott (Barnsley Assistive Technology Team)

#### Abstract

Children with Cerebral Palsy can often experience significant challenges when accessing AAC due to a wide range of factors, such as co-ordination, tone, involuntary movements, sensory and processing difficulties. Their communication development may also be impacted by the interactions of the people around them, who may be unsure of how to communicate with the child who might not give the same physical and vocal responses as a child without cerebral palsy.

This presentation will explore the difficulties often experienced by these children, the multiple factors that influence success and then offer practical solutions for developing the movements required for communication. Often access and communication are introduced together and we shall examine why this can often lead to a negative experience for the child. We will explore current best practice for these children and how this can be applied within the roles of Occupational Therapists and Speech and Language Therapists and the need for of a multidisciplinary team approach. The session will discuss touch, switch and eye gaze access, looking at how these might be developed both with and without technology. Consideration will also be given to cases where technology might not be the best solution. Case studies will be presented to support the discussion.

### Alexa, what can you do for me?

Mr. Gary Derwent (Independent OT)

#### Abstract

Voice assistant devices such as the Amazon Echo and Google Home are becoming increasingly ubiquitous in domestic homes and can be very useful to people with disabilities. AAC suppliers have already demonstrated that AAC devices can be used to trigger commands so people who use AAC need not miss out. Various AAC suppliers have provided ready made grids and templates for activation of these voice assistants. However, many professionals may be unaware of the broad range of functions offered by the Amazon Echo and Google Home and because of the cloud based nature of the systems, the functionality can and does change and improve over time. Newcomers to these systems may be unaware that third-party apps are available. There are also differences in capability between different parts of the world where these systems may be used. This session aims to present a beginner's guide to the functions of the Amazon Echo and Google Home which may be most useful for people with disabilities. The session will focus on elements of the system with potential to assist people with memory and cognitive impairments, such as list and reminder functionality, but will also cover basic environmental control and other functions. These systems have great potential to assist those with memory and other cognitive impairment but there are also limitations and pitfalls with current device implementations.

### An Assessment Using Auditory Scanning

Mrs. Sally Conner (Ingfield Manor School)

#### Abstract

The need for an auditory scanning assessment was emphasised when representatives at a tribunal stated that 'you can't assess children like this,' referring to a very switched on child with motor and visual impairments. Based on this, the proposed bar for target setting was set extremely low. Thankfully, our evidence was accepted. From his first day in school, this child justified our very positive assessment. However, given the cynical opposition, it would have been much more persuasive to present evidence from an auditory scanning assessment. It would also help us to plan learning pathways for the increasing number of pupils in school who need auditory scanning.

The Pre-Assessment establishes whether and how 'yes' is signalled. It also assesses optimum spoken list length. Based on this the remaining assessment will be presented with lists of 3,5 or 8 words. If the child has a recognisable 'yes' response and can make selections from a word list of 3 or more, they may be assessed on single word recognition (nouns, verbs, adjectives, and prepositions); on 2-word combinations; on simple categorisation and/or sub-topic categorisation; and on narrative recall and understanding. Assessment with auditory scanning is relatively slow, and potentially tiring because of the focus on sustained listening and auditory memory. It is likely that a full assessment would need to take place over a relatively long period; or that only specific sections are used.

The assessment is a work in progress. We have started to assess a small group of pupils in the primary department. In a weekly communication group for 8 pupils who use auditory scanning, aspects of the assessment have proved useful for differentiated group work, and for individual target setting.

#### References

Buzolich & King: http://www.acts-at.com/resources/ASSESSMENT/Auditory-Scanning-Assessment-Recording-Form.pdf

Kovach, T and Kenyon, P (August 1998) Auditory Scanning: Development and Implementation of AAC systems for individuals with physical and visual impairments (ISAAC Bulletin 53:3)

'Communicative Competence for Individuals who use AAC: From research to effective practice' Jan 2003. Janice Light and David R Beukelman

Aided Language Stimulation for the Prospective auditory Scanner: Linda Burkhart: http://www.lburkhart.com/hand ALS for Aud Scanners

'Auditory Scanning: Using Case Studies to begin to develop ideas for appropriate levels and progression:' Alison Mackenzie and Janet Hinchcliffe: CM Symposium 2003

The Chailey Communication System: Practical Applications Within a School Environment: Lisbeth Meek & Valerie Moffat: CM journal August 1998

### An exploration of possible factors influencing the non-provision of specialised augmentative and alternative communication (AAC) equipment after an extended assessment period.

Mr. Josh Mars (Barnsley Assistive Technology Team)

#### Abstract

Provision of specialised AAC equipment is a key aim of regional specialised AAC services. The Service Specifications for Complex Disability Equipment – Communication Aids (Specialised AAC services) (NHSE, 2016) provide the framework for regional specialised AAC (RSAAC) services to work within.

The requirement to assess within 6 weeks of referral and provide specialised AAC equipment within 12 weeks of assessment has implications for managing resources for service delivery. Cases taking over 18 weeks to reach their conclusion are potentially over-utilising resources, particularly when the outcome is non-provision of specialised AAC equipment. This could impact on cost efficiency, quality and safety for other clients, and service innovation.

In order to explore this issue within one RSAAC, themes associated with a higher likelihood of the above outcomes were proposed by RSAAC colleagues. In addition, the investigator considered further areas within the triage and assessment phases of the care pathway. Data collection was approved by the NHS Trust for cases to be analysed for factors influencing non-provision outcomes after an extended episode of care (EoC).

31 cases covering a range of non-provision and extended EoC outcomes were studied. Probable factors identified at the outset were confirmed to some extent. These were: under-developed low-tech AAC system, unclear expressive-receptive language discrepancy, complex access needs, and low level of client motivation to use specialised AAC. Some of these could be identified at triage, however, nearly two-thirds of cases with non-provision outcomes exhibited low motivation to use specialised AAC. This was only demonstrated through the assessment process.

This exploration signposts areas for more thorough investigation and development. These include client motivation, assessment procedures before referral to the RSAAC service, triage processes, and fine tuning of specialised assessments to be sensitive to the areas identified.

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### Are there similarities and differences in the content of the clinical decision-making of Biomedical Engineers, Occupational Therapists and Speech and Language Therapists when assessing for electronic assistive technology ?

Dr. Sylvia Taylor-Goh (RELATIONAL COMMUNICATION, SPEECH & LANGUAGE THERAPY CONSULTANCY)

#### Abstract

Aims: an investigation into the similarities and differences in the content of clinical decision making (CDM) during assessment and prescription of EAT for adults with an acquired brain injury. Design: A cross-sectional design employing concurrent think-aloud method.

Method: Two standardised audio and video enhanced written case scenarios were presented to participants who were asked to think aloud their assessment of the patient. The verbatim transcribed verbal data resulted in 120 verbal protocols.

Analysis: The primary method of analysis was qualitative coding of the data using inductive thematic coding to generate concepts within the data. Three stages of coding were applied, descriptive, categorial and analytic, indicating the process of moving up through and transformation of the data.

Subjects: A purposive sample of 60 participants (BE, n=20; OT, n=20; Speech and Language Therapist, n=20) from assistive technology centres and brain injury units across England.

Results: Two overarching themes, Person and Equipment emerged from the data and a high degree of similarity was observed between all professions during the think-aloud task. Each theme contained a number of principal concepts which were comprised of topics and categories generated during the coding process. The themes, Person and Equipment correspond to the existing literature for AT assessment (Scherer and Craddock, 2002). The theme Person reflected the biopsychosocial perspective of illness and the anticipated outcomes in the process of rehabilitation (Mermis, 2005). The theme Equipment reflected the literature regarding factors to consider when assessing for and implementing assistive technology provision (Scherer and Craddock, 2002, Cook et al, 2008)

Conclusion: The high degree of similarity between the content of decision making of the three professions would suggest that they are working from an internalised framework for assessment and prescription. The resulting framework derived from the data provides a clear and comprehensive structure for assessment of electronic assistive technology.

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## Are we sitting comfortably?

Mrs. Kate McCallum (Beaumont College), Mr. Craig Brown (Beaumont College)

#### Abstract

Story telling exists in many cultures and settings worldwide and "is one of the simplest, most enjoyable and most transformative activities on earth' (Grove, 2013). Storytelling is multifaceted and can be used in numerous ways, e.g. a leisure activity, to educate and help to convey meaning or as a tool to teach literacy. It has been shown to be effective in improving language skills (Joffe, 2013). Howley and Arnold, (2005) and Park, (2013) identified the value storytelling has for children on the autistic spectrum and people with profound and multiple learning disabilities (PMLD).

Sensory storytelling – storytelling supported by the use of relevant objects chosen for their sensory qualities and appeal – enhances the learning opportunities for individuals with PMLD (Fuller, 1999).

Often Augmentative and Alternative Communication (AAC) users are denied access to literature due to resource barriers within the classroom and beyond.

Many purchasable premade resources are expensive, aimed at children and do not meet the needs of people who use AAC or are emerging AAC users.

We will share how and why we have adapted stories and poems to meet the needs of students with a range of skills and abilities; how we are using sensory stories to promote and teach:

cause and effect,

switching and access skills,

literacy skills,

sequencing,

choice making,

turn taking

and access to low, light and high-tech AAC.

We will deliver this presentation through our adapted sensory poem, 'Sometimes The Beach' by S.C Johnson. We'll demonstrate how to use/adapt simple house hold items, simple and complex AAC software, and environmental and computer control to include everyone in a traditional SEN classroom while providing an immersive learning experience controlled by the students in a person centered way.

## Augmentative and Alternative Communication provision pathway: single item activation to linking ideas and navigating

<u>Ms. Deborah Wilkinson</u> (The Children's Trust), Ms. Catherine Bate (Surrey Teaching Centre), <u>Mr. Marc Viera</u> (The Children's Trust), Ms. Clare Stothard (Surrey Teaching Centre), Ms. Helle Mills (The Children's Trust)

#### Abstract

For clients with complex neurological presentations, there can be many obstacles to specialist augmentative and alternative communication (AAC) provision. This paper presents a pen-portrait style-technology review of a journey leading from basic cause-and-effect skills to those needed for specialist AAC provision, such as visual scanning, linking ideas and navigating categories.

The authors suggest that progress is enhanced by joint multidisciplinary working, including shared AAC goals targeted in a variety of contexts and joint sessions, as well as the dissemination of technology.

For some, recognising, finding, and successfully activating a single target signals the start of their journey. A variety of single cell gridsets of a scripted conversation are demonstrated that take the user through the challenge of honing their scanning and targeting skills.

The presence of a distractor icon/symbol can then be challenging. A sampling of adaptations of two-cell selection sets of a scripted conversation is shown that take the user through gradually increasing distraction demands. Next on the journey is finding two targets from within a larger selection set. Variations of an eight-cell selection set for playing videos, and a more complex version of a scripted conversation, serve as examples.

The concept of linking ideas is introduced using a mix of sentence starters and object/subject content for a variety of contexts in an eight-cell layout. Finally, navigation of categories is explored in a similar layout.

This paper highlights the clinical reasoning behind the technological adaptions shown. The particulars of this journey will not be applicable to every situation. However, the clinical reasoning, adaptation, and particularly the model of dissemination of technology across professional boundaries, provides the potential of closing the gap from basic cause-and-effect skills to specialist AAC provision.

## Cause & Effect in Eye-Gaze Technology: What effect does "teaching" have on task performance?

Mr. Tom Griffiths (Communication Aid Service East of England (CASEE)), Ms. Susannah Davis (University College London), Dr. Michael Clarke (University College London), Dr. John Swettenham (University College London)

#### Abstract

The use of eye-gaze control technologies as a method to access computers and AAC devices is increasingly widespread for children with severe motor impairments. Often, such technologies are introduced to children at a young developmental age, with the goal of teaching them the core skills needed to control them. Previous work has suggested typically developing children with a developmental age of 18-24 months were not able to independently complete an activity consisting of learning the functions of two different onscreen buttons and using this knowledge to complete a cause and effect task. Results suggested that development of sustained attention may be an important factor in learning to use eye-gaze technology.

This paper will present a follow-up study with typically developing children. All children will first complete a physical cause and effect task drawn from standard developmental testing, in order to ensure they have established this skill. The experimental phase of the study will use a similar task to that described above, presented on both eye-gaze and touchscreen technology, with the order in which they trial the technologies randomised. The experiments will now include a "teaching" component, in which children are provided with feedback after each trial of the task and modelling of the task is carried out in the event that children are unable to learn the task independently.

The study seeks to address the following research questions: (1) Can children who demonstrate cause and effect understanding using physical and touchscreen tasks apply this knowledge to control of an eye-gaze system? (2) What effect does explanation of the task have on performance?

At the time of submission, data collection is underway and the results will be presented in this paper, together with demonstration of the tasks and discussion of the implications of this study for future research and clinical practice.

### **Communication Access UK - the journey continues!**

Mrs. Catherine Harris (Communication Matters)

#### Abstract

By the time we reach the Communication Matters Conference we will hopefully be ready to launch the Communication Access UK symbol! This has been a much longer journey than anticipated. Since July 2016 Communication Matters been working in partnership with RCSLT, Stroke association, MND association, Headway and others on an extensive consultation to agree the symbol concept and develop the under pinning standards for a UK symbol. In parallel to this resources have been developed and a training package trialed to support the initiative. Champions and mystery customers have been recruited from around the UK. Training workshops have been piloted at the University of Leeds.

So where do we go from here!

This session aims to update delegates on the process with the research findings from the consultation. The future plans around impact and sustainability will be discussed. There will be an opportunity to contribute to discussions about the role Communication Matters should have as the symbol is rolled out.

## Developing Shared Reading Resources for Children with Speech, Language and Communication Needs (SLCNs)

#### <u>Ms. Gillian McNeill</u> (CALL), <u>Ms. Claire Harrison</u> (CALL)

#### Abstract

Acquiring communication and early literacy skills are key milestones in the development of all children. There is a significant body of evidence which demonstrates that the use of a shared reading approach can improve engagement and outcomes in early literacy. For children with additional support needs, shared reading can underpin the development of language and communication skills by offering motivating and engaging communication experiences. Shared reading goes beyond activities based at school, as there are many benefits when children and their families enjoy sharing books together at home.

Since 2009, CALL Scotland has worked in partnership with the Scottish Book Trust to support children with additional support needs in Scotland by providing accessible digital copies of the shortlisted Scottish Bookbug Picture Book Award titles. In recent years this partnership has expanded to include the production of symbolised shared reading resources for the picture books, in printed and digital formats with alternative access, enabling children with SLCNs to participate in storytelling. These are available for anyone to use. In this presentation we will...

- describe the rationale and benefits of shared reading and storytelling to support literacy, language, communication and learning for children with Speech, Language and Communication Needs.
- demonstrate digital copies of the picture books which provide accessible versions for children with additional support needs in Scotland
- explore the symbolised resources to support participation in and communication about the stories, which are available for anyone to use
- facilitate a shared reading group activity for workshop participants to see how the resources can be used

### **Embedding AAC in Educational Settings**

<u>Ms. Emma Bowers</u> (AT Therapy)

#### Abstract

#### Background

With advances in the field of high-tech augmentative and alternative communication, there are an increasing number of students being given opportunities to overcome communication barriers. When being provided with a means to communicate, it is necessary for students to then be given the reasons and opportunities to do so, throughout all contexts. This presentation will focus on the educational context with some reference to home support.

However, it has been identified that educational settings can both promote and impede language development (Von Tetzchner and Grove, 2003). There are high levels of voice output communication aids being abandoned in educational settings, outside of direct speech and language therapy intervention.

The literature recognises that it is vital for students to be exposed to embedded speech and language therapy input, and consistent opportunities to see aided language modelled. To support with this, there has been the development of resources by many sources, including communication systems developers.

#### Aims and Method

This project will be based on three case studies. Each student uses a different piece of communication software from differing suppliers, in turn with differing support resources available. The software and supportive resources include:

- Tobii Dyanvox Snap + Core First software and pathways for Core First resource
- Assistiveware Proloquo2go software and Core Word Classroom resource
- Liberator Words for Life software and AAC Language Lab resource

The aims of the project are:

- 1. To quantitatively track high-tech AAC users progress following the use of published supportive resources.
- 2. To identify the ability to generalise resources to other modes of alternative communication, including low-tech.
- 3. To qualitatively review best practise strategies for embedding AAC into learning environments and the effectiveness of published resources.

Results will be interpreted, and conclusions drawn to identify further ideas for embedding AAC in educational settings and consolidate best practice strategies.

## Evaluating the impact of a 12 week training programme for teaching assistants in using Aided Language Stimulation

Ms. Kate Duggan (The Seashell Trust), Ms. Emily Walsh (The Seashell Trust)

#### Abstract

A project to upskill Teaching Assistants (TAs) to improve school wide AAC use was carried out in a nonmaintained special school. A large number of students at the school had AAC systems in place, however, consistent AAC use was not successfully embedded throughout the school day. The evidence base and clinical experience in this setting indicates that communication partners play a significant role in predicting AAC user's success (Siller & Sigman, 2002). It was recognised by the Speech and Language Therapy and Assistive technology teams that there was over reliance on TAs spontaneously promoting communication opportunities within the classroom. Self-selecting staff from each class team were identified as 'AAC champions' and invited to attend half termly meetings to share good practice and increase skills in supporting AAC use. Von Tetzchner and Grove (2003) identified that in order for many individuals with developmental difficulties to acquire language, specific opportunities for learning are required. Aided Language Stimulation (ALS, Elder and Goossens, 1994), was therefore identified an approach which could be used to promote aided communication as a valuable means of communicating and support joint engagement and spontaneous language use (Kasari et al, 2014). A 12 week training programme involving a taught training session and three reflective workshops using video modelling was offered to all AAC champions on the use of ALS. Pre and post measures including a questionnaire to determine TA's confidence in using ALS and observations to identify the frequency of use of ALS were completed. The impact of use of ALS on student's ability to use their AAC system successfully for functional communication throughout the day was also considered. Findings from the project are discussed along with future directions for the upskilling of AAC champions to promote successful communication for children and young people who use AAC in this environment.

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### GCSEs - Exam access arrangements for an AAC user.

Mrs. Saffron Murphy-mann (CandLE), Mrs. Philippa Blackbourn (CandLE)

#### Abstract

There is little evidence base around the needs of students who rely on AAC and who have average intelligence regarding the acquisition of qualifications. We anecdotally know about a small number of students who have used AAC to obtain GCSE's and higher qualifications and we have taught some of those who have done so. To date we are not aware of any guidelines to support this process nor is there any evidence of exam boards embracing the need for a uniform approach to ensuring that this groups of students is enabled to meet their potential in terms of qualifications.

This presentation will involve a case study of the work of one student who has been determined to achieve qualifications despite the odds being stacked against her. These odds included a supportive school which had, nonetheless never guided an AAC user through exams, specific learning difficulties which made working memory and short-term memory tasks a challenge and a change in the exam system that removed course work, an all-important facility that previously enabled students who needed more time to show what they could do over an extended period.

The teachers, therapists and teaching assistants around the student worked tirelessly to help her overcome her memory problems and store the facts she needed to recall for the exam. They also negotiated accommodations to help the student retrieve some of the information she needed. Inspired by the work already carried out by CandLE in Cumbria and KM CAT in Kent the team put an argument to the exam boards which was eventually agreed and has pushed the boundaries of a fair process for exam access nearer to fruition.

Ways forward for the development of clear guidelines that exam boards can publish to support this group of students will be outlined.

## Getting it right - an AAC hub case study of a teenager's transition between devices

<u>Mrs. Shani Aleksandravicius</u> (Bristol Communication Aid Service), <u>Mrs. Katherine Marchant</u> (St Rose's School and Post 19 Centre)

#### Abstract

**Introduction:** Transitions and finding the right device and vocabulary is not always easy. This case study describes one teenager's transition to a new voice output communication aid (VOCA). His pathway included AAC hub assessment and trials, before reaching final recommendations. As with all complex assessments, there were a range of features that we sought to match to an AAC system. However, for JM, it was crucial that we ticked all the boxes to find a functional solution for him.

**Case presentation:** JM is a 16 year old with athetoid cerebral palsy and social communication difficulties. He was referred to BCAS for a new device and vocabulary. At this time he had an unreliable Vantage Lite 2, moisture protected with cling film, and was using Unity 60 (NuVoice), accessed directly with a keyguard. His main needs were identified as:

- Rugged moisture protected device with easily removable keyguard.
- Extensive core and fringe, symbol supported vocabulary and keyboard access.
- Quick, easy to programme software.
- A slow transition.

**Management and outcome:**It was clear from early on in the process that JM did not fit the standard BCAS pathway and required a staged progression to a new device and vocabulary. We will describe how the team around him (Hub SLT, Local SLT, family and school staff) approached the priorities and challenges of each stage of the process. We will outline goals of each stage, as well as describing the implementation and outcomes of the trials.

**Discussion:** The positive outcome demonstrates the importance of a thorough client centred approach including detailed feature matching, flexibility in the assessment process and strong teamwork with all committed to finding the optimal AAC system and supporting its implementation. We will also discuss issues around posture/positioning and prescribing a mixed supplier AAC system.

### Give Me a Minute - Visual indication of message creation

Mr. Fil McIntyre (Beaumont College), Mr. Matthew Oppenheim (Lancaster University)

#### Abstract

For many high-tech AAC users, it is difficult to see when they are composing a message. Two examples are eyegaze users and switch users, where it may not be clear when they are actively preparing speech.

We implemented a system that visually indicates when communication software is being used. 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.

The system continually monitors the AAC software to show when new messages are being entered, without the user having to manually trigger a "hang on" type message and interrupt their composition.

The system comprises of a BBC Micro:bit connected to the the AAC device. The Micro:bit has an array of bright LEDs which are used to give a clear indication of when a message is being composed.

The BBC Micro:bit is a small educational device, provided to schools for students to learn coding. It was chosen as it is cheap, easily available and safe. The software has been created using a freely available platform and will be made available on completion of the project.

#### References

http://microbit.org/

## Handshake - using hand motion to control switchable communications software

Mr. Matthew Oppenheim (Lancaster University), Mr. Fil McIntyre (Beaumont College)

#### Abstract

We present a system that uses cheap, off the shelf components to enable 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 system uses two BBC Micro:bits and one Leostick USB dongle. The Micro:bit is a small, light and programmable computer board given to all 11-12 year old students in British schools to learn programming. One Micro:bit is worn on the wrist. The Micro:bit has an accelerometer which is used to detect hand motion acceleration above an adjustable threshold. This threshold can be remotely adjusted. The second Micro:bit is connected to the communications device, which controls the AAC. The two Micro:bits communicate wirelessly. The USB dongle emulates a keyboard to send a keystroke to the communications software. The system has been successfully shown to operate Sensory Software's Grid 2 and Grid 3.

Several trials were conducted with volunteers who have cerebral palsy. The system was successful at picking up intentional hand gestures. Further testing will be conducted when volunteers who can benefit from this technology enter the college where testing takes place.

Full details of how to set up the system and the software are made available on the project website, enabling low-cost replication of the system using easily available components.

#### References

https://www.microbit.co.uk/home https://www.freetronics.com.au/products/leostick#.WoroRa5l99N

## Health promotion using smartphone apps for people who use communication supports

Prof. John Arnott (University of Dundee), Ms. Susan Munro (NHS Tayside), Ms. Robyn McNaughton (NHS Tayside), Mr. Gareth Lloyd (University of Dundee), Mr. Matthew Malone (University of Dundee), Ms. Bernie Brophy-Arnott (NHS Tayside)

#### Abstract

Health promotion messages such as those produced by health authorities advise people on how to look after their health, typically covering how to eat well, stay physically fit and reduce smoking and alcohol consumption. Messages are usually presented textually and are designed for people who have good cognitive skills including the ability to read and process language and retain information. People who need communication supports can often find such information inaccessible.

The development of mobile smartphone technology has created new opportunities for encouraging healthy lifestyles among the public<sup>[1,2]</sup> and providing information in formats which are accessible to different population groups. The delivery of health information to people who require communication supports is one such avenue for development.

A prototype smartphone application (app) was developed to deliver health information messages for people with mild cognitive impairments (MCI) in order to help them keep track of their health-related activity and provide motivation to adopt healthier behaviour<sup>[3]</sup>. Symbols were used extensively throughout the interface design. Outcomes indicated that the app had acceptable usability and could have a positive effect on certain health-related behaviours of people with MCI. A further prototype application has been designed to deliver dietary information<sup>[4,5]</sup> for people with learning disabilities, while also helping them to keep photographic food diaries for review with their dietitians or carers. Targets could be set for a user, presented in a very visual way using images and symbols, and a tutorial was also produced which could give feedback based on the user's recognition of fruit, vegetables and healthy drinks. Positive feedback was received also about this app.

Outcomes from these investigations on health promotion have been positive and encourage further development of special interfaces for mobile smartphone applications for people who use communication supports.

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## High speed AAC for switch users: rethinking switch frequency keyboard layouts

#### Ms. Jessica MacRae (Smartbox Assistive Technology)

#### Abstract

Switch scanning is an important technique for allowing individuals with a motor-impairment to communicate and access a computer. "Such systems, however, suffer from extremely slow text-composition rates"; therefore, any increase in text entry rate is worthwhile (Damper, 1984).

After reading Wade and Koester's paper on 'Switch scanning frequency analysis' (2017), I was left to consider what this meant for high-tech, literate switch users. As a member of the support team at Smartbox, these are the individuals I work with every day.

One of the benefits of a high-tech system is the access to prediction to speed up entry rate (Koester and Arthanat, 2017); in the case of Grid 3 – SwiftKey prediction. It is also apparent that a layout based on frequency of use (so that the more common letters are more easily accessible), will increase communication rate (Foulds, 1972). Therefore, we must take the impact of prediction, and frequency of letter use, into consideration when designing a Grid layout for high-tech switch users.

SwiftKey state "next words are predicted with such accuracy that 33% of suggestions are right the first time and usually (84% of the time) you won't need to press more than two letters" (SwiftKey, 2015). Taking into account these assumptions, I have designed a prototype keyboard based on the most recent research; the letters most frequently used as the 1<sup>st</sup> or 2<sup>nd</sup> letter in a word (Norvig, 2012), with consideration of overall letter frequency (for the instances where more than two letters need to be typed). The aim of this is to influence the design of future Grid 3 resources; providing better opportunities to improve text entry rate for users accessing a keyboard via switch scanning. "Fast text entry remains vitally important if user acceptability is to be gained and reasonable productivity achieved" (Damper, 1984).

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### How do augmentative and assistive communication practitioners make decisions? Quantitative evidence from a discrete choice experiment

<u>Dr. Edward Webb</u> (University of Leeds), Dr. David Meads (University of Leeds), Dr. Yvonne Lynch (Manchester Metropolitan University), Ms. Nicola Randall (Barnsley Assistive Technology Team), Mr. Simon Judge (Barnsley Assistive Technology Team), Prof. Juliet Goldbart (Manchester Metropolitan University), Mr. Stuart Meredith (Manchester Metropolitan University), Ms. Liz Moulam (Manchester Metropolitan University), Prof. Stephane Hess (University of Leeds), Prof. Janice Murray (Manchester Metropolitan University)

#### Abstract

**Background:** Little evidence exists on thedecision-making process of augmentative and assistive communication(AAC) practitioners when providing AAC systems to children. We use adiscrete choice experiment (DCE) to examine practitioners'preferences for attributes of systems and how they change given the characteristics of the child they are providing for.

**Methods:**In an online survey of AAC practitioners, we gave respondents avignette describing a hypothetical child described in terms of fourkey characteristics and asked them to choose between threehypothetical systems described in terms of five key attributes.Participants were shown three vignettes and made four choices foreach. DCE data was analysed using a stepwise mixed logit regressionusing the Akaike information criterion for model selection. From theresults, preference weights were calculated for each vignette, aswell as the relative importance of each system attribute expressed asa percentage.

**Results:** 155 AACpractitioners completed the DCE. Large variations in preferenceswere observed for different vignettes suggesting certainchild-specific characteristics have an important influence ondecisions related to the choice of graphic representation, vocabularysize and vocabulary organisation among other factors. This presentation will provide a detailed analysis of how preferences and the relative importance professionals ascribe to attributes of systems interact with salient child characteristics.

**Conclusion:**The study gives the first quantitative insight into the decision-making process of AAC practitioners providing systems tochildren, and shows their preferences for system attributes canchange dramatically depending on the child they are providing for.

## How our communication and use of AAC impact on our care needs

Ms. Helen Quiller (AAC user), Mr. Toby Hewson (AAC user)

#### Abstract

In this paper we will be discussing the impact our communication and the use of AAC has on our care needs and working with existing and new Personal Assistants. We will be talking about our experiences of working and communicating with personal assistants. Some good, some bad, some serious and some funny accounts of how our communication problems and the use of AAC impact on our care needs and working with Personal Assistants. The issues around communicating very basic care needs to assistants, especially when it isn't physically possible to use AAC equipment, for example when you are sitting in the shower, or lying in bed. These communication issues have a huge impact on my care needs. For example any new staff coming to work with me have to have at least two shadow shifts with one of my existing staff to learn my needs. In the past this hasn't always happened when I've been living in residential care home settings and had to work with lots of different agency staff who I have never met before and have come into get me up in the morning without any training or introduction to my needs or communication. These situations can be extremely frustrating and indeed frightening for me to deal and cope with at times.

## Implementing School-wide Core Vocabulary Instruction: From Idea to Practice

Ms. Maureen Donnelly (TobiiDynavox), <u>Ms. Michelle Mann</u> (Richard Cloudesley School), Ms. Natalie Fry (Richard Cloudesley School)

#### Abstract

For decades, the standard AAC approach has been to provide students with topic-based systems comprised mainly of nouns, descriptors, and pre-scripted phrases. While this approach can be helpful, it can also limit opportunities for generative, nuanced, or novel communication. Research shows that instruction in core words, a set of highly useful words across contexts and partners, can drive the communication potential of AAC users (Geist & Erickson, 2015). Core vocabulary is also shown to help students make connections between oral and written language and as such, provides a critical inroad to literacy development. Despite this, core vocabulary instruction can be challenging since many of these words are abstract, because many teachers and clinicians struggle to bridge language and literacy for their students, and because the research basis for this approach is emerging. Questions arise, like where do teachers begin and how do they maintain instructional consistency for their students?

One effective strategy is to identify a series of instructional priorities and construct a framework for implementation. Priorities might include the need to provide repetition with variety, the need to balance interactions across print and language environments, and the need to provide students with meaningful, generative ways to use the core in naturalized contexts. Another effective strategy is to use an existing curriculum that embodies these priorities and implement it across classrooms.

Richard Cloudesley School conducted a pilot project in which they implemented a core vocabulary curriculum called Core First Learning with students who use a variety of AAC solutions. Teachers collected qualitative and quantitative data to determine growth and student engagement. They also explored individualised ways to extend and enrich pre-made curriculum to meet the needs of all students.

This session will explore the opportunities and challenges in implementing a school-wide core vocabulary curriculum at Richard Cloudesley School.

#### References

Geist & Erickson, 2015

# IPAACKS in action: working towards an Educational Framework for AAC

<u>Ms. Sara Dale</u> (Ace Centre)

## Abstract

*IPAACKS – Informing and Profiling AAC Knowledge and Skills* provides a framework for workers to benchmark their knowledge and skills so they can better support AAC users. The framework was completed in 2014, but there has been limited reporting of its use and effectiveness to date. From the outset, when Communication Matters began work on a National AAC Competency Framework, there had been a vision for an additional Educational Framework . This session aims to consider next steps towards achieving this.

Ace Centre's LAACES (Local AAC Services) project has involved mapping local AAC multi-disciplinary teams' knowledge and skills to the IPAACKS framework in order to identify strengths and areas for development. Work has been underway within the Specialised AAC Services working parties to cross reference training programmes to this framework in order for practitioners to identify courses that will enable them to develop their AAC knowledge and skills. In addition to this, IPAACKS has been cross referenced to the *Augmentative and Alternative Communication Service Standards v1.2*. This document was published by Communication Matters in 2012 and defines quality statements against which an AAC Service can be measured. The context for these standards has changed significantly since their production yet the content remains as valid today. Linking these documents together aims to strengthen both; illustrating how local expertise is meeting the service standards and inversely what more needs to be done to improve the quality of services for patients.

This session will consider the implementation of IPAACKS and the AAC Service Standards with local AAC services and reflect on their current form, experiences of implementation in practice, and recommendations for revisions. Furthermore it will consider the links between professional development and service standards, and a move towards the creation of an Educational Framework for AAC.

### References

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Communication Matters (2012) *Augmentative and Alternative Communication (AAC) Service Standards* [online] [15/03/18] Available from: https://www.communicationmatters.org.uk/sites/default/files/downloads/standards/ aac\_services\_standard\_aug\_2012.pdf

## It's your turn to Rock with Sign Out Loud!

Mrs. Kate McCallum (Beaumont College), Mrs. Sally Featon (Beaumont College)

### Abstract

It's your turn to Rock with Sign Out Loud! For the past few years Sign Out Loud have presented at conference, this time it's you turn to learn a song, rock out and star in one of our videos.

Started in 2013, Sign Out Loud is an active and fun way of teaching Makaton through the use of popular music. For years there has been a huge gap in the market as there were no age appropriate resources available to support teenagers and young adults who have difficulties with receptive and expressive language. Makaton supports many of the people gain access to music. Sign Out Loud is helping to bridge this gap and is a energetic and fun way to learn Makaton. Sally is a regional Makaton Tutor and full time lecturer at a National specialist College and Kate is a Specialist within the AAC field and has been using Makaon since age 7, when her sibling was born with additional needs.

As Sign Out Loud continues to go from strength to strength

.. It's your turn to get up and active learning Makaton Signs without even realizing it. It's your turn to Sign Out Loud!..... Promises to be a loud, fun, energy packed, practical session where we share with you the techniques we use to enable the world to learn and use sign every day and together make a video we will share.

There will be no death by power point, there will be no escaping the fun. This is defiantly not a sit back a listen session it will be all singing and signing. We hope you will join us to capture the fun on video.

# Johnny Hawko

Mr. Jamie Preece (AAC user), <u>Ms. Emma Sullivan</u> (PA)

## Abstract

This presentation will be the reading of a short story. The main character is an AAC user known as Johnny Hawko. His life is that of a fairly ordinary guy until a chance meeting leads him to fall in love, fall in with the wrong crowd and end up in a world he could not have dreamed of. A dark and mysterious organisation takes control of his life and his communication device.

# Language Intervention using VOCAs for Children with Partially Intelligible Speech

Ms. Jessie Luckins (University College London), Dr. Michael Clarke (University College London)

#### Abstract

There is growing evidence for the positive effects of interventions using Voice Output Communication Aids (VOCAs), also referred to as Speech Generating Devices (SGDs), on the expressive language of children with little or no speech. However there is currently very little evidence for the use of VOCAs with children who have partially intelligible speech alongside language difficulties.

This presentation will describe the rationale, procedures and results of a conversation-based intervention using recasting, modelling and personally meaningful pictures, designed to improve the expressive language skills and communicative intelligibility of children with partially intelligible speech who use VOCAs.

A multiple probe across participants study design was used with four children. After a baseline period, the intervention was provided for each participant by trained speech and language therapists for a total of 12 sessions. Conversational interactions used pictures of each child in activities important to them, and involved recasts of the child's output into more complex utterances, which were then modelled on the VOCAs. The children were supported to learn and use linguistic clause structures and grammaticalisation appropriate for their development, and important for their improved intelligibility. To determine whether the children generalised new language skills, the results were analysed for spontaneous use of targeted structures during the intervention sessions in addition to language used following adult recasts and models. Generalisation was also explored in participants' conversations with familiar adults who were not involved with the intervention and unaware of its aims and methods.

All participants showed increases in their use of spontaneous clauses, and the grammaticality and length of their clauses. Clauses were produced on the VOCAs, and clauses were also produced verbally by three of the children. All gains were sustained and generalised to conversations with familiar partners. Clinical and theoretical implications of the results will be discussed.

# Language, learning and literacy: strategies and tools for supporting early AAC users

Ms. Daisy Clay (Smartbox Assistive Technology), Ms. Kerry Vacara (Smartbox Assistive Technology)

## Abstract

This presentation will examine a range of key strategies and tools for supporting AAC users to develop language, begin with literacy, and engage in learning.

We will explore and demystify strategies for implementing AAC and how these support language and vocabulary development, with reference to a SIMPLE AAC framework.

With increasing emphasis on supporting AAC learners to develop literacy, we will investigate a number of ways AAC learners can be given early literacy experiences alongside their AAC development. We will reference technology and low tech resources that can be used to support literacy development and offer suggestions for wider learning.

The benefits of focusing on vocabulary that is high-frequency, motivating, and relevant to the learner's activity will also be discussed, with regard to its impact on learning and literacy. The importance of access to early concept vocabulary such as size, shape, position and feelings will also be explored.

The presentation will refer to two products from Smartbox, the Super Core vocabulary, and Look to Read software, although the general principles and strategies can be applied to other AAC systems and general literacy instruction.

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# Learning English as an AAC user

Mr. Gregor Gilmour (AT Therapy)

## Abstract

Learning English as an AAC user has been a very long journey, which is still on going. I have come up against lots of barriers and have had to find ways of over coming them.

This is my journey through the education system. From starting out at a specialist nursery and primary school, to moving into mainstream education. Learning to talk using picture charts, communication books and symbol based AAC devices. To becoming a competent AAC user. Realising I could read really well and learning to spell. The opportunities that would open up to me from learning to read and write changed my life and the advances in AAC devices could allow me to develop my English and communication even more. I always knew what I wanted to say but getting it out was hard. I want to talk about the positives and the negatives, what worked for me and what didn't. How I coped using switch scanning to do my school work, homework and GCSE's.

Learning to read and write is vital for me to be able to communicate effectively. That is why I have carried on my literacy Journey so that I can reach my full potential. I now work self-employed for a private Speech therapy company, as an AAC mentor.

# **Living Independently**

Mr. Toby Hewson (AAC user), Ms. Helen Quiller (AAC user)

#### Abstract

This is the story of how I got to my live my life how I want to. Why it is worth putting your foot down and not giving in, even when you really can't see how you can possibly win. I will start with, when my mum put my name down on the Council housing register when I was 16, then showing you how I live today perfectly happy with my life and Finishing with what I am looking forward to in life with Helen . I will show you how much more you can get out of life if you use the technology available.

Gaining and keeping your Independence will mean you have to fight, fight again and keep on fighting till the bitter end but believe me it's worth it. This is my story.

# Management of iDevices in a specialist AAC Service

Ms. Abigail Attwell (Kent and Medway Communication and Assistive Service)

## Abstract

The Kent and Medway Communication and Assistive Technology Service is a specialist Alternative and Augmentative Communication Hub (AAC). The Children's Team is commissioned to help children access both communication and education. With this commissioning, as well as having a direct Case Load who we assess and provide with AAC Aids, we also work with local therapists around Kent, providing loan equipment.

With an increasing range and quality of apps, accessibility options and customisability, iDevices are frequently used as an appropriate, commercially available and often cheaper alternative to dedicated communication devices, in particular for those with direct access ability and finer motor control.

Therefore, as a Hub, we keep banks of iDevices for Staff, Training Courses, Assessments, Hub Loans and Spoke Loans, let alone the iDevices provided to our Case Load! Therefore, with over 100 iDevices in our service, how do we keep tabs on all of these? How do we manage all the apps we need on them without breaching licencing regulations?

In response to such questions, we have recently implemented a Volume Purchase Program (VPP) for apps and a Mobile Device Management System (MDM) to control groups of iPads, their restrictions and distribution of the apps.

In this session I will share my experience of setting up our MDM system to set restrictions on the iDevices and manage apps, including the struggles encountered.

Come along to see why it's a cost and time effective resource to have in an AAC Hub!

# My AAC journey

Mrs. Sarah Seamer (Electronic Assistive Technolgy Service, Lincolnshire Community Health Services), Mr. Guy Carter (none)

### Abstract

My name is Guy Carter. I am twenty years old; I have quadriplegic cerebral palsy. I can't sit up, walk, use my hands or talk.

All my life the SLT team have worked closely with my parents and schools. I used picture symbols and had a book full of labelled photographs about my life. I couldn't make the sounds but Mum practised phonics with me and taught me to read. At 6, I got my first electronic communication aid. It held all my favourite words. I used hand switches to step and select. This was slow:my hands don't work properly.

SLT and the Electronic Assistive Technology Service (EATS)recommended head switches. This was easier but still slow.

I wanted to spell. My parents ran through the alphabet and I nodded when they got to the correct letter. We got an ipad and this was quicker: I nodded to step and select.

I took English Literature and Maths GCSE. Essays took days to write. At 15, I was given my first eye-gaze communication aid. This was life changing. It was quicker; I learnt to use it and enjoy it.

Since then I haven't looked back. I passed my exams, left school and enjoy telling my story. Good communication partners are:

- Interested in hearing what we have to say and patient enough to wait for us to type it.

- Wait rather than reading the screen.

This is a joint presentation which aims to give Guy the opportunity to share his AAC journey and highlight the most important factors from his point of view. It will include information about the SLT intervention programme based on Janice Light's Framework of Communicative Competence.

Guy Carter

Sarah Seamer, Consultant SLT

#### References

Communicative Competence for Individuals who require Augmentative and Alternative Communication: A New Definition for a New Era of Communication?

Janice Light & David McNaughton (2014)

# NHSE Specialised AAC Services - where are we now?

<u>Ms. Anna Reeves</u> (Ace Centre), <u>Ms. Carolyn Young</u> (NHS England Programme of care Lead - Trauma), <u>Ms. Vicky Styles</u> (Bristol Communication Aid Service), Mrs. Julie Atkinson (ACT AAC Advisory Group Chair)

## Abstract

After many years of campaigning, in 2014 NHS England confirmed contracts for specialised AAC services across its ten specialised commissioning regions. Whilst at that point in time, the services that existed had previously operated very differently to each other and often in isolation, the NHSE commissioning arrangements have enabled improved equity of access to specialised AAC services for those children and adults who meet the defined NHSE eligibility criteria. This session will offer reflection on progress to date, emerging themes and issues and priorities for the future.

Whilst AAC services were already identified within NHS specialised commissioning arrangements prior to 2014, in reality there were few services in existence resulting in significant inequity across England and most regions having no access to specialised AAC services or NHS funded AAC equipment provision. The 'Bercow Review 2008'[1] and the findings reported in the 'Shining a light on AAC'[2] report along with actions resulting from the Government's response, the 'Better Communication Action Plan'[3] led to the announcement of additional £15 million annual recurrent funding from the NHS Convergence Fund for specialised AAC services. In the absence of robust data on the level and range of need, average equipment and service costs and existing eligibility criteria for these services, a service specification was drafted in order to anticipate how these services would operate. Three years after these services commenced, we now have a far greater understanding of these issues and efforts from a number of national working parties are addressing priorities for service development to ensure equitable, efficient high standards are attained. The focus is now shifting in order to address the varied equipment management and vigilance issues, local AAC provision and service standards and sharing learning across the UK.

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# Oldies but goodies - are we stating the obvious with implementation?

#### Mrs. Emily Gabrielle (Liberator Ltd)

#### Abstract

For those of us who have worked with AAC for some time implementation strategies to support language development are second nature.

We use them without thinking - they seem obvious to us. So when supporting new clients or skilling up new staff teams do we overlook these strategies, assuming them to be common-sense? Do we feel the need to always be looking for the bigger and better ideas to recommend?

We have all had a learning journey with AAC and those strategies which, for many of us, are now so obvious were once new, interesting and thought-provoking.

In this session we will think about the common implementation strategies often utilised and think about why they are still relevant. We can then think about how we can support ourselves or others who may be new to AAC to get to grips with them.

# Parents as Active Partners: Supporting parents/carers of children and young people who use AAC

<u>Ms. Nicky Ford</u> (KeyComm - Lothian Communication Technology Service), Ms. Debbie Jans (KeyComm - Lothian Communication Technology Service)

## Abstract

Evidence-based workshops for parents/carers of children and young people who use AAC were delivered across Edinburgh and the Lothians over one year, in partnership with local Speech and Language Therapy (SLT) services. These were followed-up with tailored support in each area. The workshops were designed to enable parents/carers to feel more confident with supporting their young people to use AAC systems at home and in the community; to generate their own practical ideas for communication opportunities; to set their own targets for developing their child's AAC skills. The parents/carers were introduced to the CODES framework to support target-setting. The CODES Framework is a tool used to support collaborative target setting and the extension of AAC users' functional communication skills.

The presentation will describe:

- the evidence-based workshops and resources/handouts used.
- how support was tailored for different groups of parents/carers.
- examples of ideas for AAC targets and communication opportunities devised by the parents/carers themselves.
- feedback from parents/carers and local SLTs.
- barriers that were encountered during the project.
- plans to support longer-term improvement of the service we provide to parents/carers of children who use AAC devices in Edinburgh and the Lothians.

Both authors work for NHS Lothian. This project was funded by the Edinburgh and Lothians Health Foundation, and was supported by KeyComm (Lothian Communication Technology Service).

The application for funding was made based on an evidence-based audit of the services that we provide to parents/carers. This audit was reported on at the Communication Matters conference in 2015.

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## **Participation for young AAC users**

Ms. Francesca Sephton (ATtherapy)

#### Abstract

The World Health Organisation (WHO) defines participation as the nature and extent of a person's involvement in life situations and categorises participation in terms of; personal maintenance, mobility, information exchange, social relationships,home life, education, employment and economic life (WHO, 2001). Participation leads to life satisfaction as well as a sense of competence and is essential for psychological and emotional wellbeing. Research states that as children with Cerebral Palsy (CP) grow up they are likely to be less socially active, participate in fewer leisure activities and are more socially isolated than typically developing peers (Stevenson et al. 1997). There are a number of reasons for this including; physical barriers (accessibility of buildings), age and gross motor function, perceptions of their own disability (not being accepted by their peers), society attitudes, familial factors (supportive modelling, overprotection) and level of engagement in social activities (King et al. 2006).

This presentation will share examples of participation for young, highly competent AAC users with a diagnosis of CP focusing on social relationships, emotional well-being and employment experiences. The content of the presentation covers three main areas;

Early experiences

The impact of early learning and communication experiences on participation will be shared drawing upon the literature on theory of mind and incidental learning.

The teenage years

Participation changes as children with disabilities transition to adolescence, with fewer activities occurring outside the home (King et al. 2003). Social skills in different contexts and mediums (social media) will be shared with similarities highlighted between the different case studies. The longer-term implications of poor participation will also be addressed such as fewer romantic relationships, psychological maladjustment (mental health difficulties, low self-esteem) and employment opportunities.

Strategies for intervention

Various approaches and interventions will be referenced to develop social skills, enhance emotional well-being and thus increase participation.

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# Proposed App for Setting and Tracking Aided Communication Targets

## <u>Mr. Mark Scott</u> (SCTCI)

## Abstract

It is important, when working on aided communication development targets, to be able to consistently set targets and to measure progress.

This session will describe the development of an app to support multidisciplinary teams to define and track targets for aided communication development.

The app allows the definition of targets over a period of time, and the logging of communication interactions. It provides visual and descriptive measurement of progress towards targets according to the interactions which have been logged.

As well as logging information directly about a communication interaction, such as what was said and the modality that was used, it also allows contextual information to be captured, such as where the interaction took place and who the interaction involved.

The terminology and definitions used in the app is consistent with the CODES framework developed by Keycomm (Jans et al., 2011). It is envisaged that the app could be used to support the work and decision making involved in the CODES framework.

It is also hoped that the app would be useful for defining and tracking the progress of targets during a period of AAC assessment. Inclusion of contextual information encourages consideration of more than just the use of any AAC system by itself, and the logging of interactions allows patterns to be discerned which may be of significance to the assessment.

Avenues for trialling the app and for providing feedback will be discussed.

### References

Jans, D., Wise, R., and Goodwin, S. (2011) C.O.D.E.S. Framework. Edinburgh.

## Research Case Study – Communicating with the Wider Community

Ms. Helen Quiller (University of Westsuffolk), Ms. Naomi Meara (University of Suffolk)

#### Abstract

#### Research Case Study - Communicating with the Wider Community

Presented by 1 Voice Trustees Helen Quiller & Naomi Meara – Research Partner

#### I have been using AAC for about 3 year

There are several reasons why I feel it is important that I can communicate with people outside my immediate environment and in the wider community. One of the main reasons for this is that I don't want to become isolated and only able to communicate with my Personal Assistants and my immediate family.

I have always found it quite difficult and challenging to work with pre-programmed words and phrases, because they can't ever say exactly what I want to at the time, or in a specific situation.

I began to become aware of some limitations in communicating beyond my immediate friends and family and decided to investigate this challenge.

The Purpose of the current research is to investigate via a case study the potential role of using 'pre-set' phrases (Hi, nice to meet you) versus phrase building in order to initiate or maintain a conversation with people in the wider community.

With support from a research partners I have been engaging in formal research to enable me to become more aware of the joint needs of an AAC user and people who are unfamiliar with my communication method. Having developed a greater understanding of the social rules of conversation, this has helped me to establish some key points to trial when conversing with people who are not known to me or when I am in a group setting.

The potential benefits of the research will be able to inform my wider work and those who are supporting individuals with their application of AAC use.

# Romsey: The first Makaton Friendly Town in the world!

Ms. Hannah Anderson (The Makaton Charity)

## Abstract

The Makaton Charity is passionate about communication and firmly believe that all children and adults with a learning or communication difficulty should be able to access the same services and facilities as everyone else. The Makaton Friendly scheme recognises organisations that strive to make their services accessible to Makaton users.

Currently there are now over 400 Makaton Friendly organisations including zoos, schools, museums, hairdressers, shops, cafés, etc. However there is currently only one Makaton Friendly town!

Hannah Anderson with Speaking Space encouraged as many places as possible in the town of Romsey to become Makaton Friendly. Speaking Space is a Total Communication Environment who wanted to improve the service users' communication experience when accessing the community. When the service users were in the local community they would automatically put their communication aids into their bags, and would stop using signs. As a person's ability to use other methods of communication such as signing are dependent on the environment they are in and the people they are communicating with, the Makaton Friendly scheme was a brilliant way to get the community involved and make the service users feel more at ease and confident in communicating. With the help of the community and the Makaton Friendly scheme, service users can now communicate directly to who they want to speak with, rather than via a parent or carer, increasing independence and happiness.

The Makaton Friendly town has made a huge difference in the confidence of those who use a form of AAC to communicate. It has boosted their confidence, built stronger friendships and built a community presence of Makaton. It has become the talk of the town and brought the community even closer.

Let's make a difference to more people's lives by reducing social anxiety around communication!

## **Selecting Vocabulary for a Diverse Population**

Mr. Jose Perez (AssistiveWare)

#### Abstract

When designing an AAC system, vocabulary selection is one of the most important considerations. A robust vocabulary that gives the user space to grow and satisfies their own personal needs is a great starting point that's already setting the right direction for the future. But when targeting a diverse population that may not share culture, background and language with the person making the decision about vocabulary selection, a vocabulary may be created that doesn't fit the user's needs and has a higher chance of being rejected.

While creating the Spanish, French and Dutch versions of Proloquo2Go we were confronted with this problem, and we had to find a way to develop vocabularies that would be useful and effective for very diverse populations that don't necessarily have the same background, culture and native language as we do. To do this we took different approaches for core words and fringe words, but both approaches were motivated by the same idea - put the communication needs of the AAC system's user first.

In this presentation we will describe all the techniques that we used during the creation of the Spanish, French and Dutch vocabularies (including their variants for different countries and bilingual use), as well as the findings, lessons learned and the usefulness of each of them. We hope to begin a conversation and for these findings to serve as a starting point for the audience to find more ways of creating ever more inclusive AAC systems.

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# Slidey keys: An alternative method of auditory scanning.

Mrs. Charlotte Akrigg (Communication Aid Service East of England (CASEE)), Ms. Catherine Hale (CASEE)

### Abstract

*Slidey Keys* is a communication system for people who require a voice output communication aid which can be accessed through auditory feedback. This is usually due to a visual impairment. As a team we identified a need for a faster auditory access method for those people who can use their hands to directly access with some support e.g guidance from a keyguard.

Features:

- Keyguard with 5 rows which you can slide your finger along.
- Device set to give auditory feedback.
- Feedback (Private) voice is different to spoken (Public) voice.

This system was originally devised for a client with a diagnosis of Progressive Supranuclear Palsy. This session will include:

- Details of the system including set up and variations.
- Case study examples of clients who have used Slidey Keys.
- The common features of clients who benefit from Slidey Keys.
- Details of its development and evaluation.

The system was devised by Charlotte Akrigg at the Communication Aid Service East of England Authors: Charlotte Akrigg (Advanced Specialist Speech and Language Therapist), Catherine Hale (Acting Clinical Lead and Advanced Specialist Speech and Language Therapist), Lisa Morsley (Advanced Specialist Speech and Language Therapist), Rob Smith (Rehabilitation Engineer), Jenny Druce (Clinical Technologist), Amy Hemus (Occupational Therapist), Karen Young (Advanced Specialist Speech and Language Therapist), Rachel McSweeney (Advanced Specialist Occupational Therapist), Lucy Talbot (Advanced Specialist Occupational Therapist), Joe Doran and Tom Griffiths (Clinical Scientist).

# Switch elimination access - Method and analysis for informed grid design and proof of equitable access

Mr. Leo Whiteman (Lincoln Community Health Services NHS Trust)

#### Abstract

Switch elimination is an alternative access method to conventional switch scanning. It requires two or more switches, although a single switch can be used differentiated by short and long presses. A desired cell is selected by converging on it through a series of iterations of selection/elimination choices.

The advantages of switch elimination scanning are perhaps most apparent when comparing it to conventional 2 switch scanning (progress and select). Although some cells take more presses when using switch elimination, access to the full range of cells in the grid is more equitable. A more subjective factor to consider is the intuitiveness of switch elimination compared to other switch access methods. When using coloured switches matching the group defining colours, switch elimination essentially becomes a task of selecting the colour seen on the screen. This is a lower level cognitive task than deciding between progressing / selecting.

The analysis in this presentation first shows that the number of switch presses required to select any particular cell in a grid of uniform cell sizes never exceeds a difference of 2 presses, thus illustrating the improved equity of access over more conventional switch scanning methods. It then details the method for determining the exact number of presses required for each cell in any given grid, before finally expanding the method to account for grids containing irregular sized cells. Determining the number of switch presses required for any given cell enables informed grid design, as well as further emphasising the benefit of equitable access to large grid sizes.

**References** Original analysis

# The AAC Mentor Summer Group

Mr. Gregor Gilmour (ATtherapy), Ms. Jessica Forster (ATtherapy), Mr. Afonso Ramalhoso (ATtherapy), Ms. Jodie Turner (ATtherapy), Mr. Adam Lenartowicz (ATtherapy), Ms. Francesca Sephton (ATtherapy)

## Abstract

Inspired by 1Voice, AAC mentoring as a profession has been embraced by ATtherapy. Since the emergence of the Mentoring service in September 2017, the benefits of the mentor role have been widely reported from mentees and their multidisciplinary team. This has included;

· Improvements in confidence and independence using their AAC across a range of environments

• Developed awareness of the importance of AAC, long-term potential and thus engagement with speech and language therapy advice/programmes of work

· Increased use of AAC and attainment of social competence goals

 $\cdot$   $\,$  Employment of strategies to support frustration with communication breakdowns following advice from AAC mentors

Inspiration to trial different AAC options including access methods, vocabulary packages etc.

ATtherapy now has four mentors who are highly proficient AAC users who deliver mentor sessions for those individuals who are new to AAC, less experienced, lack confidence, meet few other AAC users (often those in mainstream schools) or are going through a transition. Earlier this year, joint mentoring sessions were held with mentors and their mentees. This proved to be highly effective to enable some of the mentees to meet peers closer in age who have similar interests, communication abilities and access methods. Following the success of this, an AAC summer group was planned for AAC users and their support networks. The group has two components led by the mentors – fun activities designed to promote communication and a parent/carer workshop. In this presentation, ATtherapy's AAC mentors will feedback on the impact of the AAC summer group focusing on the effectiveness of the mentee-mentor relationship across activities and environments.

# THE IMPACT OF AN IN-SERVICE AAC TRAINING ON TEACHER-PUPIL INTERACTIONS IN CLASSROOMS

Dr. Ana Paula berberian (Universidade Tuiuti do Paraná), Dr. Simone Kruger (Universidade Tuiuti do Paraná), Dr. Gregor Renner (Katholische Hochschule Freiburg), Dr. Ana Guarinello (Universidade Tuiuti do Paraná)

#### Abstract

Two perspectives on the conception of Augmentative and Alternative Communication (AAC) have grounded clinical and educational practices. The first one assumes it as an instrument associated with the language as a code, and the second one as a linguistic resource. The latter claims that AAC can contribute to the process of language and knowledge acquisition, fostering interactions where teachers and students are placed as authors of their discourses and protagonists of such processes.

Advocating such a perspective, this study aims to analyze the impact of an in-service training for teachers, who work with speech or language-impaired students, on teacher-student interactions in the classroom, by means of an open questionnaire administered prior and after training.

The method consists of action-research with the implementation of a 30-hour, in-service training program, as well as in-classroom guidance for 24 teachers, who work with speech or language-impaired students in child education, elementary and intermediate school and special education.

Significant changes in relational and teaching attitudes were noticed, as well as impacts on teachers' personal development. From the perspective of discussing and mediating how children acquire language and knowledge, there was a change in the work propositions on language and interaction in the classroom.

It was concluded that ongoing education, committed to addressing AAC in theory and in practice, in light of a language conception constituting the subject, fosters inclusive education, improving interactional quality between students with speech and language problems and their teachers. Ongoing in-service training courses, based on that language perspective and AAC, are suggested in order to provide theoretical refinement. It is believed that by constant reflection on the joint and continuous work between speech-language pathologists and teachers, it will be possible to select the best strategies in terms of teacher-students interaction and learning.

# The Impact of Obsolescence in AAC and AT

Mr. Euan Robertson (Ace Centre)

### Abstract

The world of assistive technology and AAC (Alternative and Augmentative Communication) has been an ever changing landscape in recent years with huge advances in technology. The adoption of off the shelf technologies and the rise of tablets has led to a larger choice for people with disabilities when looking for the right technology to suit their needs. The improved funding landscape for both environmental control (EC) and AAC means that more people than ever are accessing technology. Whilst it cannot be denied that the technological advances are beneficial there are some lessons to be learned from the past.

The new wave of technology for people with disabilities such as iPads and eyegaze technology has lasting implications for a specific cohort of people "left behind" who can, for many reasons, only use other access tools that are no longer available or discontinued. From specialist keyboards to access methods no longer supported on iOS or android there are significant challenges faced by users of technology and the teams supporting them. In this session we will look at the impact of these changes on users and also the challenges faced by services supporting them, we will look at the evidence on obsolescence in AAC and AT and any recommendations that can be made to legislators and manufacturers of AAC and AT.

# The Potential of Low-Cost Devices to Improve AAC Assessments, Access Methods Implementation and Development of Bespoke Solutions Based on Biosignals

Mr. Hélio Lourenço (Ace Centre)

## Abstract

Biosignal acquisition and applications have been the target of increasingly growing development, since they constitute the basis of a diagnostic systems to provide a better understanding of human bodily functions through bioelectrical signals monitoring (Rangayyan, 2015). There are a range of accurate, low-cost and open source devices that have great potential not only to contribute to the research field, but to also promote the development of bespoke and cost-effective solutions for application within assistive technology.

BITalino is an example of such a device. It is a highly versatile hardware framework for biosignal monitoring without the requirement for high level electronics or computational science knowledge. BITalino is a portable device with wireless communication capabilities. It has its own software that enables live biosignal visualization and feature extraction (da Silva, Guerreiro, Lourenco, Fred, & Martins, 2014). It also allows the creation of bespoke tools with physiological sensors.

This paper focuses on demontsrating how Electromyography (EMG) and Electrocardiography (ECG), as non-invasive methods, can play an important role in the lives of patients with neurodegenerative disordes (Beukelman, Fager, & Nordness, 2011). They could also be beneficial across a wide spectrum of other physical and cognitive conditions across people of all ages.

Heart rate variability analysis, through ECG monitoring, can give information about the autonomic nervous system and it's stress levels, which can be applied during AAC assessments or during the period that a new strategy for communication, or even a different access method, is being implemented. While EMG is crucial for detecting any residual movement to generate control signals, (Londral, Nunes, Silva, Carvalho, & Azevedo, 2013) and is proving an increasingly popular access method, it also allows evaluation of levels of muscle fatigue, for long or short periods, supporting clinicians to develop more efficient and personalised access methods.

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# The Same but Different: A retrospective comparison of MND AAC journeys

## <u>Mr. Mark Scott</u> (SCTCI)

## Abstract

For people whose physical abilities are affected by Motor Neurone Disease (MND), maintaining access to technology for communication, both face-to-face and remote, can be crucial. Services such as Facebook Messenger, Skype, and WhatsApp can be just as integral to a person's communication as speaking and text messaging, particularly when their physical impairments have contributed to an increase in their social isolation.

The Scottish Centre of Technology for the Communication Impaired (SCTCI) is a specialist tertiary-level AAC assessment service working in 11 of the 14 geographical health boards in Scotland. For clients who are referred and who have a diagnosis of MND, SCTCI is often involved from the onset of their physical symptoms until the end of life.

This session will follow the progress of three people with MND, all of whom were provided with assessments by SCTCI in conjunction with their local Speech and Language Therapist, through their AAC journey.

In many respects, these three people could be considered quite similar; both in terms of their skills, knowledge and abilities, and also in terms of their communicative aspirations. All three people, however, made use of different access methods and different configurations of AAC systems. They also required different amounts of support to learn and to continue use of these systems.

Clearly, well known factors such as environment, attitudes, and culture influence the outcomes, but there may be additional factors which play a part. The purpose of this session is to begin to explore which factors may have most strongly influenced the final recommendation of a particular AAC system and access methods, and the support required to ensure successful outcomes. The ways in which these additional factors might influence clinical practice, after further development, will also be discussed.

# The Story of Core: History, Evidence, and Application

Ms. Bethany Diener (Tobii Dynavox)

#### Abstract

Core words are a hot topic of discussion in the field of AAC right now and for good reason; they provide AAC users with a powerful means of expression and are considered best practice. But what do we know about the history of core words? Who first identified them? How were core words first included as part of AAC systems? Why are they organised in the Fitzgerald Key? Who was Fitzgerald and what was the original purpose of the Key? Has colour coding always been part of the Key? What are practical ways to teach core? This session will answer those questions, share current research in identification of core words, and discuss strategies and approaches shown to encourage successful use of core words for augmented communicators.

Scientific evidence including work from Erikson et al (Project Core) offers us new information about criteria for selecting core words. We will discuss this as well as additional research (Robillard & Bélanger, 2014; Decker et al, 2017, etc.), expert opinion, and user/parent/caregiver experience to enhance our knowledge related to pertinent issues in providing a core vocabulary: organisation of core, suggested growth patterns (Duchovny & Zhou, 2016; Project Core), provision of personal core, and localisation of core across languages.

While knowledge of the history and current evidence regarding core words is important, it is use of these words in daily life by augmented communicators that is our real goal. Therefore, we will examine strategies known to facilitate functional and successful use of core in daily life such as attributing meaning and modeling (Romski et al, 2006) as well as approaches to teach finding, using, and reading core words.

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# The Unspoken Voices Project expert advisory group: Finding strength in collaboration

<u>Mrs. Katherine Broomfield</u> (Sheffield Hallam University), <u>Mr. Jamie Preece</u> (Sheffield Hallam University), <u>Mr. Patrick Bates</u> (Sheffield Hallam University)

### Abstract

### Background

The Unspoken Voices Project is part of a PhD study aimed at developing a greater understand about why people do and do not use AAC and how they view success in using them. Listening to people who rely on AAC telling their story is at the heart of the project, therefore involving them in the research study at every stage is critical to the integrity and relevance of the project.

## The Experts

People who rely on AAC were recruited to the expert advisory group for the research project via word of mouth. The group meets every 6 months at the National Star College near Cheltenham. Two members acquired communication difficulties as adults, two have had communication difficulties from birth, and three students from the college attend the meetings. It became clear from early on that the methods traditionally used to engage people in research advisory roles would not be suitable for this group.

## The Collaboration

Participatory design principles have been applied within expert group meetings to promote inclusion and generate meaningful collaboration between the researcher and experts in order to realise the true value of their experience. The experts rejected text-heavy materials in favour of audio-visual and picture-based ones. The lead researcher shifted the focus of the meeting from discussion to practice, encouraging experts to feedback using objects, images and gestures. Collaboration with designers and artists has enabled creativity to inform and record the expert meetings rather than words.

### Results

The researcher and two group members will share their experience and learning from the group and explain how they plan to build on this collaboration to expand the roles of the experts within the research project in future.

## The Use of Adapted LEGO®-Based Therapy to Develop Communicative Competency in Children Who Attend a Specialist Educational Provision and Use Augmentative and Alternative Communication Systems (AAC)

Ms. Nicola Dutton (Lansbury Bridge School & Sports College), Dr. Suzanne Gough (Manchester Metropolitan University)

## Abstract

*Presentation aims:* To try to solve the complex problem of developing communicative competence (CC) (Light, 1989; Light and McNaughton, 2014) in paediatric users of augmentative and alternative communication (AAC) systems the use of adapted LEGO®-based therapy has been trialled informally within Lansbury Bridge School – a specialised, educational placement in the North West of England. This presentation aims to explore the observations made of young AAC users participating in adapted LEGO®-based therapy sessions and link these observations to current research. Janice Light's communicative competency framework (Light, 1989; Light and McNaughton, 2012) will be used to discuss areas of competency during the presentation.

*Background*:LEGO®-based therapy (LeGoff, 2004; LeGoff and Sherman, 2006) is a social intervention largely used with people on the Autistic spectrum (Lindsay et al., 2017). It uses an intrinsically motivating, systematic and predictable therapy design to target the development of social communication and interaction skills in young people with Autism (Owens et al., 2008; LeGoff et al., 2014). LEGO®-based Therapy provides opportunities for the development of social competency as well as other areas of competency such as linguistic, operational and strategic (Light, 1989).

*Discussion:* The presentation will critically explore how the application of an adapted version of LeGoff's (2004) original therapy design has enabled its use with a wider range of clientele within Lansbury Bridge School. Specific case studies will be presented including paediatric AAC users whose overall communicative competency has developed as a direct result of their participation in LEGO®-based therapy; including examples of development in single and multiple competencies. Discussion will also take place around the design of individual communication targets within group sessions including sentence structuring or vocabulary development and device navigation. Examples of symbolised resources and personalised AAC systems will be discussed and presented.

### References

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Light, J. (1989) 'Toward a Definition of Communicative Competence for Individuals using Augmentative and Alternative Communication, 5(2) pp. 137-144.

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# The What? Why? Where? and How? of mounting.

Mr. Gary Scarlett (MERU), Mrs. Nikky Steiner (CLCH)

## Abstract

This session presents a holistic and practical review of our experience mounting AAC equipment within a small specialist AAC service (hub). The service provides a range of mounting solutions from different companies including Rehadapt and Daessy. For some clients a more bespoke solution is also needed where there isn't an "off the shelf" product;

In this session we will explore;

- the types of devices that we typically mount and those we don't
- the rationale for selection of a mount and consideration re floor, wheelchair, desk or bed
- decision making as to where a device is mounted on a wheelchair
- an overview of risks assessment and documentation used including: RA, WRAMP, MAT-doc, photo/video manuals/instructions of use.
- maintenance
- outcomes for the user (TOMS for AAC)
- reflection and learning for the team

Case studies will be used to illustrate the decision making, challenges and solutions for a range of children and adults using AAC.

These case studies illustrate the need for close liaison with mufti-disciplinary teams and the impact of support for the child/adult. They also demonstrate the need to involve the user in the process and consider their preferences.

## **Training Mystery Customers for Communication Access UK**

Mrs. Catherine Harris (Communication Matters)

### Abstract

If you would like to become a Mystery Customer for Communication Access UK or would like to be a trainer of Mystery Customers then this session is for you!

Since July 2016 Communication Matters has been working in partnership with RCSLT, Stroke association, MND association, Headway and others to launch a symbol for Communication Access in the UK. The symbol is due to be launched in September 2018. In parallel to this workshops have been facilitated around the UK in specialist schools and colleges and in stroke support groups to share the vision and identify champions and potential mystery customers.

As the symbol is rolled out there will need to be a coordinated approach to monitor how the symbol is used and whether businesses and organisations are meeting the underpinning standards. The aim is to improve the experience of people with communication difficulties out in the community and they are central to the success of this initiative.

There are now 12 mystery customers recruited across the UK but we need more people to join the team and more trainers to facilitate the workshops. This role fits well with educational programmes involving students in community activities. The data being collected is giving important baseline information for strategic planning and targeted marketing.

This session will aim to equip delegates to be able to do a mystery customer visit and deliver an introductory workshop as appropriate.

We need you! Come and be part of this exciting initiative from the very beginning.

### References

CM and the Communication Access Project-CM Journal August 2016 Catherine Harris The Communication Access Symbol- RCSLT Bulletin May 2017 Derek Munn The Communication Access Symbol- RCSLT Bulletin September 2017 Derek Munn Communication Access UK update CM Journal November 2017 Catherine Harris A right to be able to communicate RCSLT Bulletin January 2018 Catherine Harris

# Triggers for success in literacy acquisition: a case study

Mrs. Jude Philip (Grow Communication Limited), Ms. Marion Stanton (CandLE)

## Abstract

There has been research into the literacy difficulties experienced by students who have complex communication needs. However, there is less research exploring solutions to these difficulties. Up to 90% of children with cerebral palsy cannot read or read below grade level even if they have average IQ levels. [1] Lowered expectation may further decrease opportunities for students to develop literacy. [2]

A strong correlation exists between phoneme and phonological awareness and the successful attainment of literacy. [3] Recognition of and reproduction of sounds within words is an important precursor to reading ability. This is a challenge for students who have difficulty with vocalisation. [4]

S is a cognitively able 6-year-old boy with dyskinetic cerebral palsy and highly unintelligible dysarthric speech. Following a unique programme of Speech and Language Therapy (SLT) input S has acquired literacy skills in line with peers - he uses a text-based AAC system to augment communication and to complete written work at the same level as his peers.

This case-study will unpack the SLT input leading to literacy success, drawing on current discussions around SLT for pre-schoolers with CP, aided language input and literacy development. The session will equip listeners with practical solutions to maximise literacy development in the early years for children with severe speech difficulties.

## References

[1] Machaliecek et al (2010), "Literacy Intervention for students with physical and developmental disabilities who use aided AAC devices: A systematic review." In Journal of development and physical disability (2010) Vol. 22:219-240

[2] Ibid

[3] Larsson et al, (2009) "Reading and Spelling in children with severe speech and physical impairments" in The Journal of Development and Physical Disabilities (2010) Vol 21: 369-392[4] Ibid p 373

## Update from the Outcome Measures Working Party: Analysing the data

Ms. Vicky Styles (Bristol Communication Aid Service), Mrs. Nikky Steiner (Assistive Communication Service), Ms. Catherine Hale (CASEE)

## Abstract

**Overview:** Since presenting at CM last year on the implementation of AAC outcomes, the national outcomes working party have been exploring what to do with the data once it has been collated. This session will present an overview on how specialised services are standardising the interpretation of Outcome Measure (OM) data. **Detail:**The national OM working party 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 meets twice a year.

The goal for year one was to standardise the way in which each of the centres were administering the Therapy Outcome Measures (TOM) tool and to ensure a level of consistency in which this data was recorded.

Now in its second year, the working party have turned their attention to data interpretation. As busy clinicians, there is nothing more disheartening than being asked to collect data but getting no feedback regarding this. The working party aim to produce clear guidelines on how to use and interpret the information in a meaningful way. The session will review:

- Baseline reports that all services should be able to pull no matter the platform from which the data is collected
- The reports that can be extracted from patient management system
- How RCSLT are using ROOT to generate reports

Nationally collated OM data has the potential to be used in a positive and powerful way. As a group of AAC practitioners, we need to present this information in a meaning format that can not only be used to inspire the clients we work with, but also the commissioners that fund our services both now and in the future.

# Voice and message banking - the unvarnished truth

Mr. Richard Cave (MND Association / Royal Hospital for Neuro-disability)

## Abstract

The Voice Banking at Diagnosis Project was launched by the MND Association with the following goals:

• All people living with MND will be given the information they need to make their own decision about voice banking

• Technical and practical support will be available if they decide to proceed.

• All of this will be provided in a timely manner (as soon after diagnosis as possible), giving the best opportunity to successfully complete voice banking before significant voice deterioration.

We provide free training to professionals working with plwMND, and offer trained volunteers to help complete the process in pilot areas.

This presentation will:

Discuss how effective this project has been during the first 9 months from launch, an unvarnished review of what we learnt, what we would do more of and differently.

Share how each voicebanking supplier voice sounds with the same person recording - make your own mind up. This project works with all suppliers and we want you to consider your client's needs with perspective on all the available options.

Case studies on when voice or message banking did and did not work well for a client, and why.

For your clients - whether MND, ENT, acquired/progressive neuro or already lost their voice - our best advice on 'discussing and doing' voice and message banking with them

You are welcome to bring and share any client scenario you want to discuss.

## Voice or Message Banking? A Client's Perspective.

Ms. Mary Groves (Access to Communication and Technology), Mrs. Lynne Allsopp (Access to Communication and Technology)

#### Abstract

Aim: By evidencing our learning from a client's experience we will explore the practicalities and impact of voice and message banking.

Due to advances in technology which have been highlighted in the media, people now have more access to and potential for recording their voices if faced with the possibility of losing their speech. The media and research emphasis often focuses on voice banking (Orrell, 2016), with little mention of alternative options such as message banking or leaving a digital legacy. This presentation will explore the differences between these from a client's perspective and the importance of considering all options.

The inability to accept an alternative voice has been cited as reason for AAC abandonment in MND patients (Murphy, 2004). As part of joint working with the MNDA, they highlighted a significant rise in the volume of queries to their advice service around voice banking from both professionals and clients. This combined with the increased media attention highlights a need for healthcare professionals to develop their knowledge and skills in this area.

As therapists working in a regional specialist hub, we work with local therapists to support and train them to address this subject in a timely manner. Using our client's experiences has enabled us to develop our training, comparing all options to ensure a personal client centred approach.

The presentation will include the differences between voice and message banking and a client's top tips for completing both options, as well as highlighting a range of resources and support available.

### References

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# What is the role of the Occupational Therapist (OT) in assisting adults who are losing speech?

Ms. Mary Groves (Access to Communication and Technology), Mrs. Lynne Allsopp (Access to Communication and Technology)

## Abstract

**Aims:** Consider how Augmentative and Alternative Communication (AAC) can enable functional and meaningful communication for adults who are losing speech; and recognise how this can be implemented within daily life in order to maintain occupational identity and roles.

OTs regularly work with people with rapidly deteriorating conditions such as Motor Neurone Disease (MND). The MND Association (2016) report that 80-95% of people living with MND will experience some loss of speech. MND Nice guidelines (2016) state that AAC equipment should be provided to maximise participation in daily life. In 2013 NHS England initiated commissioning of services for those with complex communication difficulties and OTs are an invaluable part of a multidisciplinary team who deliver specialised or local AAC services (NHS England/Specialised Commissioning, 2016). Despite the significant potential of AAC, paper based resources and high-tech aids have a significant rate of abandonment.

OT skills are directly relevant to making AAC functional and meaningful and an OT specific framework can be utilised to help identify communicative breakdowns. The Model of Human Occupation (MOHO) will be used as a framework to discuss how the inability to use speech can impact occupational identity and occupational roles and how the functional implementation of using AAC can bridge the breakdown that people experience when loosing speech.

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## What's the Score? Translating a Core Vocabulary from German to English

Ms. Gillian Rumble (Independent SLT), Ms. Judy King (Independent SLT)

#### Abstract

The Cologne Core Vocabulary is a widely used AAC system in Germany. It originated in a low-tech form of symbol boards and binders for use primarily within education. Based on the strong principles of research, Professor Jens Boenisch and his team at Cologne University developed a set of vocabularies that offered the user access to high frequency words and grammar structure in the German language. The system provides a progression of boards that enables the child to grow their communication skills following developmental language principles. Through collaboration with Jabbla this paper-based system developed into the high tech dynamic vocabulary MyCore on Mind Express.

This presentation will explore the challenges faced in translating this vocabulary for the UK. The primary principle has been to maintain the integrity of this well-structured system whilst adapting it to suit the needs of the British AAC user. The authors were mindful of the differences in the teaching of AAC in the UK to that of Germany and the need to ensure that the vocabulary arrangement was transparent and predictable for those responsible for implementation.

Looking at both the low-tech boards and binders and the high tech programme it has been important to give it British credentials. We will outline the decisions made in terms of symbol choices, colour-coding and vocabulary selection. We reviewed the organisation of large vocabulary sections such as verbs and adjectives to make it more intuitive for new users. Although not included in the original German version, pre-stored sentence starters and phrases have been added to promote social communication.

The strength of the Cologne Core Vocabulary and MyCore is that the high tech vocabulary has grown from the roots of a well designed low tech system. It is these principles that we have sought to give the UK user through Score.

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## When is a sheep not a sheep? Debunking the myths around Minspeak and Semantic Compaction.

#### Mrs. Emily Gabrielle (Liberator Ltd)

#### Abstract

As an approach to vocabulary organisation, Minspeak has existed for over 30 years and is currently recognisable in vocabularies such as Unity 2.0 and LAMP Words for Life.

Being built on the principles of multi-meaning icons, rule-driven patterns and short icon sequences to access vocabulary, means that Minspeak vocabularies offer individuals quick access to a vast vocabulary in a manner which means automaticity can quickly be established.

So why are people often so afraid of Minspeak based vocabularies?

Let's take some time to briefly explore the evolution of Minspeak and consider the rationale behind using such an approach to organise language.

Then we can try to address some of the challenges and common preconceptions held and think about how simple vocabulary tools and resources can easily support the instruction of this amazing vocabulary approach. You'll be a convert in no time :)

## Where We Are: Old Challenges and New Opportunities in Literacy Instruction for Students who use AAC

#### Ms. Maureen Donnelly (TobiiDynavox)

#### Abstract

Supporting the learning needs of children who use AAC is a complex endeavor and one that comes to us freighted with historical beliefs and perceptions about student potential. Today, however, there are new opportunities that suggest we rethink our perceptions about student potential, as well as the approaches we take in supporting their literacy learning needs. There are three new developments that encourage us on this path; technology that presents new opportunities to access learning materials, evidence that effective instructional practices can apply to all students, and a growing cultural consensus that underscores the fact that all children can learn to read and write. These factors, together and in combination require that we challenge ourselves to chart a new course for students who struggle. The purpose of this presentation is to outline how these barriers have shaped us, as well as how we might address them thanks to changes in research, technology, and in cultural beliefs. Since most students with complex needs also have very beginning literacy skills, the presenter will begin by defining emergent literacy and outlining effective instructional practices for our earliest beginners. The speaker will identify and discuss barriers that students typically face in accessing the kind of instruction that leads to conventional skills. Finally, the presentation will conclude by offering a theoretical framework for instruction, that includes practical, everyday approach for supporting the literacy learning needs of students who use AAC.

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## Smart Speakers - a game changer for AAC users

<u>Mr. Mike Thrussell</u> (Access Technology North Ltd), Mr. Andrew Simpson (Access Technology North Ltd)

#### Abstract

Access Technology North present 4 case studies to demonstrate the motivational and lifestyle benefits of using Smart Speakers (Amazon Echo, Google Home etc.) for users of AAC devices.

Assistive technology is not just about the equipment necessary to access education, communication and independent living; users must also be motivated to fully engage with their technology-solutions, and we should do all that is necessary to support them in their personal journey to develop into competent *lifelong* users of Assistive Technologies.

This presentation will demonstrate the role Smart Speakers can play in this journey.

We have witnessed a significant increase in motivation for our clients to spontaneously use their AAC devices via the use of Smart Speakers. The familiarity and positive reinforcement brought about by this use of AAC leads to a more proactive approach to communication transferred across different contexts.

We will explore a variety of different access methods used to engage with this low-cost mainstream technology for a range of positive outcomes.

We will make comparisons of available devices and offer examples of the range of functionality these devices present, including:

- Environmental Control (smart home, lights)
- Entertainment (TV control, music, audiobooks)
- Communication (intercoms)
- Management of daily routines (calendars)

AAC users can become less reliant on support workers, in that they can make choices and take control of their surroundings independently. These devices have the added benefit of being inclusive for the whole family, as every member engages in the same way with the same technology - unlike most Assistive Technology solutions that are exclusive to the user.

## "A Case of CASEE" - How Does Outcome Data Guide the Development of a Specialist AAC Service?

<u>Mr. Tom Griffiths</u> (Communication Aid Service East of England (CASEE)), <u>Ms. Catherine Hale</u> (Communication Aid Service East of England (CASEE)), Ms. Rachael Mcsweeney (Communication Aid Service East of England (CASEE)), Ms. Lucy Talbot (Communication Aid Service East of England (CASEE)), Mr. Joe Doran (Communication Aid Service East of England (CASEE)), Ms. Karen Young (Communication Aid Service East of England (CASEE)), Mr. Charlotte Akrigg (Communication Aid Service East of England Service East of England (CASEE)), Mr. Charlotte Akrigg (Communication Aid Service East of England Service East of England (CASEE)), Mr. Charlotte Akrigg (Communication Aid Service East of England (CASEE)), Mr. Charlotte Akrigg (Communication Aid Service East of England (CASEE)), Mr. Charlotte East OF England England Service East OF England

East of England (CASEE)), Mr. Rob Smith (Communication Aid Service East of England (CASEE)), Ms. Jenny Druce (Communication Aid Service East of England (CASEE)), Ms. Amy Hemus (Communication Aid Service East of England (CASEE))

#### Abstract

The Communication Aid Service East of England (CASEE) was opened in 2016 with funding from NHS England, after it was acknowledged that no existing service was appropriately located to cover the region. As such, the service is unique in that is has been built "from the ground up" and has expanded to now include 16 members of staff from a range of professional backgrounds. Today, the service has an active caseload of over 282 adults and children across six counties.

This presentation will offer a unique perspective on the challenges of providing for such a broad and diverse catchment area and how the acquisition and analysis of data and feedback from service users and referrers has guided the development of the service and shaped how decisions have been made. For example, since its inception the service has been using the *Therapy Outcome Measures for AAC* (TOM AAC) with all clients in order to evidence the changes that AAC provision is making. A large dataset (*n* = 107) of completed pre- and post-provision TOM AAC scores will be presented and discussed, alongside geographical spread, referral trends and case examples to illustrate the ways in which we have changed and adapted our service delivery. The team will discuss what initiatives we have developed to encourage referrals and increase the efficiency of service delivery, including our assessment kit training programme for local AAC professionals.

We will show how the provision of AAC has a positive impact for individual clients and discuss how the establishment of a new service has been aided by measuring outcomes, listening to feedback and making changes in response.

## "To Communication and Beyond"

<u>Ms. Sarah Ward</u> (Chailey Clinical), Dr. Samantha Micklewright (Chailey Communication Aid Service)

#### Abstract

It is not unusual for high tech communication aid users to want to use their devices for purposes additional to voice output. Such purposes include: using computer applications for education or work, handling phone calls and emails, and controlling their surrounding environment. Assessment and provision of some of these additional functions can be carried out by the existing NHS England Specialised Alternative and Augmentative Communication (AAC) and Environmental Control Services. However, for some functions, it can often be unclear what appropriate services are available to the user and how to access these.

At Chailey Clinical (NHS Sussex Community Foundation Trust) we have both the Chailey Communication Aid Service (specialised AAC service) and a separate Specialised Communication, Access and Mobility Potential clinic. These services have worked in partnership to provide users with appropriate voice output devices alongside support for additional device functions. An example of this was a client seen by the Communication Aid Service who had further requirements beyond voice output. The device needed to enable the client to undertake academic examinations and perform specific tasks related to his chosen career.

This presentation will discuss how users can go beyond using their device for everyday voice output communication alone and what services are available to support them in this. It will explore the national stance on going beyond what is typically covered by our services and question how we can be addressing these requests within AAC.

## POSTER

## 'Communication Matters - the impact on practice at Chailey Heritage.'

<u>Mrs. Paula Marten</u> (Chailey Heritage Foundation), Ms. Helen Dunman (Chailey Heritage Foundation)

#### Abstract

Chailey Heritage Foundation includes a school for children and teenagers with severe and complex physical and learning disabilities, medical conditions and sensory impairments - often a combination of these. Along with the school, the Foundation has residential provision, therapy and clinical services.

Teaching at Chailey is centred around the need to provide learning opportunities that meaningful and relevant for these youngsters, given the limitations they face as a consequence of their disabilities and recognising their individuality and potential. As teachers, the many inspirational sessions that we've attended at the CM Conferences in recent years, the delivery of workshops and presentations that we have conducted there, and the discourse that has followed, have led directly to new developments in our teaching practice which we believe will have a positive impact on the lives of the amazing young people we work with. Listening about the experiences of parents of severely disabled children has helped us to re-define our thinking about the need for our students to learn leadership skills. Learning about the use of film to facilitate reflective practice has led to the introduction of CPD utilising this method, now an established part of our staff training programmes. These are but two examples of the many which we'd like to explain and illustrate at this years' conference with the aim of instigating more professional dialogue and stimulating new ideas and interventions.

## A Hub and Spoke Journey: Reflections on Implementing AAC with Children and Young People with Retts Syndrome.

<u>Ms. Charlotte Sax</u> (Guys and St Thomas Assistive Communication service), <u>Ms. Alice Gallimore</u> (Lewisham and Greenwich NHS Trust)

#### Abstract

We will present three children/young people we have worked with all who have a diagnosis of Rett Syndrome and are using high tech devices with eye gaze to communicate. With reference to the evidence base we will discuss some of the learning that has risen from working together with these three individuals, their families and school staff.

Our goal, in all three cases, was to provide them with appropriate alternative and augmentative communication to extend their expressive communication and allow these young people to show more of their abilities. Some of the issues we encountered included:

- Assessment How to assess someone who finds things harder as soon as it is an assessment situation? What to do when one off assessment sessions are not particularly effective?
- Managing children and young people who are consistently inconsistent in their communication skills taking the long view.
- How does 'assuming competence' work in practice what does this mean for choosing vocabulary sets and/or AAC devices.

Some of the approaches we found helpful have included

- The hub and spoke services working very closely and somewhat flexibly together.
- Providing communication opportunities rather than structured assessment sessions and collating data over time and across settings
- Using modelling , pausing and 'soft questioning' when chatting
- Exploring different vocabulary options
- Actively managing levels of alertness
- Communicating around motivating situations
- Continually challenging our own and others expectations

## Becoming a culturally responsive AAC practitioner

Mr. Charlie Danger (Ace Centre)

#### Abstract

Our culture defines who we are, how we act and how we respond to services, including assistive technology and AAC. How do we, as providers of these services, accommodate cultural differences when working in a multicultural and multilingual society? This presentation draws on research and clinical experience working in the middle east to explore the impact of our cultural responsiveness on the services we provide. We examine three levels of culture: surface, shallow and deep; and discuss how we can examine our own ability to acknowledge and leverage differences in order to provide the optimum service and reduce device abandonment. A number of practical solutions will be put forward, including the use of free apps, international pictorial symbols, and other resources that can be used immediately to help us to deliver a more effective service.

### **Communicating Emotions for People with Dysarthria**

Mrs. Lubna Alhinti (University of Sheffield), Dr. Heidi Christensen (University of Sheffield), Dr. Stuart Cunningham (University of Sheffield)

#### Abstract

Speaking is the most common method of communication and it plays a critical role in defining who we are. Emotions are essential elements in our everyday social interaction with others. Understanding emotional expressions, and the information they carry, helps in coordinating social interactions as they affect others' responses, actions and feelings. Having dysarthria may change the way people communicate. It may affect the speaker's style, communication behaviour and it may affect the capacity of revealing feelings and emotions while speaking.

With the emergence of Augmentative and Alternative Communication (AAC), people with speech disabilities have been given a way to support their communication. Current AAC users have new social roles and therefore have new desires, demands and expectations in their social participation that they would like to fulfill (Fried-Oken et al.,2012). However, the current AAC technologies limitations stand as barriers to communicate effectively. The current AAC technologies focus on assisting their users to communicate the *verbal* part of their message. However, relying on verbal communication only, may lead to problems in communication and may increase the potential of being socially withdrawn. People cannot express all their feelings by words. Nonverbal information carries a huge part of the person's feelings and emotions that affects the meaning of the spoken word (Calero, 2005).

This research focuses on understanding how people with dysarthria communicate emotions. How difficult is it to get their emotions across? What are the emotions that are important for them to get across? Is there a difference in the way emotions are communicated to familiar and unfamiliar people?

We will be presenting and discussing preliminary survey findings. What these results may mean and how they could be used to improve voice output communication aids (VOCAs).

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## **Core Vocabulary: Group Intervention Using LAMP**

<u>Ms. Emer Noble</u> (Central Remedial Clinic), Ms. Fiona Walsh (Central Remedial Clinic)

#### Abstract

Language Acquisition through Motor Planning (LAMP) is a therapeutic approach based on neurological and motor based learning principals for those who are non-verbal or with limited speech. In LAMP, the emphasis is on core vocabulary words - high-frequency words that make up about 80% of the words used every day and include mostly pronouns, verbs, descriptors, and question words<sup>1</sup>.

The aim of our intervention was to investigate the acquisition of targeted single core vocabulary words through aided language stimulation in a bi-weekly group setting. It was hypothesized that targeting a selected group of core vocabulary words using the Language Acquisition through Motor Planning approach wwould result in the participants recalling the location of the word, and maintaining their knowledge of that word.

Twice weekly play based therapy group for approximately 30 to 40 minutes was facilitated by two SLTs. Focus on use of core words was taken from evidence based vocabulary lists through aided language stimulation<sup>2345</sup>. The same words were targeted across multiple activities, along with incidental occurrences, in different contexts, and activities were chosen to facilitate the repeated use of the core words. A checklist assessment of ability to find 15 – 16 chosen core words was completed as a pre-intervention measure. The same assessment was completed immediately after the group and then again after an interval of 5 - 6 weeks.

The results show that all participants increased in their knowledge of word location across the two groups, as measured by our checklist of targeted words. There was evidence of maintenance of word location knowledge from most participants. This showed that bi-weekly intensive group therapy is effective for increasing and maintaining word knowledge in LAMP, in our experience.

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## Hot wheels is exciting

Mr. Patrick Hockaday (College Cambria)

#### Abstract

My poster will include information about how i use my communication aid in the wider community. i want to focus my poster on Hot Wheels which is a wheelchair dancing club which is very important to me. I have been a communication aid user since the age of 2, a quarter of a century of AAC use! My first device was a 'Liberator'. it had 128 keys and was big and heavy with paper overlays for the programmes I had. i would be happy to share some funny stories with the conference participants about these early devices e.g my first device was so big I could not see over the top of it from my wheel chair!

I want to express how i feel about Hot wheels using a mixture of text and pictures. i want to put on my poster the advantages and disadvantages of using my communication aid at a club. i used my communication aid to present an award to Linda and Julie who have been running Hot wheels for 15 years, it was on BBC North West Tonight and I will include this on my poster. Hotwheels is exciting because i enjoy it so much and I can speak to friends.

## Inclusion of participants with communication and learning disabilities in a study of experiences of communication aid assessment

<u>Ms. Nicola Randall</u> (Barnsley Assistive Technology Team), Mrs. Liz Moulam (Manchester Metropolitan University), Dr. Yvonne Lynch (Manchester Metropolitan University), Mr. Stuart Meredith (Manchester Metropolitan University), Mrs. Helen Whittle (Manchester Metropolitan University), Prof. Juliet Goldbart (Manchester Metropolitan University), Mr. Simon Judge (Barnsley Assistive Technology Team), Prof. Janice Murray (Manchester Metropolitan University)

#### Abstract

**Introduction:** Children whose speech is not sufficient for functional use may beoffered alternative and augmentative communication (AAC). AAC ranges fromunaided systems such as manual signing, through aided but low-tech systems suchas communication boards, to high tech systems such as voice outputcommunication aids. Whilst there is evidence that AAC can significantly enhancelanguage and communication, there is also evidence of high levels of abandonment of communication aids.

**Patients and methods:** Children who may benefit from AAC include those with cerebralpalsy, intellectual disability, autism, specific language impairment andother rarer syndromes. As part of a UK National Institute for HealthResearch-funded study, children who use AAC were asked about their experiences of AAC assessment. In order to be maximally inclusive, in line with UNCRC andUNCRDP, a range of methods was used, including familiarisation sessions,Talking Mats and specially designed storybooks to elicit children's views.

**Results:**Children were able to provide rich accounts of their own experience whichcontributed to later stages of the project. Examples of the Talking Matsresponses are presented to illustrate children's priorities.

**Conclusion:** The use of skilled interviewers and carefully planned techniques can enable children who use AAC to contribute to greater understanding of Assessment processes. This may facilitate the selection of appropriate devices, leading to reductions in device abandonment, enhanced language and communication and greater user satisfaction.

### **Introducing Communication Dictionaries**

Ms. Alison Matthews (Total Communication Services CIC), Ms. Shahnaz Ashraf (Total Communication Services CIC)

#### Abstract

The focus of the paper is the development of a tool known as the Communication Dictionary, which has been developed by the first author and originally was used to describe, support and develop the communication of people with profound learning disabilities and complex communication needs. The Communication Dictionary started life in 1997, inspired by elements of Essential Lifestyle Planning (Smull, Sanderson and Allen 2001) and the 'Bringing people back home' training pack (Szivos and Clarke- Kehoe, 1990). Communication Dictionaries are created for individual disabled people, and represent carers' interpretations of how individuals including people with profound and multiple learning disabilities (PMLD) express themselves and how they best understand. Everyone who knows the well is invited to contribute. This may include family members, support workers and people paid by the service user. The Communication Dictionary can best be described as a process for supporting change and facilitating communication and a document which captures and preserves the detailed knowledge of communication partners.

Koski and Launonen (2012) describe skilled communication as being sensitive in nature, and define sensitive communication as an ability to 'perceive and interpret the communication partners' signals accurately' (page 2) and an ability to respond quickly and appropriately. Skilful communication can also encompass the use of a facilitative style, requiring the communication partner to accept the disabled person's communication as worth listening to and responding to (Koski and Launonen 2012).

The Communication Dictionary has existed in paper form since 1997 and has been redesigned by Total Communication Services CIC and introduced into a NW charity, a locked rehabilitation unit and a private dementia service. Training materials have been developed in English and in two of the main Asian languages as well as in English. The project is partially funded by the National Lottery Awards for All grants.

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## My Journey to Becoming an 'AAC Eye-gaze Pro'

Mrs. Sally Mosley (Treloar School and College), Ms. Sophie Beam (Treloar College), Ms. Emily Bird (Treloar School and College), Ms. Caroline Weighton (Treloar School and College)

#### Abstract

Hi, I'm Sophie. My poster is the story of how I've taken on lots more responsibility for my AAC equipment, so that I could become the expert in my own AAC needs.

I have used AAC with head switches for a long time but I wanted to see if I could be faster with another access method. I practised using eye gaze for about 9 months and was able to improve my accuracy a lot over this time. I also found that I used less energy than with my switches! The next challenge: I needed new AAC equipment so that I could use eye-gaze full-time.

My SLT at Treloar College set up lots of different equipment trials as part of the assessment process. I like to talk all day so I carried out my own research to find the best battery life, including setting timers for when I used each device. With some help from my SLT and my parents, I completed a list of pro and cons of each device. I tested devices until I found the Accent 1400 was best for me.

I have now had my new AAC device for just over a year. I'm doing all my own programming, changing settings and contacting the AAC supplier myself for technical support.

I have 'Sophie-fied' my grids so they work best for me. I can independently use lots of different features that help to make me a faster communicator. Now that my access is so much quicker I can also be more chatty, cheeky and sarcastic when I want to be!

In the future, I want to help other people to become AAC Pros like me. I want to work with AAC companies to make software that does what we need it to do.

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## Perceptions of people who use AAC about the potential of speech-generating devices to express identity

<u>Ms. Sarah Marshall</u> (Leeds Beckett University), Dr. Amanda Hynan (Leeds Beckett University), Dr. Nicole Whitworth (Leeds Beckett University)

#### Abstract

A qualitative research study exploring the perceptions of individuals using a Speech Generating Device about the potential of their voice output to express their identity. Drawing on theoretical influences from the field of Augmentative and Alternative Communication, identity theories and voice, the research study used interpretivist, constructivist methods to elicit thoughts and opinions from three participants. The study was designed to address a gap in the literature regarding the perceptions of individuals using a SGD about the potential for of their voice output to express their identity. Face-to-face semi-structured interviews were held and the interview data was transcribed. The interview transcripts were coded and two global themes were generated. These were: Representation of Self and Opinions of Voice on SGD. The results revealed that all participants had personal preferences regarding the characteristics they desired for their voice output on their SGD. Participants were open to changing their voice to suit their identity better and had previously changed their voice to transition from a child's voice to an adult's voice. However, individuals viewed the sudden breakdown of a device and a potential loss or change of voice negatively as it threatened their identity, their peer relationships and they were unsure whether they would like the new voice. Although not all participants felt their voice fully represented their identity, all participants stated that the priority for their SGD was that it allowed them to communicate effectively. Further research using a larger sample would add further to the literature base to help professionals in the field of AAC, families of individuals using SGDS and manufacturers of SGDs have an insight into the preferences of the individual.

## Perspectives of AAC in A & E: Points of interest from the literature

#### Mrs. Samantha McNeilly (Ace Centre), <u>Ms. Ruth Williams</u> (Ace Centre)

#### Abstract

Hindsight is a wonderful thing. Reflecting on previous roles and experiences, which included working with non-verbal adults in accident and emergency (A&E) settings, a knowledge of AAC, would have been extremely useful.

Attending an accident and emergency service can be a difficult and stressful time for clients and their family. In 2016, there were 23.57 million attendances at England's urgent and emergency care services, with 65% of those attending A&E (CQC 2017).

Within NHS England's "Accessible Information and Communication Policy" (2016) it is highlighted that all staff have a responsibility to use communication aids as appropriate and promote effective communication, however within a fast paced emergency setting with the need to see multiple members of staff within a short period of time, this can be difficult. Literature discusses the use of AAC within an Intensive Care Unit (ICU) and the benefits; particular for those patients intubated and provided with high tech communication aids. But what strategies are used for patients within an A&E setting, immediately following an incident and perhaps prior to admission to ICU?

Now working at the Ace Centre, this interest led to a sift of the literature to explore how AAC is incorporated into these settings, any strategies suggested and thought provoking ideas and points to consider when working in emergency settings.

This presentation aims to discuss key findings and future directions following a sift of the literature.

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## Teaching Early Core Vocabulary – where on earth do I start?

Mrs. Emily Gabrielle (Liberator Ltd)

#### Abstract

It's a commonly held opinion that when thinking about AAC Vocabulary, core words give us good 'communication' value for money. They can be used across contexts, have multiple meanings and can promote a wide range of language functions beyond simply requesting.

With numerous studies confirming that our highest frequency words used are, on average, around 80% core, we know that it makes sense to be teaching core words early on in an individual's AAC journey.

Many AAC vocabularies are now available based on this and we have a range of core-rich vocabularies at our disposal.

But when starting someone on the long road to ultimate AAC Competency how we do choose which words to teach in the early days?

In this session we will think about what may influence the core words we choose, think about considerations we should take when building vocabulary skills in the early stages of AAC instruction and explore useful resources to teach those all-important words once we've chosen them.

## The Vision of Teachers who Teach Children with Speach Impairments Regarding Augmentative and Alternative Communication (AAC)

<u>Dr. Simone Kruger</u> (Universidade Tuiuti do Paraná), <u>Dr. Ana Paula berberian</u> (Universidade Tuiuti do Paraná), Dr. Gregor Renner (Katholische Hochschule Freiburg), Ms. Rita Tonocchi (Universidade Tuiuti do Paraná)

#### Abstract

From a socio-historical perspective, it is advocated that AAC comprises non-verbal linguistic signs mediating dialogical interactions and favouring language appropriation which will lead to the constitution of subjects with speech impairments. Speech therapists, who work in the educational field, are requested by teachers to guide them on the use of AAC, aiming at learning and school assessment, without addressing issues which entail language acquisition and interaction. Since there is no language and knowledge acquisition without interaction and interpretive activity, the urgency in rethinking educational practices becomes apparent, spreading beyond the language concept which regards AAC as a communicative tool. The goal of this study was to analyze how teachers who work with students with speech impairments conceive AAC. As methodology, a field survey was carried out by means of interviews with twenty-seven (27) teachers who teach to students at the levels of both regular and special education with severe speech impairments in a town of 150,000 dwellers in Southern Brazil. The interviews were interpreted according to dialogic discourse analysis. It was verified that the technicist and instrumental view of the AAC prevailed in the teachers' discourses, wherein AAC is regarded as: communication code; tool of expression and representation of thoughts; graphic signals for conveying messages; instrument for the oral development and having a signalling function. It was concluded that the conception of AAC from an instrumental view of language is predominantly adopted. Nonetheless, we argue that the expansion of linguistic and interactional activities in the dialogical perspective of language fosters the establishment of the dialogic process in the classroom, favouring the relationship between teacher and student, and thus, language and knowledge acquisition.

# **EXHIBITORS**

## A love story about how two become one. A tale of two companies, apart, but together in mission, mindset and heart.

<u>Mr. Dougal Hawes</u> (Smartbox Assistive Technology), <u>Mr. Rob Gregory</u> (Tobii Dynavox), <u>Mr. Nick Ward</u> (Smartbox Assistive Technology), Mrs. Tina Voizey (Tobii Dynavox), <u>Mr. Adam Waits</u> (Smartbox Assistive Technology)

#### Abstract

In all seriousness, there are exciting times ahead and we believe our joint future will mean helping more people that need AAC through even better products and support.

Come and join Dougal, Rob, Nick, Tina and Adam to hear about what we are aiming to achieve by bringing Smartbox and Tobii Dynavox together.

### Accredited and non-accredited Ace Centre AAC training

<u>Ms. Rachel Stevens</u> (Ace Centre), Ms. Sara Dale (Ace Centre), Ms. Ruth Williams (Ace Centre)

#### Abstract

Ace Centre is committed to developing the AAC workforce supporting children and adults who need and use AAC through training. We offer a range of training packages, including a Postgraduate Certificate Assistive Technology validated by Manchester Metropolitan University and non-accredited training, such as our training units and courses to support the use of our publications. This session will provide an overview of what we can offer and how to access this.

The Postgraduate Certificate Assistive Technology is delivered in a blended learning format, involving face to face, online, taught and self-directed learning over a one or two year period. Training units include the very popular Assistive Technology Unit and the Augmentative and Alternative Communication Unit.

Ace Centre also offers a range of flexible training models, including AAC assessment and implementation support within schools or your working environment.

For the first time this year, we are also offering training related to our successful publications: 'Developing and Using a Communication Book' which is supported by ready made templates in different software formats; 'Look2Talk' - the award-winning guide for parents and professionals who need to make and use a communication book for children who communicate using their eyes alone; 'The Pragmatics Profile for people who use AAC' - this Profile can be used with individuals who have used AAC in the past, are currently using AAC, or where you feel that an individual is using informal modes of AAC and you wish to introduce more formal methods; and the 'You Matter' AAC training the trainer materials, which includes a family edition and education edition. These one day courses will offer attendees ideas and suggestions about implementation, provide 'Hands on' support and the course fee will include the purchase price of the publication as well.

## An overview of Ability World's 'no-tech' communication, access and learning support aids, including several exciting new products.

Mr. David Weatherburn (Ability World Ltd)

#### Abstract

During 2018 Ability World has expanded its range of products, with several new styles of communication book and folder, new portable switch mounts, and other access and learning aids.

'No-tech' resources are often an important component of AAC strategies used to develop communication skills, whether you support 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. In this session we will take a look at some of the more popular resources that can be used on their own or along-side low-tech and high-tech AAC systems. We will also introduce the very latest communication and learning support products developed by Ability World.

We will look at various styles of communication board, communication/choice books and folders, small wearable aids and some other interesting items.

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

### CALL Scotland – Free Online Professional Learning Resources on AAC

Ms. Gillian McNeill (CALL Scotland, The University of Edinburgh), <u>Mr. Allan Wilson</u> (CALL Scotland, The University of Edinburgh)

#### Abstract

The presentation will begin with an overview of the work of CALL Scotland to support pupils with communication difficulties in schools across Scotland, before moving on to look at our practical resources available to everyone. This will include a detailed description and demonstration of our new online learning modules, available on the AAC Scotland web site (www.AACScotland.org.uk).

CALL Scotland was commissioned to create the **Supporting Learners with Complex Communication Support Needs in Schools**modules, in order to raise the knowledge and skills of staff working with pupils in schools. Addressing many aspects of AAC implementation and support, including a communication friendly school environment, team roles and transition planning, (it is based on the learning needs of workers at IPAACKS skill level 1/2 and beyond). Much of the content will also be of interest to those working with children and young people in other sectors, such as health, social care, voluntary and independent sectors.

The modules are composed of 7 sections:

- 1. Setting the Scene Complex Communication Support Needs, an introduction to AAC and getting yourself and your school ready.
- 2. **Communication Friendly Schools** Establishing a communication friendly school with an inclusive environment and practices benefitting learners beyond those using AAC directly.
- 3. **Augmentative Communication in Practice** Fundamentals of AAC, creating communication opportunities and communication partners, and integrating its use into the everyday classroom.
- 4. **Education Frameworks** Supporting AAC through Education Frameworks, staged intervention and planning, target setting, recording and monitoring.
- 5. **Supporting Teaching and Learning** Curriculum differentiation, literacy and language teaching, and supporting learners with profound/severe and complex ASN.
- 6. **Working Together** Collaboration and team working, school roles and responsibilities, partnership working with parents and pupil voice.

**Communication for Life** - Making for good transitions and beyond school, preparing for communication as a lifelong skill.

## **Communication and Cognition**

Mrs. Lauren Frost (Abilia), <u>Ms. Kat Smith</u> (Abilia)

#### Abstract

As a company Abilia gives individuals with additional needs the power to become independent and take control of their daily lives. Based on more than 40 years' experience that is supported by research evidence, we know that our assistive technology helps people.

The Lightwriter first hit the UK market in 1973, designed by Toby Churchill who had designed solely for personal use but realised a gap in the market so began making the product for commercial use.

Although now under the Abilia umbrella, the Lightwriter is still being produced with the goal to make communicating as easy and as natural as possible.

Abilia also have a range of cognitive aids that can help individuals take control of their daily schedules and the understanding of time, this can help to reduce anxiety and increase participation in daily activities.

Abilia has a team of Product Advisors that loan out products to individuals to try to ensure the product is right for them, it's worth popping along to speak to a friendly member of the team while you're at Communication Matters this year.

#### References

https://www.abilia.com/uk

## EyeControl - A Revolutionary Approach to Assistive Technology for "Locked-in" Patients

Mrs. Gali Halpern Wienerman (EyeFree Assisting Communication Ltd), <u>Mr. Or Retzkin</u> (EyeFree Assisting Communication Ltd), <u>Ms. Tania Suares</u> (EyeFree Assisting Communication Ltd)

#### Abstract

People with ALS gradually lose their ability to communicate with those around them. Not having the ability to communicate with carers and loved ones is very isolating for locked-in individuals and negatively impacts their mental outlook. It also limits their quality of care when they are unable express their needs.

Communication devices for locked-in patients usually rely on visual feedback, meaning that individuals are unable to communicate when they are not calibrated to the screen of the device. The screen also restricts eye contact between the user and carer and gets in the way of a meaningful and normalized exchange. Coming from a real need for an immediate 24/7 communication device for these patients and their carers, we developed the EyeControl.

The EyeControl is a lightweight, wearable communication device that enables communication by intuitive eye gestures and audio feedback, eliminating the need for users to be calibrated to a screen. A head-mounted infrared camera tracks the eye movements and sends the information to a small computer which translates the movements into communication. The bone conduction earphone provides audio feedback to the user before the communication is transmitted to the output speaker or connected Bluetooth device, all without the need for a screen. It enables patients to communicate immediately upon waking, while in the bathroom and while traveling. Calibration is not necessary and eye contact between the carer and user is maintained throughout the conversation.

The EyeControl expands the ability to provide effective professional care to people with ALS and other "lockedin" conditions.

In this session we describe how the EyeControl can be used to empower patients and give them the ability to express themselves in their daily interactions. Additionally, we will explain how the EyeControl works and have an open discussion on new applications being developed for the patient's homecare.

## Get Started with Grid for iPad: a 'hands on' workshop

Ms. Natasha Roberts (Smartbox Assistive Technology), <u>Mr. Dougal Hawes</u> (Smartbox), <u>Ms. Kerry Vacara</u> (Smartbox Assistive Technology)

#### Abstract

Join us for an interactive session where you will learn the basics of our AAC app, Grid for iPad. We'll be giving you a tour of the app, and introducing essential features and content, including:

- Super Core for symbol AAC
- Text Talker for text AAC
- Basic editing
- Settings
- Syncing with Grid 3

You will all have access to an iPad, so you can explore the app as we go along.

FREE FOR ATTENDEES: Everyone that attends the session will also receive a free Grid for iPad licence (worth £349.99).

## **Innovations from Therapy Box**

Dr. Rebecca Bright (Therapy Box Ltd)

#### Abstract

An update on the innovations in the past year at Therapy Box. This presentation will cover updates on our projects spanning machine learning that relate to our AAC product range - including breakthroughs in voice creation and speech recognition.

## Introduction to the new core based vocabulary called Score

Mr. Ian Foulger (TechCess Communications Ltd), Mr. Bart Noe (Jabbla)

#### Abstract

Techcess will be introducing a new core based vocabulary called Score.

Score is a communication system heavily based on research. Central to Score is the language development. Using a communication book learned through modelling, the user's language is progressively developed. This principle was translated into a Mind Express vocabulary.

Score consists of a set of low tech communication boards, an extended communication binder and a comprehensive communication page set for Mind Express. The most frequently used core words are consistently organised in a static frame around a dynamic block of fringe words. This clever setup gives the user access to core vocabulary at any time. Grammar functions are dynamically presented, based on the part of speech, and can be used to build grammatically correct messages.

Learners and their communication partners use and practice with a set of selected focus words for a number of weeks, receptively as well as expressively, and in different contexts. The idea is that if the child's language development is facilitated and subsequently improves, then the child's communication skills will also improve. The availability of both low-tech and high-tech resources allows a multi model approach and supports modelling variation.

The seminar will be hosted by Bart Noe & Ian Foulger

## LAMP and Unity - Using Minspeak doesn't have to be scary!

<u>Mr. Mark Street</u> (Liberator Ltd)

#### Abstract

When some people hear the word Minspeak they get a gulp in their throat and I am used to hearing "It's for the high achievers", It's difficult" or "I don't understand it"

Well, actually it's not that difficult and we have many clients throughout the world using Minspeak successfully. Is language easy? No, so implementing an effective robust vocabulary isn't easy either. That said this opportunity is to share the resources, tools and strategies and hope to show you that Minspeak isn't as scary as you might think and can be used for the emergent or early communicators.

## Literacy Resources for All

Ms. Marion Stanton (SCandLE)

#### Abstract

Literacy Resources for All is a comprehensive literacy package which can be accessed by students who rely on AAC (Augmentative and Alternative Communication) and/or who have complex needs. The program is also useful in a wider context; we have found that what works in AAC works for all – hence the name! The program is based on research into the literacy needs of students who have complex needs.[1] It also draws on our 27 years of experience in teaching literacy to students with a variety of learning needs here in the UK; where we have been inspired by programs from the USA we have adapted them to suit a UK market. The program consists of 5 elements:

- 1. Communication
- 2. Emergent Literacy
- 3. Literacy Needs Assessment
- 4. Conventional Literacy
- 5. Mainstream curriculum support

These five elements take the learner through from no known literacy skills to age appropriate ability levels. There are a number of low-tech and software resources including:

- Emergent Literacy:
  - Alternative pencils
  - Predictable chart writing
  - Letter cards
- Conventional Literacy:
  - The popular 'Phonics for All' spelling program
  - Adapted reading schemes
  - Options for reading for pleasure
  - Resources for writing
- Communication:
  - Our accessible communication book
  - Our virtually indestructible letter board
- Letter, word, sentence and text level assessments
- Grid 3 with resources for the mainstream curriculum

The session will explain the pedagogy behind the scheme and show examples of how it works. We will also tell you about the not-for-profit work of our sister company CandLE, including our exciting project which aims to roll out the AAC City & Guilds qualification for students throughout the UK.

Marion Stanton MA, PGCE, Adv. Dip. Ed. (Special), AAC specialist teacher at CandLE and ScandLE www.scandle.org

#### References

[1] https://www.med.unc.edu/ahs/clds [accessed 28th June 2018]

## Meet the new Tellus i5

Mr. Ian Foulger (TechCess Communications Ltd)

#### Abstract

Ian Foulger from Techcess will be showing the new Tellus i5 integrated eye gaze system along with an exciting new communication device accessory.

The Tellus i5 builds on the established and stable Tellus 5 platform by adding integrated eye tracking, resulting in an all-in-one solution for users who rely on their eyes to communicate, work with computers, access social media apps, emails and to control their environment.

Using Mind Express applications such as Amego or SCORE turn this fully dedicated piece of technology into a highly functional AAC device. The integrated eye gaze and sleek design results in a streamlined and aesthetically pleasing device.

Selection when eye gazing can be made by dwell, blink or external switch press. In addition you can wake the device up from sleep using the eye gaze or turn on from completely off state using external switch press.

An integrated IR environmental control transmitter allows control of the environment around a user. A Webcam is also integrated for video chatting with loved ones or for taking selfies! An integrated mobile phone option allows users to make and receive phone calls and send and receive text messages.

Ian will also be showing a new communication accessory developed by Jabbla.

## **Mounting & Movement**

<u>Ms. Esther Dakin</u> (Smile Smart Technology), Mr. Billy Hunter (Smile Smart Technology Ltd)

#### Abstract

Looking at both **switch access** products from Smile and the **Rehadapt** range of **mounts**, members of the Smile team will introduce key products from both their in-house range including Flexi-rods and Softytops and take questions about the RehAdapt mounts, Drivedeck teaching and and invite general questions on mounting and switch solutions.

Smile also speak on the latest model of their switch access teaching tool, the 'Drivedeck'. A proven multi-user, line following, motivational teaching and access tool for those needing to learn switch access and those hoping to improve within the safe bounds of a line-following track or free driving environment. Specialist clinical centres and schools primarily use the Smile Smart System integral to the Drivedeck and Smart Powerchairs to develop switch access through the powerful motivation of movement. With focus upon the use by colleagues at centres of excellence, the Drivedeck is introduced along with its key functions, motivational outcomes and educational benefits in today's progressively interdisciplinary AT/AAC landscape.

## Picture Communication Symbols: Past, Present & Possibilities

Mrs. Tina Voizey (Tobii Dynavox), Mrs. Pamela Curry (Tobii Dynavox)

#### Abstract

Picture Communication Symbols (PCS) are much loved and used by millions of children and adults around the globe for over three decades. Supporting everything from classroom walls to interactive whiteboards, choice boards to robust AAC systems, PECS to iPads, PCS has been the symbol set of choice.

In this session we will look back at how and why PCS started, their growth from distribution in a book to Boardmaker software, and the inclusion into educational platforms as well as robust AAC systems. We will look at the newer and different variation of PCS symbols; Classic, Thinline and HighContrast and discuss each of their strengths and the intention to meet the specific needs of the different types of people relying on symbols.

A first-hand account of the design process will be given by a PCS Graphic Artist as well as sharing how new content is generated for biweekly updates. There will also be time for an open forum looking for suggestions of new topic matter with a particular focus on the development of UK specific symbols.

This will be a session no symbol geek will want to miss!

## Proloquo2Go – Your input can shape the future

Dr. David Niemeijer (AssistiveWare), Mr. Jose Perez (AssistiveWare), Ms. Saudamini Tambay (AssistiveWare), Ms. Yefan Wang (AssistiveWare)

#### Abstract

When Proloquo2Go came out in 2009 it shook up the Augmentative and Alternative Communication (AAC) field. Easy on the fly customization and affordability helped democratize high-tech AAC. Since 2009, we have learned a lot about the AAC field and best-practice. We have also learned a lot from our users, be they parents, educators, therapists or AAC users. There is a world of difference between the original and the current version of Proloquo2Go. Feedback from the community has contributed greatly to that difference. Processing feedback goes beyond implementing the most often asked for features. It is all about merging AAC theory, AAC best-practice, and community input to deliver features people really need. This may be different from what people are asking for. Our design process is based on user-centered design (UCD). UX designers research potential new features or improvements through interviews and/or surveys to figure out what problem users want to solve with such a new or improved feature. This is followed by an ideation process which leads to potential solutions. These solutions are prototyped and tested with users. This may require several iterations. Once the design has been validated the new feature or improvement will be implemented.

In the first part of this session we will share how the user-centered design (UCD) process works. We will explain how we incorporate user feedback into Proloquo2Go. From what sources we get user feedback and how we solicit user feedback. We will also explain how usability testing works. This part will be lecture style.

The second part of this session will consist of a number of interactive exercises. This will provide you an opportunity to share your feedback on, frustrations with, and dreams for Proloquo2Go. We want to hear what you have got to say!

#### References

Novoseltseva, E (2017) "User-Centered Design: An Introduction" URL: https://usabilitygeek.com/user-centered-design-introduction/

Wikipedia (2018) "User-Centered Design" URL: https://en.wikipedia.org/wiki/User-centered\_design

## Supporting Literacy and vocabularies for the Adult Acquired market

<u>Mr. Mark Street</u> (LIB)

#### Abstract

At Liberator we have an extensive range of vocabularies to support adults with MND and other acquired conditions. We are excited to share those vocabularies and show not only how our clients can use these vocabularies to communicate but how they can also use then to access social media, messaging, internet and their environment. We will be showing our latest vocabularies and giving a live demonstration and taking your questions. We look forward to seeing you there.

### The Tobii Dynavox Ecosystem: supporting communication, education and access

Mrs. Tina Voizey (Tobii Dynavox), <u>Ms. Alice Langley</u> (Tobii Dynavox), <u>Ms. Jeniffer DeAlmeida</u> (Tobii Dynavox), <u>Mr. Joe Naraynsingh (Tobii Dynavox)</u>

#### Abstract

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 demonstrate all aspects of the Ecosystem working together featuring:

**Hardware:** If you prefer iOS or Windows we have you covered! Learn about how the new Speech Case can change your iPad into a dedicated AAC system. Meet Indi7, the little brother of our popular Windows based dedicated touch device the Indi.

**Software:** We'll take a close look at Snap+Core First, a research-based core word framework to help you continuously build your vocabulary and communication skills. Built on three pillars for communication success: growth, engagement and literacy, it is a robust AAC system for life!

**Implementation:** We know that successful engagement requires far more than knowledge of core words. Pathways for Core First (free) offers a comprehensive way to address the breadth and depth of skills required to fully participate in school, home and beyond.

**Curriculum:** We'll show Core First Learning, a 36 week long curriculum focussed on teaching people who use AAC how to find, use, and read core words. We'll also look at how this program leverages the transactional nature of communication and literacy and puts you on the road toward reading and writing.

**Support:** We'll meet all the levels of help Tobii Dynavox has to offer including a dedicated Tech Support team, a vibrant global community as well as cloud-based resources and a go to app.

## **Authors Index**

Akrigg, C.	48, 69	Dutton, N.	57
Aleksandravicius, S.	22		
Alhinti, L.	75	Featon, S.	31
Allsopp, L.	63, 64	Ford, N.	42
Anderson, H.	46	Forster, J.	50
Arnott, J.	25	Foulger, I.	94, 97
Ashraf, S.	79	Friday, M.	8
Atkinson, J.	40	Frost, L.	90
Attwell, A.	38	Fry, N.	29
Bate, C.	15	Gabrielle, E.	41, 66, 83
Bates, P.	56	Gallimore, A.	73
Beam, S.	80	Gilmour, G.	36, 50
berberian, A.	51, 84	Goldbart, J.	27, 78
Bird, E.	80	Gough, S.	57
Blackbourn, P.	21	Gregory, R.	86
Bowers, E.	19	Griffiths, T.	16, 69
Bright, R.	93	Groves, M.	4, 63, 64
Broomfield, K.	5, 56	Guarinello, A.	51
Brophy-Arnott, B.	25		
Brown, C.	14	Hale, C.	48, 61, 69
brown, c.	14	Halpern Wienerman, G.	91
Carter, G.	39	Harris, C.	17, 59
Cave, R.	62	Harrison, C.	18
Christensen, H.	75	Hawes, D.	86, 92
Clarke, M.	16, 33	Hayward, C.	7
Clay, D.	34	Hemus, A.	69
Conner, S.	11	Henderson, M.	2
Cunningham, S.	75	Hess, S.	27
Curry, P.	99	Hewson, T.	28, 37
<u>,</u>		Hockaday, P.	77
Dakin, E.	98	Hunter, B.	98
Dale, S.	30, 87	Hynan, A.	81
Danger, C.	74		40
Davis, S.	16	Jans, D.	42
DeAlmeida, J.	102	Judge, S.	27, 78
Derwent, G.	10	Karaoglanis, K.	2
Diener, B.	55	King, J.	65
Donnelly, M.	29,67	Kruger, S.	51, 84
Doran, J.	69	Kwok, M.	6
Druce, J.	69		0
Duggan, K.	20	Langley, A.	102
Dunman, H.	72	Lenartowicz, A.	50

	0		00
Lim, D.	6	Roberts, N.	92
Lloyd, G.	25	Robertson, E.	52
Lourenço, H.	53	Robinson, H.	9
Luckins, J.	33	Rumble, G.	65
Lynch, Y.	27, 78	Sax, C.	73
MacRae, J.	26	Scarlett, G.	58
Malone, M.	25	Scott, J.	9
Mann, M.	29	Scott, M.	44, 54
Marchant, K.	22	Seamer, S.	39
Mars, J.	12	Sephton, F.	43, 50
Marshall, S.	81	Simpson, A.	68
Marten, P.	72	Sleman, G.	8
Matthews, A.	79	Small, K.	3
McCallum, K.	14, 31	Smith, K.	90
McIntyre, F.	23, 24	Smith, R.	69
McNaughton, R.	25	Stanton, M.	60, 96
McNeill, G.	18, 89	Steiner, N.	58, 61
McNeilly, S.	82	Stevens, R.	87
Mcsweeney, R.	69	Stothard, C.	15
Meads, D.	27	Street, M.	95, 101
Meara, N.	45	Styles, V.	40, 61
Meredith, S.	27, 78	Suares, T.	91
Micklewright, S.	70	Sullivan, E.	32
Mills, H.	15	Swettenham, J.	16
Mosley, S.	80		
Moulam, L.	27, 78	Talbot, L.	69
Munro, S.	25	Tambay, S.	100
Murphy, S.	4, 7	Taylor-Goh, S.	13
Murphy-mann, S.	21	Thrussell, M.	68
Murray, J.	27, 78	Tonocchi, R.	84
		Turner, J.	50
Naraynsingh, J.	102		
Niemeijer, D.	100	Vacara, K.	34, 92
Noble, E.	76	Viera, M.	15
Noe, B.	94	Voizey, T.	86, 99, 102
Oppenheim, M.	23, 24	Waits, A.	86
		Walsh, E.	20
Perez, J.	47, 100	Walsh, F.	76
Philip, J.	60	Wang, Y.	100
Preece, J.	32, 56	Ward, N.	86
Quillor H	20 27 AE	Ward, S.	70
Quiller, H.	28, 37, 45	Weatherburn, D.	88
Ramalhoso, A.	50	Webb, E.	27
Randall, N.	27, 78	Weighton, C.	80
Reeves, A.	40	Whiteman, L.	49
Renner, G.	51, 84	Whittle, H.	78
Retzkin, O.	91	Whitworth, N.	81

Wilkinson, D.	15	Young, C.	40
Williams, R.	82, 87	Young, K.	69
Wilson, A.	89		