COMMUNICATION
MATTERS

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Communication shimmers in a sensory space, courtesy of Jules Whicher

Trustees News

We hope you are enjoying the warmer days of summer!

The CM office in Leeds has seen much activity since the last Journal update. Hilary and Emily have now been working with us for over six months and are well settled into the Leeds Innovation Centre. We hope this will become a place where members of CM can visit if they are in the area. You will be made very welcome!

As has been said before this is an exciting new stage for CM but at times it has been somewhat daunting for all concerned. The programme for the different events during the year is very busy. Every Roadshow and Study Day generates a lot of administration and the planning for Conference is really a full time job in itself. Add to that phone calls, e mails, publications and marketing and lobbying and you can see a little of what working for CM involves! We have lots of potential projects within our strategy and action plan especially relating to more engagement with people who use AAC. We recognise that getting sponsorship and additional funding to support our ongoing and future activity will be a key focus over future months.

Conference

The 2015 Conference fast approaches and this is obviously a significant event in the CM calendar but more importantly a key AAC event in the UK. The keynote speakers are confirmed. They are Denise West and Brett Reynolds from Australia and they will be sharing about the Communication Access project both through the keynote presentation and workshops. We are really keen to learn more about this project and whether it is something we can promote within the UK. Find out more about the project and the speakers from our website. We are also very pleased that the ISAAC president elect Gregor Renner is attending the conference and will be sharing on ISAAC activity and future plans. We had more abstracts submitted than ever before and we are really pleased by the range and standard of the submissions. The large number of abstracts has meant some people will have been disappointed if their papers were not accepted. We are looking at other ways in which this work can be shared. The provisional programme is now available and it looks to be a varied and interesting conference with some great social events to enjoy! Between now and September there will obviously be a considerable amount of work required to ensure that the 2015 conference is a success. Please contact the office if you have any questions. We are pleased that both Hilary and Emily will be at the Conference so that they can get to know more of the delegates and experience things first hand. Book your place now!

Marketing and Sponsorship

We have received mostly positive feedback about our new look website which is much clearer for visitors to the site and easier to navigate. We are trying to upload the latest information on the development of the Hub and Spoke Specialised Commissioning model with links to the relevant documentation. We also would like to include stories and experiences from people who use AAC. Check it out for yourself and send us your comments if there are things you would like added. We have combined this by upping our social networking activity and would value involvement and feedback from the membership so that we can continue to build on this. Marketing and Sponsorship will be a focus as we look towards Conference. The Communication Access project is a great opportunity to raise awareness and promote partnerships with some key players. Please visit our facebook page and for the tweeters among you pass on CM news.

Study Days and Roadshows

Our Roadshows continue to attract people who are not yet members of CM and serve to raise awareness and provide updates about developments in AAC. We are grateful to our supplier members who enable us to run these events. We have recently had a meeting in Leeds with our supplier members to review the focus and structure of future Study Days and Roadshows to ensure we are achieving our aims and maximising our reach. We need to plan further ahead to ensure that we secure dates well in advance.

Specialised Healthcare Alliance

As Chair of CM I have continued to represent CM on the SHA. I regularly forward information to Sally Chan who is Chair of the AAC subgroup (which is the subgroup for the Clinical Reference Group for complex disability equipment) and this has contributed to showing where AAC fits into the bigger picture. CM is also represented on the AAC Subgroup and this has been a useful link with the leads for specialised services as Specialised Commissioning begins to take effect. If there are issues of concern related to your specific geographical area please do contact us so that we can endeavour to support you.

2016!

2016 will be the 30th anniversary for Communication Matters. We have an events group who have already started planning events including the 2016 Anniversary Conference and a fund raising Ball. We are looking for 'champions' in various settings such as the Further Education (FE) colleges so that we can reflect the views of everyone and plan accordingly. We would like to improve our links with other charities where there is an overlap in our vision an strategy. If you are interested in becoming more involved please do contact us.

CATHERINE HARRIS
Chair of Communication Matters August 2015

Dates for your diary

Autumn–Winter 2015

CALL Scotland Training Courses, 2015

For more details see CALL website
http://www.callscotland.org.uk
or telephone 01316516235

3rd September 2015

How to Use Digital Exams and Assessments

10th September 2015

Using ICT to Create Shared Reading
& Storytelling Resources for Pupils
with Complex ASN

1st October 2015

Speech Recognition and Dictation
on Windows and iPad

8th October 2015

How to Make Digital Exams and Assessments

29th October 2015

iPads - Accessibility Features and Use in Class

5th November 2015

Using Eye Gaze to Support Learning
and Communication

12th November 2015

iPads and Communication –
Using Picture Apps for Early Level Communication

16th November 2015

How to Make Digital Exams and Assessments

3rd December 2015

Creativity and Beyond with an iPad

Communication Matters & 1Voice Dates

13-15th September

#CM2015 conference & AGM University of Leeds.
Details on the website
www.communicationmatters.org.uk/conference-pages/

13th September

1Voice Activity Day
Leeds University (before the CM AGM).
For details see http://www.1voice.info/events

16th October (18:00 GMT)

ISAAC Conference 2016

Call for papers closing date https://www.isaac-online.
org/english/conference-2016/call-for-papers-2016/

18-19th November

**CM Trustees Business, Budget and Strategy Board
Meetings**
Leeds Innovation Centre LS2 9DF

8th December

CM London Roadshow
Resource for London, 356 Holloway Road,
London, N7 6PA
Book a Place here
http://www.communicationmatters.org.uk/
page/road-shows-diary

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Development of a suite of mobile applications to support communication and leisure pursuits for patients with acquired brain injury.

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INTRODUCTION

The National Rehabilitation Hospital (NRH) is a CARF accredited facility which provides a comprehensive range of specialist rehabilitation services to patients from throughout Ireland who, as a result of an accident, illness or injury have acquired a physical or cognitive disability and require specialist rehabilitation. In our work at the NRH we noted a gap in the current market for simple, accessible and age-appropriate Apps that would enable adults with a variety of physical, sensory, cognitive and communication impairments due to acquired brain injury to use tablet computers for basic, yet personalised, communication and leisure purposes. For our high dependency/ disorder of consciousness patients establishing cause and effect is important and it is here that we want to integrate technology into our intervention with these patients.

LITERATURE REVIEW

The mobile era makes information more readily available. It should do so for everyone, including people with disabilities, yet accessibility is often an afterthought in device design and App development. Regardless of the sophistication of the

Fig 1. A Samsung Tablet

device or the nature of the person's disability, the purpose of assistive technology is to improve the individual's quality of life by enabling increased independence (Lancioni & Singh, 2014).

Tablet devices are first and foremost touch screens, so users need to have a degree of manual dexterity to enable access. If an individual has physical and sensory limitations they may be unable to use touch screen devices. A certain degree of cognitive and language function is also required to successfully access and operate certain Apps for leisure such as radio, video clips and photo albums.

A person who sustains an acquired brain injury will often experience difficulty in independently engaging in valued leisure
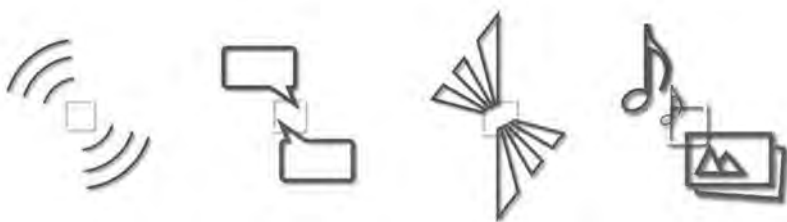
Fig 2. The Suite: Touch & Listen, Touch & Choose, Touch & View, Touch & Browse

Fig 3. Touch & Listen Content Settings

- Photo Album (Touch & Browse)
- YouTube Playlists App (Touch & View)

The design process was an iterative one and involved close collaboration between hospital staff and the designer. One of the key design goals was to provide users and clinicians with as much control as possible in the continuing design, adaptation and personalisation of each of the Apps. It was hoped that this would lead to an elegant handover process which would in turn facilitate long-term use.

Another principal aim was to respect a balance between ease of use for staff, for whom time is a limited resource, and providing maximum flexibility in the modification of the interface. To address both of these goals, each App implemented a structured set-up process, composed of three principal components, modifications to content, modifications to layouts and modifications to the interaction mechanism.

Each of these categories typically consisted of several screens. Taking the Touch & Listen App, which implemented an Internet radio, as an example; within the Content Settings phase, the user can choose which radio streams to activate and can add new radio streams of their own.

In the Layout Settings phase, the user can first select which buttons to activate for the final user, for example the full screen can act as a sole button, set to simply change stream for instance, or the user can activate a range of other buttons including volume controls, a play/pause option and previous station controls. On the second screen, the user can then resize the chosen buttons using a set of sliders, which are generated according to the buttons selected.

activities due to cognitive, communication or physical deficits. For such individuals, high-tech assistive technology can be used to enhance engagement in leisure activities (Lancioni et al, 2014; 2010). Guidelines from both the Royal College of Physicians (2013) and RCSLT (2009) recommend the appropriate integration of assistive technology in the management of individuals with complex acquired brain injury. Alternative methods of access for tablet devices are now being considered by mainstream manufacturers e.g. switch control functionality in iOS7, thereby enabling integration of mainstream technologies into the everyday lives of those with acquired brain injury.

DEVELOPMENT

In an attempt to address these concerns, a suite of four accessible Android Apps, with a consistent theme, was developed:

- Radio (Touch & Listen)
- Yes/No type App (Touch & Choose)

Fig 4. Touch & Listen Layout Settings

Upon the Interaction Settings screen, the user then has access to a range of accessibility options which can be used to regulate how the final user is able to interact with the buttons on-screen. The user can select to use the App with a separate assistive switch device, to simply click the buttons as they are present on screen or to use multiples clicks to activate each button, a single click anywhere on the screen activates the first button, a double click activates the second, and so on. Further options include the ability to hold one's touch for set periods of time in order to elicit each button's response, relinquishing the touch to select the appropriate button and the option of simply holding one's touch to cycle the focus continuously between all buttons, again releasing the touch to make a selection.

When any of the last three options are selected, an additional seek bar appears on the screen which then allows the user to modify the timing settings for each of these options.

Fig 5. Touch & Listen Interaction Settings
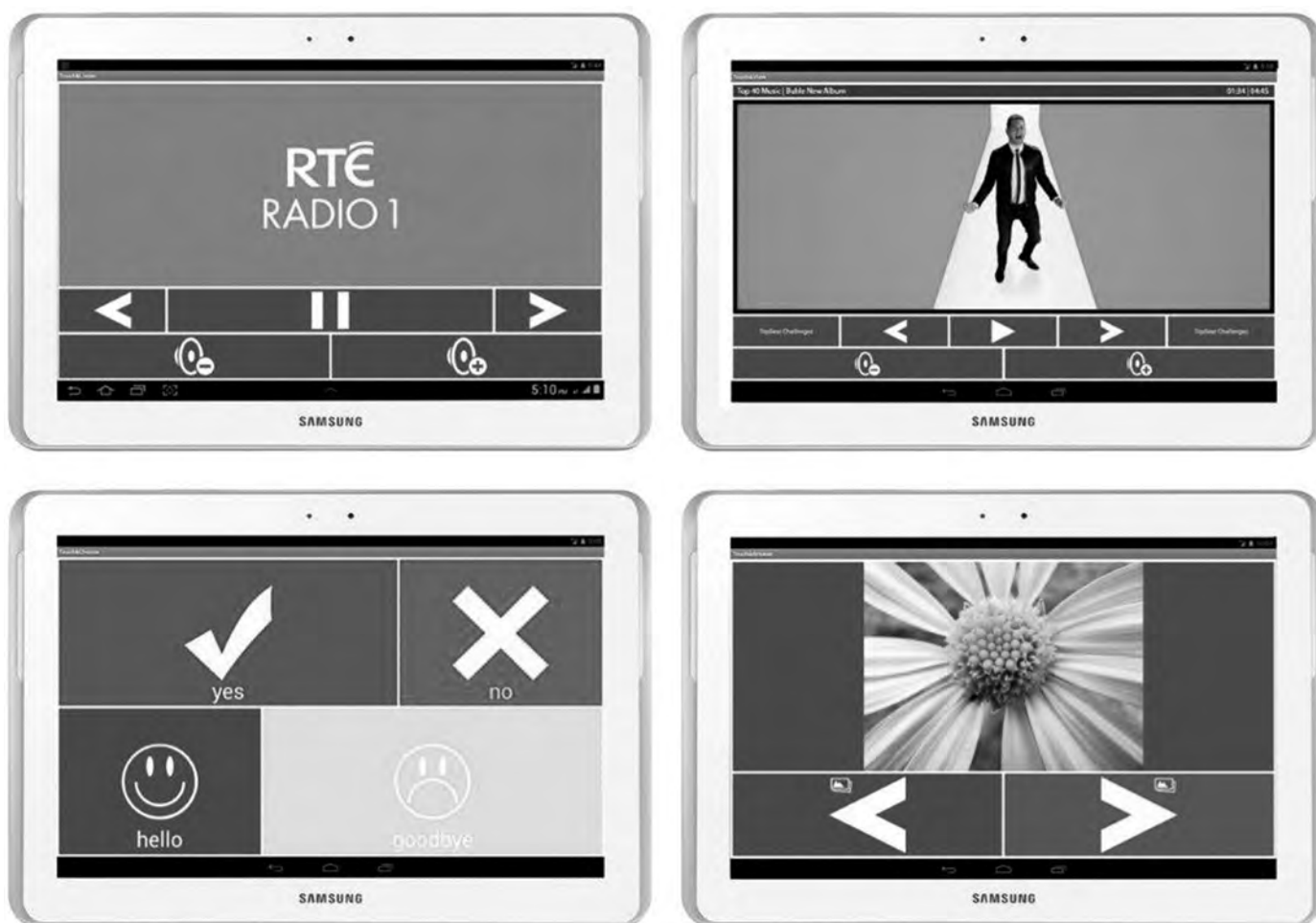

Fig 6. Timing Settings

Fig 7. Examples of all four Apps

In the case of each one of these setting screens, a real-time preview of the evolving layout was provided. This allows the user to visualize how the final App iteration will appear, as changes are made, as well as how each interaction mechanism will function. This proved particularly useful as describing the function of such mechanisms through text alone is a lengthy task.

In addition to these features, it was decided to provide a means of storing settings for specific users, as the needs of individual patients vary so considerably. An account system was therefore developed which allows the storage of a user's settings between uses. User specific photo and music files can also be added to the user's account folder on the device and then accessed directly by each of the Apps to facilitate personalization of the user's content. The approach taken to the implementation of the account system meant that the settings files could be transferred securely between devices to allow persistence of a user's settings, while also respecting patient confidentiality.

The account system represented another manner in which freedom of choice was provided to the staff as users. The system could be used to save specific App designs for each patient or, alternatively, to create more generic accounts of the type 'basic', 'intermediate' and 'advanced', where each iteration would add more functionality to the App. This possibility introduced the concept of tractable progression, potentially rendering Apps designed in such a way more useful as therapeutic tools.

CASES STUDIES

Sarah

Sarah is a 42 year old lady who suffered a left MCA stroke. She presents with severe aphasia and apraxia of speech and a dense right hemiparesis. She has a keen interest in music and enjoys listening to the radio. She had significant difficulty accessing radio Apps on her smartphone after her stroke due to the severity of her language impairment.

Intervention focused on trialling the Touch & Listen radio App with simple settings. The App was programmed with her favourite radio stations and customised settings were created. Sarah was able to use her non-dominant left hand to access the App directly. This allowed Sarah to re-engage with a valued leisure activity and reassert control in her life over a simple, yet enjoyable, activity.

Michael

Michael is a 53 year old man who suffered a hypoxic brain injury secondary to respiratory arrest. He presents with severe physical, cognitive and communicative impairments. He has limited upper and lower limb movement and was unable to use direct access to control a tablet computer.

Intervention initially focussed on trialling GRID 2 software with a 3 cell grid and access via a switch mounted at his head. Michael was unable to manage scanning at this level due to cognitive and visual deficits. The Touch & Listen App was then introduced with an external switch mounted at his head to enable radio control. The settings were customised to enable a simple play function. Michael was able to control this simple App to allow him to choose his preferred radio station.

Laura

Laura is a 47 year old woman who suffered a traumatic brain injury secondary to a road traffic accident. She presents with complex physical, cognitive and communication impairments. She is dependent on a wheelchair for mobility and has a right upper limb weakness. She enjoys listening to music by her favourite band and viewing family photos.

Initially the GRID 2 software with a photo album was trialled; however Laura was unable to manage the scanning demands due to cognitive impairments. The Touch & Browse photo album App was then introduced with access via an external switch controlled using her left hand. Customised settings were used with a simple next page function. The photo album App was used therapeutically as a motivator and established an understanding of cause and effect.

CONCLUSION

Use of the suite of Apps with patients with physical and/or cognitive impairment has shown the benefits of integrating technology into the assessment and treatment process. Therapist and patient involvement in the development of the Apps ensured that ease of set-up and customization was to the forefront in the development process. Key features include:

- Individual user profiles across the suite of Apps
- Easy set-up and customisation of Apps for users

- Reduced scanning demands for new switch users with potential for use as an entry level switch-based activity focussing on functional, personally relevant material (music/video/photos)

The Apps allow for:

- Cause and effect training based on functional and personally meaningful activities
- Return to valued leisure activities for patients with acquired language impairments post brain injury with increased ease of access to radio and video clips

Creative use of this readily available, mainstream technology can offer new opportunities for assessment and treatment with a complex and diverse patient group. Integration of technology into the management of patients with acquired brain injury forms a core part of best practice (Lancioni & Singh, 2014; RERC, 2014).

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The Visual Support Project (VSP):
an authority-wide training, accreditation and practical resource for education settings supporting inclusive practice

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This paper reports on the outcomes of an action research project to review local practice in use of Visual Symbol Supports (VSS) used as a basis for development, application and evaluation of a new whole school model of intervention – The Visual Support Project (VSP).

INTRODUCTION

There is growing evidence of the benefits of visual supports such as visual timetables and environmental labels*, for children with a range of additional support needs. Such tools enhance communication, help children understand their environment, anticipate events, predict routines, thus promoting understanding, engagement and independence. However, there is less clear evidence about how to promote consistent and effective use of visual supports, in all education settings within a local authority.

THE BENEFITS OF VISUAL SYMBOL SUPPORTS

Visual supports are a straightforward form of low-tech Alternative and Augmentative Communication (AAC), and benefits of their use are reported in literature.* The use of VSS in education settings can 'prevent, remove or alleviate the effects of barriers within the learning environment' (5).

Madigan (2005) found that "...a lack of knowledge meant symbol systems not being used, whereas the provision of effective training developed confidence and the ability to implement symbol use." (PP.33). Wellington and Stackhouse (2011), evaluated the impact of a trial training programme for Teachers and Teaching Assistants on the use of visual supports within schools, and recommended that: Teachers and Teaching Assistants should be trained together; training should precede the intervention; and mentoring should be a part of the support offered.

Scottish legislation enshrines the presumption of mainstream education for all pupils in Scotland (Standards in Scotland's Schools etc. Act (2000)). With this inclusive practice embedded, children with additional support needs attend all forms of educational settings.

It is therefore very important for education staff to implement a consistent whole school approach. However, our local evaluation study identified that VSS have so far not been consistently implemented in mainstream education settings in an effective way.

The VSP intervention model developed in Edinburgh is founded on such research (6, 7), builds on practice shared by the Fife: Symbolising the Environment project (1) and local evaluation.

VISUAL SUPPORT PROJECT AIMS

The long term aim of the project is to deliver universal access to Visual Symbol Supports (VSS) in education settings through the development of a three tiered intervention model. This current phase of the study is aimed to design, deliver and evaluate the implementation of Tier 1 'Bronze Level' VSS in five education settings.

Bronze Level includes a training package; a resource pack with a core symbol set; and a process for accreditation following evidence of successful implementation.

* Throughout the article, this asterisk indicates that you may contact the authors for a full list of references.

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EVALUATION OF LOCAL PRACTICE PRIOR TO THE TIER 1, BRONZE LEVEL INTERVENTION

In this authority, use of VSS has historically been viewed as part of targeted and specialist support for a small number of children. However our research found evidence suggesting that VSS should be used as a universal rather than a specialist support. In a survey of teachers (n=89) they reported that on average 32% (range 5%-87%) of children in their mainstream primary class had an additional need and could benefit from VSS.

Mainstream teachers were often reliant on external 'Additional Support for Learning' (ASL) teams – specialist education staff and allied health professionals – to provide support and resources for individual children, making it difficult for schools to take ownership of universal use of VSS. At times of transition between activities, classes or schools, our evaluation showed inconsistent access to and transfer of VSS. We identified a training requirement and a need to enhance the knowledge, confidence and practice of all staff.

The new model therefore adopts an anticipatory approach in the implementation and universal use of VSS, ensuring staff are collaborative partners in the provision of resources accessible throughout the school. We then explored how to make better use of visiting specialist time, targeting individual children who require a more tailored approach.

THE TIER 1, 'BRONZE LEVEL' INTERVENTION

The Tier 1: Bronze Level, includes information and resources relevant to all staff working in all education settings.

DEVELOPING THE SYMBOL RESOURCE 'STARTER' PACK

In preparation for the intervention we identified a core symbol set and agreed pictures and labels that fit well with Curriculum for Excellence (4) and local practice. Symbol packs were made for nursery, lower primary and upper primary, to reflect any curricular differences and provide age appropriate VSS. The following resources were developed and implemented (figure 1).

Participating settings achieve Bronze Level by following Tier 1 of the model, as outlined in figure 2.

Key factors for successful implementation of Visual Symbol Supports across a whole school

The following key factors, extracted from the Fife project and a literature review, were incorporated to ensure the sustainability of the VSP model:

- The need for management commitment is vital to successful implementation. Therefore, the model requires that each Head Teacher is invited to 'sign up' to agreed criteria.

- The model defines clear roles and responsibilities for the VSP training team and school staff to enable effective collaboration.

- Each school identifies a Co-ordinator and Generator to oversee the implementation and maintenance of VSS and to attend termly Co-ordinator meetings to inform the development of the model and enable schools to share practice.

- The whole school training session is key to developing a shared understanding of the rationale, use and implementation of VSS. The two hour session is delivered to each school prior to intervention. Attendance of all staff is critical.

- To ensure practice within and across schools is consistent, the training team provided schools with quick and easy access to the Bronze Level VSS resource pack.

Figure 1. Tier 1 Bronze Level Resources and training

| Tier 1 Bronze Resource pack:	Tier 1 Bronze Training pack:
Head Teacher sign-up letter	Training manual
Parent letter	PowerPoint presentation (staff)
Bronze criteria checklist	Training resources, i.e. hand-outs
Classroom environmental labels	Environmental labelling leaflet
Whole class visual timetable	Visual timetable leaflet
Whole school environmental labels	Visual Support Project leaflet
Classroom resource labels	
CD Rom	

Figure 2: VSP Model
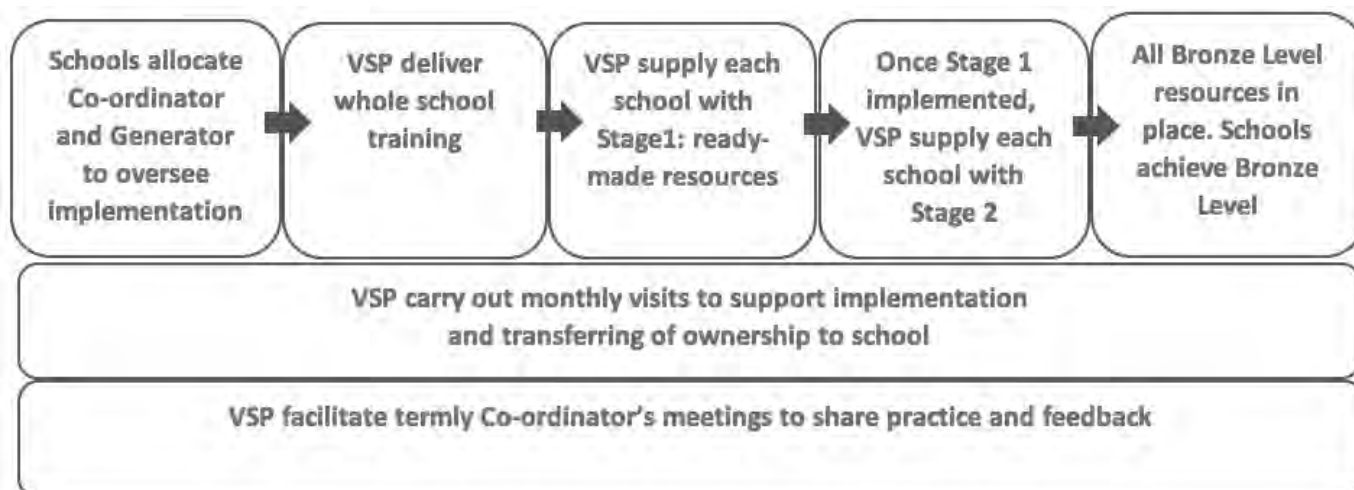
Figure 3: VSP Intervention stages

Visual Support Project resource allocation

Stage 2

Schools were given ready-made resources following the whole school training session, to take away and implement immediately.

Packs were made for nursery, lower primary and upper primary:

- Whole class visual timetables

- Classroom environmental visual labelling

Stage 2

Further resources given to school following the implementation of Stage 1.

They were provided on CD Rom for schools to print and laminate:

- Whole school environmental visual labelling

- Classroom resource labelling

- The model requires access to an agreed and consistent symbol set across the city (VSS resource 'starter' pack). The development of Bronze Level VSS resources was based on evidence and the needs of practitioners.

- Accreditation supports the school in feeling accountable for applying changes and sets a standard for good quality practice in the use of VSS. Schools are given credit for effort. Schools who do not meet criteria are given feedback and support. It is important to recognise that simply delivering training is not enough.

Evaluation of the Tier 1: Bronze Level intervention

The aims of the VSP evaluation were to:

- Establish a baseline measure of staff's current knowledge, confidence and practice in the use of VSS in ten education settings

- Identify opportunities to improve on current practice and to use this to develop a new three tiered sustainable multi-agency, universal model for the implementation and use of VSS

- Ensure equal and consistent access to high quality VSS for all children within City of Edinburgh Council (educational settings to meet their communication and educational needs

- Develop and evaluate the implementation of Tier 1 of this structured model in five mainstream primary schools

Quantitative and qualitative evaluation methods were employed to measure the impact in each setting. These were:

Baseline staff questionnaires

The team devised and sent baseline questionnaires to ten mainstream settings to report on current knowledge, confidence and practice in the use of VSS and to identify any further training needs. The ten settings included five schools taking part in the project, and five schools used as a control group. 152 questionnaires were returned.

Training evaluation

At the end of each whole school training session, all attendees were asked to complete a training evaluation form.

Follow-up staff questionnaires

The baseline questionnaire, with the addition of one question, was redistributed post-intervention to evaluate the impact of the VSP model on staffs' knowledge, confidence and practice. 97 questionnaires were returned.

Case studies and focus groups with children (Kennedy, P)

Qualitative evidence gathered by each school in collaboration with their Educational Psychologist through case studies and focus groups was carried out to evaluate the impact on children.

RESULTS

Baseline questionnaires

66% (85/128) of respondents thought they would benefit from training on visual supports. Evaluation also highlighted the need to improve staff confidence in using visual supports and to address the reported barriers and variability in accessing and maintaining visual supports.

Training evaluation

Staff were asked to rate aspects of the whole school training session using a 4 point scale of 1 (not at all) to 4 (fully). Responses were very positive: 100% (88/88) of respondents reported that their acquired skills/knowledge could be applied in the workplace (rating 3 and 4) and 100% (88/88) recognised that their new skills/knowledge would benefit children in their school, (rating 2, 3 or 4).

Follow-up questionnaires

These showed an increase in participants' confidence in using visual supports along with increased knowledge of why they have implemented visual supports. Almost a third of those who had received VSP training thought that further training would be beneficial.

Case study / focus groups

Results from these additional qualitative evaluation measures found that pupils:

- were widely aware of the visual supports

- identified ways in which they supported them (in knowing what to do, where to go and what's happening when. They also reported that the symbols helped them to concentrate and to understand better).

- with a range of additional support needs were making reference to class and individual timetables, labelling of resources around the classroom and the wider school building, and to individualised visual supports

Some parents were aware of the VSP in their child's school and believed it would have a positive impact on language development and communication.

Accreditation

A standard format was used to evaluate and accredit successful implementation of VSS within the setting 12-18 months after initial training. To date, two schools have been awarded the Bronze Level Certificate having achieved the agreed criteria within a year.

CONCLUSION

Evaluation indicates that Tier 1 of the VSP model results in positive practice change in the use of VSS, in settings where whole school training is delivered and resources provided. In addition evaluation showed Tier 1

- could readily be used in routine school practice

- raised staff awareness

- changed practice in mainstream settings, in implementing and maintaining use of VSS

- provided relevant practical resources and improved access to VSS for staff and pupils

- reduced the requirement for visiting specialists to spend time establishing individual use of VSS. It potentially releases them for more targeted work.

- supported collaborative practice between health and education professionals

This in turn facilitates children with additional support needs to participate more fully in all activities and school routines, reducing exclusion from learning and teaching or passive participation. Children also experience consistent use of VSS when transitioning between classes and schools. Staff have ready access to a means of making and using VSS and have a greater understanding of why they are helpful.

NEXT STEPS

Continued monitoring is required to ensure schools achieve accreditation and maintain practice. There is a need to further develop links with families.

Service leads have identified the potential in this model and plan to roll out Tier 1 of the intervention across the city, through development of a training team from existing staff. Tier 2 and 3 of the VSP will be developed to offer an enhanced level of VSS.

ACKNOWLEDGEMENTS

The VSP team would like to express their gratitude to all the individuals and organisations that have supported the project:

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- The City of Edinburgh Council and NHS Lothian multi-agency steering group

- DynaVox Mayer and Johnson

- Fife: Symbolising the Environment Project

- The City of Edinburgh staff and pupils

- Pamela Kennedy

- Ross Burgess

- Ian Grahame

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Improving Privacy in Communication Aids

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INTRODUCTION

This piece of research started as part of a group based learning module at Sheffield Hallam University. The module took a group of students from different IT backgrounds and challenged them by asking them to use their specialist areas of knowledge to develop a communication aid. One aspect of this was to deliver a report explaining how an individual student's specialist area of knowledge could improve communications aids. I (Jack) was one of the students and Peter was the module leader.

MY AREA OF STUDY

My field of study is Computer and Information security and to be honest, I was initially sceptical at how I could improve communication aids by applying information security principles to them. I explained to Peter that within information security there is often an inverse relationship between usability and security. As more security measures are applied, usability generally decreases. As security measures are removed or reduced, usability generally increases. This relationship is easier to explain using a password as an example. A password system that allows a password to be set to anything at all, gives the user the flexibility to set a password that is memorable and easy to type in. However, the security of the password decreases as a user might set a password that is easy for an attacker to guess. To combat this issue, many password systems require a password to meet a certain set of 'complexity requirements'; it may ask for it not to contain the users name, require symbols/numbers or contain a minimum number of characters. This immediately reduces the chance of an attacker guessing the password, however it becomes more difficult for a user to type in and can become extremely difficult to remember.

THE PROBLEM

With the inverse relationship between usability and security in mind, I was concerned that by improving the security of a communication aid that usability would decrease and the average words per minute a user could achieve using a communication aid would be reduced. Hawking (2004) found that average conversational speech takes place at around 120-180 words per minute, the average typist can type between 40-60 words per minute and communication aids are generally lower than 40-60 words per minute. My opinion was that a communication aids primary aim would be to get as close to the words per minute rate of conversational speech as possible. I raised these concerns to Peter but he re-assured me by explaining that there was little to no research into information security surrounding communication aids and therefore there could be an opportunity to solve a problem that others simply hadn't thought about, with minimal impact on usability.

THE APPROACH

When analysing information security issues, the information security triad is often referred to. The triad consists of 3 components: confidentiality, integrity and availability.
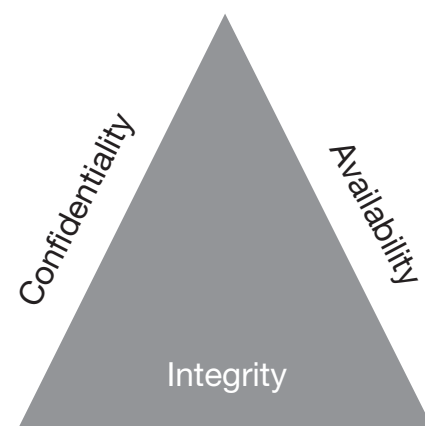
CONFIDENTIALITY

Confidentiality relates to protecting information from disclosure to unauthorised parties.

Integrity

Integrity relates to maintaining consistency, accuracy and integrity of data over its entire lifetime.

Availability

Availability relates to providing a certain measure of redundancy or failover to a system to ensure it remains available in the event of a failure.

I decided to apply the three components of the information security triad to communication aids. Integrity was an area that wasn't facing too many problems. The lifetime of data in many communication aids is often very short, data is input by a user and immediately output. The devices are often standalone and so any stored data has minimal chance of being tampered with. Availability also seemed to be an area that had no real opportunity for improvement; many devices already have extended battery life or backup power sources.

Confidentiality on the other hand seemed to have some significant weaknesses. When information is input into a voice output communication aid, the input is insecure. Most voice output communication aids use visual display units to allow a user to enter information. These displays are often designed so the information is clear and easy for the user to view. However, what isn't considered is that anyone in the room with the user is then able to see what information is being input into the device. This is a problem if the user wants to communicate private information.

There were similar confidentiality issues with the output of information. Voice output communication aids normally output the information over a speaker. The problem with this method of output is that anyone within hearing range of the communication aid could listen to the information that a user is communicating. The fundamental problem with the input and output of information was that there was no facility to allow confidential information to be communicated; there was no facility to have a private conversation.

THE AIM

I now had a clear aim for my research; to find out how we could improve privacy in communication aids by:

1) Securing the input of information into a voice output communication aid

2) Securing the output of information into a voice output communication aid

3) Achieve 1) and 2) with minimal impact on usability of the communication aid, irrelevant of a user's disability.

Securing the Input of Information

The primary problem with the input of information is that the input screen of most devices are typically designed around maximising visibility of

information to the user. Consequently this increases the visibility of on-screen information to 'unauthorised parties'. After looking at a variety of communication aids, none of them appeared to have a feature to resolve this issue. Instead I looked into the area of mobile computing where similar challenges are faced. Many business users access confidential information on mobile devices while travelling. As a result it is possible that confidential information can be viewed by other people around a mobile user; an issue known as 'shoulder surfing'. The most common solution to this problem was developed by Hazzard (2001) who created a physical privacy screen.

Physical Privacy Screen

The physical privacy screen is applied as a film over the top of a screen, the privacy screen contains holograms so that unless the screen is viewed from a perpendicular angle the on-screen information is obscured. This significantly reduces the chance of someone to the side of a user or peering over their shoulder being able to view on-screen information.

Problems

The physical privacy screen seemed like a simple, cost-effective solution that could secure the input of information to communication aids with no impact on usability. However, that analysis was based around the experience of users who don't have any physical disabilities. Many users of voice output communication aids suffer from additional physical disabilities as well as dysarthria. The problem with having a physical privacy filter applied was that, if the screen was knocked out of a perpendicular angle relative to the user's line of sight, the screen would become unusable by the user. In a communication aid this is a critical flaw. If the screen isn't visible the user can't communicate and, if they can't communicate, they can't draw anyone's attention to the problem.

After identifying the issues with the physical privacy screen, I looked back into the area of mobile computing for more solutions. What I found was a laptop released by Dell (2008) which had a software based privacy filter.

### Software Based Privacy Filter

The software based privacy filter restricted the view of unauthorised parties in the same way as the physical filter. However, as it was software based

it could be disabled or enabled at the push of a button. Therefore if the screen was knocked out of perpendicular view of the user, they could simply disable the privacy filter, draw someone's attention to the problem and once the angle was corrected re-enable the privacy filter. Disabling the privacy filter could be completed through a direct push of an button, if a user was physically capable of this or an existing switch could be encoded so that an extended press enabled or disabled the filter. Lee and Keating (1994), Barnes (1994) and Shih and Shih (2009) describe a variety of available switches for users with different disabilities including suck-puff switches, hand switches, foot switches and tongue switches therefore implementing a switch which a user can press to enable or disable a privacy filter should be possible. Dell charged ~£83.50 to upgrade a laptop with this technology at the point of factory build. This cost against the significant price tag attached to many communication aids seemed relatively small. The software based privacy filter seemed like the perfect solution to secure the input of information into a voice output communication aid. However, I still needed to find a solution to secure the output of information.

Securing the Output of Information

Even with the input of information being secure, outputting that information over a speaker immediately counter-acted the improvement of being able to input information securely. Information would be output in a 1-to-many model, to support private communication like whispering, 1-to-1 communication needed to be facilitated. The most obvious solution appeared to be through the use of headphones. If a communication aid had a headphone slot then a communication recipient could plug in a set of headphones and 1-to-1 communication could be achieved. However, there was a challenge to overcome; with 2 routes which audio could take; how could a user indicate which audio output should be used?

I consulted Peter about this challenge and he drew my attention to software that he had developed. Just Talk V1.0 voice output communication aid software made by Madhouse Software (no date) supported multiple output options by using a layered approach. In its original form it was used to allow a user to convey emotion in communication. When a communication icon was selected, there were multiple

= Shout

= Speak

= Whisper
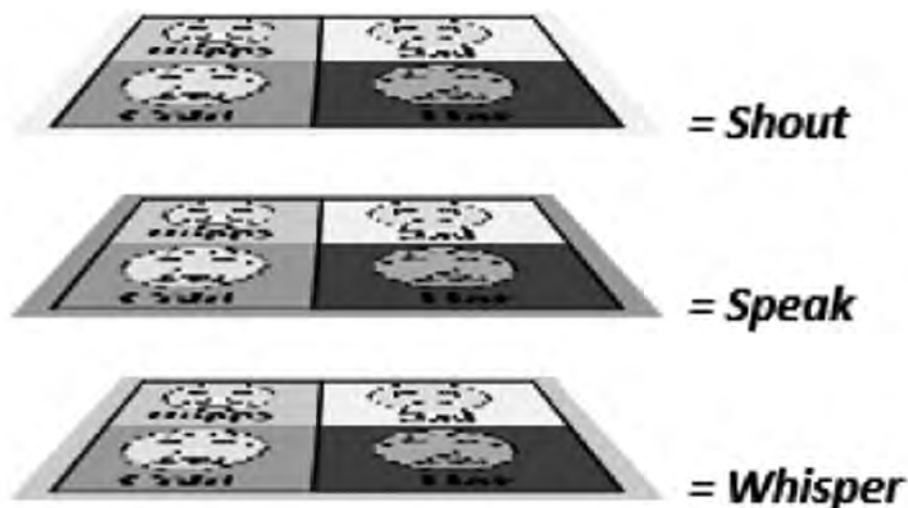
layers to choose from. If the communication was that someone was mad, layer 1 would output they are slightly annoyed, layer 2 would be they are angry and layer 3 would be that they are furious. By substituting volume of speech for the emotion option, layer 1 could be for whispering, layer 2 could be for speaking and layer 3 could be for shouting.

Output selected as layer 1 could then be routed to the headphone output, layer 2 and 3 could be routed to the speaker output. To minimise impact on usability the layers could be configured so that the most common output volume is placed in layer 1 and the least common in layer 3.

Further Improvements

Combining an additional audio output with an adapted version of Just Talk V1.0 appeared to secure the output of information to facilitate 1-to-1 communication. However, I wanted to make sure that this solution was as practical as possible.

I started to consider the audience that communication aid users may regularly communicate with and I realised that communication aid users may communicate with each other. Therefore picking up a set of headphones for a user with physical disabilities may not be an option.

The solution to this was to incorporate a third output option; on-screen text output. This type of output can be seen in the Light Writer SL40 by Toby Churchill (no date).

A fourth layer of output could be used with the Just Talk software which allowed for text based output. This would mean the conversation recipient could read the communication if picking up headphones wasn't an option for them. It must be considered that this output faces the same privacy issues as input screens do, so to facilitate private communication the software based privacy filter should also be applied to the output screen as well as the input screen.

THE OUTCOME

Combining the different solutions from mobile computing and by adapting current solutions within the communication aids domain, it is possible to significantly improve the provision of private communication in communication aids with minimal impact on usability. Currently the number of users of AAC that would utilise a communication aid in scenarios where private communication is required, is minimal. As technology improves, communication aids will give users an increasing level of independence. As this independence increases, the need for private communication to be supported is likely to rise. If we research the solutions that are available before that need arrives, we can ensure that the increased independence given to communication aid users in the future is not slowed by privacy issues.

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Review of AAC Stroke Cases to Identify Common Practice and Consider Outcomes

PRESENTED AT COMMUNICATION MATTERS CONFERENCE 2014 BY ZOE CLARKE AND MARCUS FRIDAY, BARNSLEY ASSISTIVE TECHNOLOGY TEAM.

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ABSTRACT

The Barnsley Assistive Technology Team has a varied caseload, with some patients who are stroke survivors with an associated communication difficulty. VOCA adoption has been shown to be varied if regarding this group as a whole. During a period of one month we collated eleven relevant case studies, which were compared and analysed. The process has helped in beginning to draw out some common themes, for example, in grouping particular language and communication difficulties and the potential for successful VOCA adoption. The importance of 'low tech' AAC methods was highlighted during this process. It has helped to identify necessary changes to our referral form and where we should provide additional support in facilitating the completion of a communication diary. The process has also been beneficial in identifying training needs for the team.

BACKGROUND

The Barnsley Assistive Technology Team is a multidisciplinary specialist team which currently covers Barnsley, Rotherham and Doncaster, assessing for Electronic Assistive Technology. Assessments are performed for AAC, Environmental Control Systems, Computer Access, Specialist Wheelchair Controls and combinations of these as integrated systems.

The team receives referrals from health professionals from these three areas and had recognised an increasing number of referrals for stroke survivors with an associated communication difficulty. The team hold weekly peer review meetings in which they assign new cases, discuss existing cases and any other relevant issues. At these meetings there had been considerable discussion about this group of patients, the AAC being trialled with them and the outcomes. It was identified that these referrals were often particularly challenging and the outcome in terms of goals met, AAC adoption and method(s) of communication used following our joint intervention were varied.

The team decided to undertake a more in depth look at their approach to stroke survivors and assessment with a view to undertaking an informed critical appraisal of the literature. The authors had attended a presentation at Communication Matters 2013 (1), around undertaking a critical appraisal and developing the question. As an initial step towards this we decided to produce case studies for the most recent stroke survivors we assessed for AAC and use this as a basis to develop our question. It was also identified that considering these cases offered the opportunity to review what information local therapists provide in their referrals and whether there is information we should routinely request.

METHOD FOR FIRST STAGE

Having decided to look in more detail at recent stroke survivor cases the team identified recently referred and assessed stroke survivors and each team member wrote a case study of two or three patients. To facilitate this a case study template was put together to enable easy comparison when reviewing them, with the Communication Matters case study template used for reference (2). The template developed recorded patient details, referral information, details of initial assessment/s, equipment trialled, next steps/further trials/plan and key things highlighted by the case.

Over the period of a month team members produced their case studies. One team member collated the case studies prior to a review session and undertook an initial analysis to identify some starting points for discussion.

A review session was held during which each team member presented their cases and key factors were discussed.

METHOD FOR SECOND STAGE

Following the review session we undertook further analysis of the cases. The initial analysis had identified that simply grouping them together as stroke survivors did not give a sufficient level of differentiation and that finer

differentiation in terms of presentation of impairments could potentially identify patterns in VOCA outcomes.

RESULTS FOR FIRST STAGE

Eleven case studies were produced between five clinicians. Of the eleven case studies, five were female patients and six were male patients with an age range of 31 – 79 and a median of 59. The team considered how the difficulties the patients were having were described in the referral form, identifying that all had a description of verbal output but other detail, such as cognition was only detailed in three of the referrals (see table 1). The team also considered what had been previously tried by their local teams, where this was detailed in the referral. Nine of the eleven had detailed this and it was generally low-tech AAC and in some cases iPad apps that had been tried.

The additional information gained at the initial appointment was then considered, results of what was gained included gaining further understanding of expressive and receptive language, further information about current therapy, observation of sensory or access requirements, discussion of motivations, observation of the person trying a communication aid and the environment.

The equipment taken to the initial appointment were also considered and in the majority of cases the VOCAs were portable high-tech devices with the exception of the Tobii S32, which may be considered a 'mid-tech' option. All trialled at least one device. Table 2 details what was trialled.

The outcomes identified that from the eleven people, two had been recommended a communication aid, eight had completed the trial and no recommendation had been made and one was still trialling a device.

RESULTS OF FOLLOW UP WORK

Having carried out the initial work the team decided to undertake further analysis by trying to refine the cases into groups based on the presentation of their stroke, table 3 shows the results of this analysis.

DISCUSSION OF FIRST STAGE

The purpose of this process was to learn lessons and share practice to shape future practice. It was useful to look in detail at the information from referrers and the variation within this and the additional information gained at initial assessment. It had been evident in all eleven cases that additional information was gained at the initial appointment regardless of how comprehensive the information from the referral was and any discussions with the referrer or other health professionals prior to the initial assessment. This has been important evidence when considering more generally our process and revision of our referral form. The referral form has since been revised to clarify the information required, and level of detail, whilst striking a balance with not making the referral form too onerous or restrictive.

Looking at the equipment taken to initial assessment and trialled enabled comparison and identified consistency in approach within the team. Prior to undertaking this work, due to the outcomes, there had been potential for individuals within the team to feel that the challenges may have been due to their approach. By pooling the experience it demonstrated similar thought processes and rational for assessment and trial between the team.

Eleven patients were considered, with VOCAs recommended for two, suggesting that adoption of VOCAs in this group is challenging. Other groups have identified similar outcomes (3). In the cases where VOCAs were recommended the

Table 1 – How difficulties were described

	Number of cases where this was identified
Description of verbal output	11
Description of comprehension	7
Description of cognition	3
Other e.g. sensory, psychological, motivation	4
Description of writing	5
Description of access	4
Suggestion of possible solutions	3

Table 2 – Trial equipment

Equipment trialled	Further details	Number
iPad	Predictable, Clarocom Pro, Verbally+	3
	Proloquo2Go	1
S32		1
Techscan		1
Servus	MindExpress	1
VilivX70	Grid2 – Symbol Talker A	1
Tellus Smart		1
iPhone		1
Viliv S5	Grid2 – Adapted Beeline	1
Talara 32		1

Table 3 – Results of further analysis

Predominant Condition	Number	Outcome
Broca's Aphasia	5	3 No VOCA recommended 2 Low-tech recommended
Wernicke's Aphasia	1	No VOCA recommended
Global Aphasia	2	No VOCA recommended
Dyspraxia	2	VOCA recommended
Dysarthria	1	Low-tech recommended

team were able to make observations about factors which contributed to this outcome. These observations were that the cases where a VOCA was adopted had a supportive environment and the SLT had clearly identified features the client required when referring. The two cases also demonstrated strong motivation towards using a communication aid and identified clear situations where they wanted to use it. In both cases there were no significant motor or literacy difficulties in terms of accessing the device. The team had previously considered means, reasons and opportunities (4,5) during assessments in an informal way but, since this work, have developed resources to perform this more formally.

Observations were also made around the cases where a VOCA was not recommended following the trial. One of the negative observations was around difficulty having the appropriate vocabulary available on the device. Trying to establish potential vocabulary to use from the person and carers was a contributory factor. Some were asked to complete a communication diary over a period of at least two weeks to support vocabulary selection. In some cases a low-tech system either had not been introduced or had been rejected and it was felt that having a more established low-tech system would enable potential vocabulary to be explored and could help with acceptance of a VOCA. Although it had been identified that a supportive environment had contributed to cases where a VOCA had been adopted, review of the other cases indicated that good support does not necessarily result in successful use of a VOCA. In addition the person's perception of using an aid in public can strongly influence acceptance. The cases highlighted the importance of being clear about the limitations of a VOCA (even prior to referral) as in some cases the VOCAs did not meet the expectations of the person. Alongside this, some people felt a familiar communication partner was better than the VOCA and hence the motivation to practice and use the VOCA was not there. A number

of the cases where a VOCA was not recommended were reliant on pre-stored messages or words as they were not able to generate text and this often resulted in challenges when trying to solve communication breakdown where a 'novel' word or phrase was required. Where some cases were using software for rehabilitation there was potentially a conflict between understanding that although the VOCA could provide some rehabilitation support it was predominantly to provide functional communication support. It was observed that cases where the person had become more socially isolated or who lived in a highly structured environment also had less motivation towards using a VOCA.

DISCUSSION OF SECOND STAGE

Having undertaken the initial work the team identified a need to increase knowledge of the neurological effects of stroke on speech and to establish a finer distinction between the cases which had been reviewed and future cases. Two members of the team undertook research into this and presented a training session.

Cases were then further analysed (see table 3), with a suggestion that, where the predominant impairment was dyspraxia rather than aphasia, introduction of a VOCA was more successful. Dyspraxia is a motor programming disorder in terms of speech and hence the support offered by the VOCA in terms of word prediction in the cases considered, seemed to offer benefit. The support offered by the VOCA was of less or no benefit where the predominant impairment was dysphasia/aphasia and comprehension and expression more severely affected.

CONCLUSIONS

When considering the cases where a VOCA had been recommended the analysis suggested that they were people whose predominant difficulty was dyspraxia with mild aphasia. When discussing the cases it was clear that simply grouping the cases together under a 'stroke' as a diagnosis was not a sufficient level of

distinction and that it would be necessary to consider their diagnoses in more detail and group within, for example, types of dysphasia. As described the team undertook further work and, in the cases considered, results suggested that those diagnosed primarily with dyspraxia felt more benefit from a VOCA.

Considering the information from referral and initial assessment it was agreed that we gain considerable additional information from a face to face initial assessment. However, the team has revised the referral form recently and this work contributed to how this could better inform initial assessment. It was felt that key information we need is regarding establishment of low-tech or a good reason why this hasn't been established. The team identified that they often ask people to complete a communication diary but in the discussions recognised that this can be challenging for people. This suggested that it would be interesting to try and complete a communication diary within the team.

When considering trialling of equipment we identified a need to further encourage functional use of the VOCA. The development of resources to enable therapists or assistants to undertake role play and practice scenarios may be beneficial. The team are in the process of undertaking this work.

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Our Journey with LAMP and Children with Autism

A study to develop criteria for assessment for use of the Language Acquisition through Motor Planning (LAMP) approach with non-verbal children with Autism

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Between July 2013 and January 2015, the Bradford and Airedale Speech and Language Therapy teams carried out two projects. Our first project aimed to devise a set of criteria to identify non-verbal children with Autism who are most likely to show successful use of a communication aid through the LAMP approach within the current two week assessment period. LAMP (Language Acquisition Through Motor Planning) is a therapeutic approach based on neurological and motor learning principles. We also wanted to investigate if sensory preferences and/or non-verbal communicative behaviours of non-verbal children with Autism can indicate their potential success at using a powered communication aid.

Following the first project, a twelve month pilot project to investigate the impact of offering the LAMP approach within the trusts was carried out. This article summarises our findings from both projects.

Past research projects have highlighted a range of benefits relating to the use of powered communication aids amongst children with Autism. Franco (2009) found that when a child had access to an aid "the child increased his engagement in both appropriate activities and interactions with others." Collender and LoStracco (2011) looked specifically at the use of the LAMP approach in their study of 28 children with Autism and found that all participants showed an increase in Speech generated device mean length utterance and four students became completely verbal.

Some studies have shown a variable response amongst clients. Thunberg et al (2009) found that "findings varied among the children and activities, but an increased level of communication effectiveness was seen during SGD (speech generating device) use for all children." Beck et al (2008) also found that "the influence of the communication systems on each participant's verbalizations varied." Schlosser et al (2007) studied five children with Autism using communication aids and concluded that "two students requested more effectively with speech output while there was no difference for the remaining two students."

Although previous studies indicated that the use of powered communication aids is likely to have some degree of positive effect on the communication and interaction skills of children with Autism, we were unclear as to who was most likely to benefit.

Speech and Language Therapists often have large caseloads and need to prioritise clients who are most likely to benefit from input. Therefore, clear criteria for who is likely to benefit the most from the use of communication aid are required.

Current resources and caseload numbers within our services do not allow for each child who has a diagnosis of Autism and limited functional spoken language to be assessed for a powered communication aid. Assessment for communication aids takes place over a two week period, where aids are loaned out from the communication aid company (at no cost) The Speech and Language Therapist is then responsible for deciding whether to request funding from local NHS commissioners for a long-term loan of a communication aid (as long as the child requires it). There is therefore a need to have clear criteria as to who would most likely be successful using the LAMP approach.

METHODOLOGY

Eight children took part in six assessment sessions over two weeks, using the LAMP approach with a Vantage Lite communication aid and Unity vocabulary package. The children's sensory preferences, comprehension of language and communicative behaviours were analysed to see if any of these factors were indicators of potential success using the LAMP approach. This project was supported by The Centre for AAC and Autism and Liberator.

The frequency and timing of these sessions was chosen to reflect the typical time frame for assessment within current service delivery models.

Prior to attending the sessions, each child's parents completed a questionnaire about their sensory preferences and motivators. Another more detailed questionnaire looking at sensory processing difficulties was completed with parents during the study. Parents also completed a form about their child's current methods of communication.

Each session was filmed. Participants' success was judged according to the amount of independent use of the communication aid which was achieved over the two week period. A scale of prompt fading was used to assess children's success during sessions.

RESULTS

Information about each child was collated. The areas investigated are listed below:

- Level of social engagement (using the Intensive Interaction Framework, G Firth- 2004)
- Level of comprehension (reported by parents and informally observed during the sessions)
- Greatest area of sensory processing

difficulty (touch, taste, auditory, visual, movement, sleep, smell)
- Overall sensory processing score (total of all positive responses on sensory questionnaire)
- Overall sensory state (hyper, hypo, mixed)
- Prior success with Picture Exchange Communication System (PECS)
- Number/range of motivators
- Persistence to get what they want
- Ability to point
- Current communicative behaviours (echolalia, gesture/pointing, physical manipulation of others, vocalisations, intelligible speech, crying, removes self from situation, self-injurious behaviour, tantrum, throwing things, establishes eye contact, gains communication partner's attention, joint attention, engagement with adults)

Participants were ranked in order of success with the communication aid and then the above factors were compared across participants.

Ultimately, a successful trial was judged to be one where the child:

- showed consistent independent use of the communication aid
- used the communication aid across a range of activities

The study found that level of engagement and verbal comprehension were the biggest factors influencing successful use of the communication aid. Persistence to get what they want also impacted on the degree of success. Greatest area of sensory need was not a factor, nor was overall sensory state. Success with PECS was also an indicator for success with LAMP. Whilst the overall sensory processing score was not a direct indicator of success or failure, those children with both a high level of comprehension, high degree of persistence and a high sensory processing score were successful using the communication aid, but within one specific activity. For these two children, although they quickly became independent with the communication aid, they failed to extend its use beyond one activity.

Whilst sensory processing difficulties are not a direct indication of success or failure with LAMP, it is clear that careful analysis of the child's sensory preferences and difficulties is completed prior to commencing a LAMP assessment in order to tailor the activities to maximise success. In the case of three children, motivating activities were not discovered until

sessions five. These children exhibited some progression with LAMP in the final two sessions.

All participants made progress over the six sessions. The child who was judged to be least successful progressed from showing occasional interest in the device to eventually holding the device and pointing to the screen. Several children showed an increase in spoken language within the sessions.

The fact that all children made some progress with LAMP reinforces the findings of Thunberg et al (2009). Although our study aimed to propose a set of criteria for success within a two week time frame, the fact that all participants showed some progress cannot go unmentioned.

LAMP Pilot project
(January 2014-January 2015)

Following the two week LAMP project, we met with NHS commissioners to discuss the potential use of the LAMP approach for children with Autism. The result of this meeting was a 12 month pilot project to investigate the impact of offering this approach both on NHS time and funding and to establish a set of assessment and funding criteria. Funding was provided to purchase two Accent 800 and one Accent 1000 communication aids to support the assessments.

Despite receiving nine referrals over twelve months, the majority of which met the assessment criteria, only three went on to meet the funding criteria and receive communication aids. On reflection, we believe the following factors influenced the success of the trials:

- The commitment of parents/carers and school staff to supporting the trial.
- The parents/carers and school staff's existing knowledge and understanding regarding the nature of autism and communication difficulties.
- Individual Autistic traits of the children e.g. being fixed in the routine of using a symbol book and not wanting to change to use a communication aid, having a narrow range of interests and communicative functions.
- Availability of communication aids for assessment.
- The length of the trial.
- Individual Speech and Language Therapist's capacity.

Summary and Recommendations

For some individuals, the LAMP approach is clearly a valuable tool in developing

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September 2015
at
University of Leeds

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their communication skills. We feel our study has provided us with useful criteria to identify potential indicators that a child is likely to succeed with LAMP. However, the success of the LAMP approach requires commitment from parents/carers, teachers and Speech and Language Therapists. Without dedicated time to support the implementation of a communication aid, success is unlikely and this is considered to be a significant factor influencing the outcomes, rather than just the individual child's capability. A successful outcome may have been achieved for some individuals had greater support and resources been available during the trial.

Assessment Criteria for LAMP

- The person makes active efforts to reach out, consistently join in or even comment some way on an interaction. (Social Engagement at the 'Involvement' Stage of the Intensive Interaction Framework, Firth. G, 2004).

- Persistence to get a desired outcome.

- Comprehension is an advance of functional expressive language.

- The person must have shown success using a no tech or low tech alternative communication system.

Criteria for applying for funding for a short terms loan of a communication aid (12 weeks)

Following 4 Assessment Sessions with a Speech and Language Therapist the person must:

- Have used the same word functionally for at least two different activities e.g. "more raisins" and "more bubbles."

- Demonstrate an understanding of the different functions of at least 2 words, e.g., saying 'eat' gets them more food but saying 'go' makes a toy work.

- Show some independent use of the communication aid to communicate (i.e. the person goes to the device and spontaneously uses a word functionally to get a direct outcome).

Criteria for long-term loan of a communication aid (as long as the child requires it)

Over a period of 12 weeks:

- The individual will demonstrate independent use of the communication aid for at least two communicative functions and spontaneously in a range of situations.

- Adults at home and/or school demonstrate a commitment to support the use of the communication aid by attending training and supporting the implementation of the aid across a range of activities.

If the above criteria are not met at the end of a 12 week loan, the communication aid will be returned to the Speech and Language Therapy department.

We further conclude that current service delivery model does not allow for a comprehensive assessment and care pathways should not be dictated by availability of equipment. We would further propose that these assessment and funding criteria are applied to all communication aid assessments within the Bradford and Airedale area.

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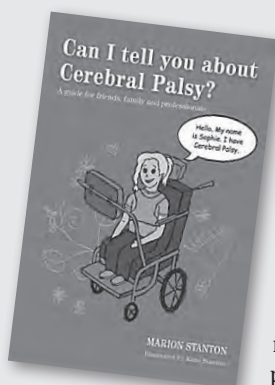
Book Review

by Emily Campbell,
CM administrator

Can I tell you about Cerebral Palsy?

A guide for friends, family and professionals

By Marion Stanton

Jessica Kingsley publishers
ISBN 978-1-84905-464-5

'Can I tell you about Cerebral Palsy?' is a clear, simple, easy to read & easy to follow book with a bright and welcoming cover. It was great for someone like me who comes to the topic with little knowledge. Each page of text has a corresponding illustration which makes it more enjoyable for younger readers (and old!) and would be an asset to any school or library.

It explains cerebral palsy (CP) from the perspective of a young teenager named Sophie and is written in the first person. It starts out with Sophie introducing herself and her disability before going into more depth about her limitations and how she can overcome them. Topics include school, friends and hobbies as well as communication aids, personal assistants and opportunities for the disabled. Although it is written from Sophie's point of view, she also mentions other people and their experiences of living with CP.

Once Sophie has finished telling you her story, she concludes by framing realistic advice from her own perspective for school staff, family members, personal assistants, people in the community and other professionals.

The book concludes with a comprehensive list of recommended websites for further information. Overall I found this book a very positive read and would recommend to anyone wishing to learn more on the topic in an informal way.

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The DART Project – Improving Assistive Technology Provision in Further Education

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INTRODUCTION

This paper explores in more depth the presentation that was given by the authors at the Communication Matters 2014 conference. The paper aims to describe the DART (Disseminating Assistive Roles and Technology) Project, including the identification of the main findings of the project's research report on Assistive Technology provision in Further Education (Maudslay, 2014). Note that a follow up research report based on a survey and focus group work undertaken in 2014-15 is underway at time of writing. The DART project has run from 2010-2015 thus far, note that a possible continuation of the project is currently under discussion. The DART project is thought to be of interest to the Communication Matters journal readership due to the roll the Assisitve Technologist can play in the assessment, provisioning and ongoing support of AAC and related technologies and as such links to project resources are provided in this paper.

BEAUMONT COLLEGE

Both authors of this paper are employed at Beaumont College (Scope – Beaumont College, 2014). Beaumont is an Independent Specialist College (ISC) operated by the national pan-disability charity Scope. The College currently has 100 students in total with 77 at the main Lancaster campus and an additional 22 students at three satellite provisions in Carlisle, Barrow in Furness and Blackpool. Beaumont College has around 330 full time equivalent staff, making it one of the larger ISC's. The College has an Ofsted 'Outstanding' grade and was recently found to be 'compliant in all areas examined' by CQC. The curriculum at Beaumont is focused on personal development, independence and skills for life. The College has a creative arts specialism. Skills for life are often embedded into creative arts sessions. Recorded / accredited learning takes place in the 24 hour curriculum with students supported in real living contexts to develop the skills they will need for maximum independence post College.
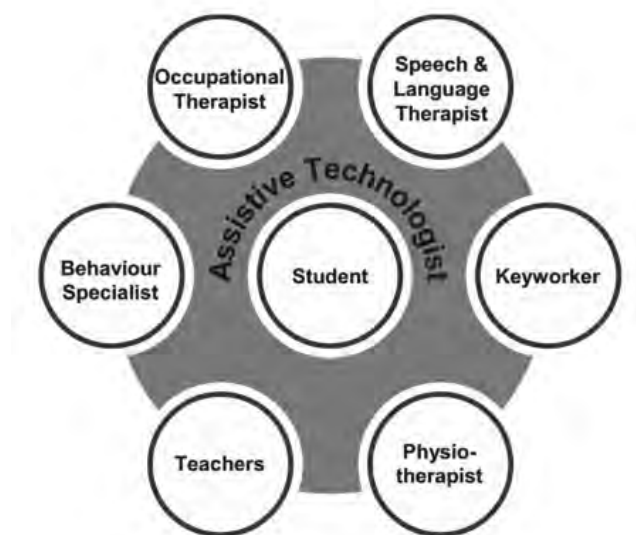

Figure 1: The Assistive Technologist.

The author has previously described both the trans-disciplinary teaming model in use at the College and the nature of the Assistive Technologist role as used at Beaumont College in a previous *Communication Matters* journal article from Vol. 28 No. 1 (Slaughter, 2014) so that information is not fully reproduced here, however a brief description of the Assistive Technologist role is provided below.

THE ASSISTIVE TECHNOLOGIST ROLE

The AT role at Beaumont College has been developed over a number of years. The role as the College and the DART project define it is more education focussed than other roles that may have a similar title. It is not a clinical rehab engineering role, but rather is a fusion of education, therapy and technical elements. The way this role works in collaboration with other roles is explained in the diagram below. It is important to note that the role does not replace any other existing role, but rather works with others to ensure that the total service offer is truly joined up, in this way the AT works as the 'chief integrator' of the technology system. It's important to note that the clinical lead for seating and positioning remains with the OT, and the clinical lead for language pack selection remains with the SLT. In the case of AAC device selection, this may be dictated by one of these factors, but normally the device selection is done through collaboration within the AAC Community of Practice.

This role is very similar to the roles deployed at the DART project delivery partners Henshaws College (Henshaws, 2015) and National Star College (National Star College, 2015). The role and person specifications have also been used as the basis for the creation of roles at Colleges that have taken part in DART deep support activity as well as in other contexts such as special schools.

THE DART PROJECT

In 2010 Beaumont College won 'Innovation' funding following a bid to the now defunct Learning and Skills Improvement Service, this original project ran between 2010 and 2012 and was delivered in partnership with Natspec, the Association of National Specialist Colleges (Natpsec, 2015) and National Star College. Since 2012 the project has been funded by Jisc (Jisc, 2015) and maintains a project

website at http://dart.beaumontcollege.ac.uk/ (Beaumont College Technology, 2015). Jisc funded the DART 2 project through the 'FE and Skills Development and Resources Programme', additional funding was supplied for 2014-15 as part of the embedding phase of the project in order to increase the number of Colleges that could benefit from the project. The DART 2 and DART 2.1 projects are delivered by the original partners plus Henshaws College (who were a recipient of project support in the original project) along with the College Development Network (College Development Network, 2015). Both projects have had the support of Jisc staff, initially from the defunct Jisc Regional Support Centres and the Jisc TechDis services and now, following a restructure of the Jisc 'customer service', function from the 'Access and Inclusion Subject Matter Experts'. The current project is known as DART 2.1 and is described below:

This project seeks to:

- Improve Assistive Technology practice in the FE and Skills sector
- Enable the replication of the innovative Assistive Technologist role
- Produce Assistive Technology case studies for the sector
- Conduct original research in order to understand the changing nature of how Assistive Technology is used in the College sector

This is achieved through a combination of providing 'deep support' to colleges, the provision of an open access workshop series, an online survey and focus group based research project, and the provision of a website containing relevant case studies and resources. Note that all the case studies, workshop programmes and supporting materials can be found on the DART project website as linked above.

The 'deep support' element has now been delivered to a total of 28 General Further Education / Independent Specialist Colleges. The Colleges who wished to take part in the deep support activity had to apply to do so, note that on each of the three occasions where we were able to take deep support applications that we were significantly oversubscribed with approximately triple the number of applicant Colleges than places were available for. A shortlisting process was applied that looked at the quality of the application,

how appropriate the DART teams skills were at meeting the stated need and a clear opportunity for an appropriate student group at the College to benefit from the project. Deep support activity is led by the College receiving support and is informed by the application that the College originally made. During the application process one of the three College delivery partners was identified as being best placed (both geographically and from a skills perspective) to provide the support that is required. The activity is also informed by a deep support mapping activity that takes place prior to any work being agreed. This mapping activity seeks to understand what the College wants to achieve within its assistive technology provision and what the DART team can do to meet that need. Examples of activity within deep support Colleges includes:

- Staff training
- An audit of existing AT provision
- Implementation of cost effective and proven AT solutions
- Development of assistive technologist based roles, including recruitment assistance or re-training
- Access to assessment kits that have already been purchased by the DART project

Note that a total of five days on-site contact time is allocated to each College taking part in deep support. It is interesting to note that of the Colleges taking part in deep support around half have either recruited someone as a dedicated Assistive Technologist or developed an existing employee into an assistive technology related role, this is seen as a key outcome of the project. Additionally through the training events and other work that has taken place during deep support such as undertaking audits of assistive technology provision the project can evidence significant positive impacts on the AT provision in Colleges taking part in deep support. For further details of deep support please see the full report on the original Jisc funded DART 2 project, this is available on the Jorum (Jorum, 2015) website: http://find.jorum.ac.uk/resources/18253 Note that at time of writing the final report of the Dart 2.1 project has not been completed as the project is ongoing.

The second element of the DART project is the design and delivery of the

workshop series. In 2013-14 three workshops were delivered as part of the DART 2 project. The themes were 'Assessment for Assistive Technology', 'The Assistive Technologist Role', 'Continuing Professional Development' and a practical day providing 'Training on Specific Assistive Technology' focusing on AT software packages and tablet computers. All three workshop days ran twice, once in central England and once in central Scotland. All of the resources from this original workshop series are available on the DART project website. The DART 2.1 project is also delivering a workshop series which is currently underway, themes include assessment for assistive technology, an introduction to assistive technology hardware and software, assessment case studies, continuing professional development opportunities, e-safety for vulnerable learners and hands on AT training. Again all of the current workshop resources can be found on the DART project website.

The third element of the DART 2.1 project is a research project, run by Natspec and following on from research work undertaken in 2012/13 (Maudslay, 2014). The original research (which can be downloaded from here: http://find.jorum.ac.uk/resources/18808) identified some key issues / barriers to Assistive Technology provision in the FE sector, the following section is quoted from this report:

1. "Over half of the providers who responded to the questionnaire had a person (either full or part time) in a designated 'assistive technology' role. This was positive, although there were also indications that the level of awareness about assistive technology was very mixed with some college's way ahead of others. Very often positive developments had occurred as a result of one particularly committed individual.

2. Respondents felt overwhelmingly that a co-ordinated approach which brought together different college departments was a key to successful assistive technology support. Most providers felt there were good relationships between those providing assistive technology and learning support departments, but worryingly many felt that their relationships with IT departments were less good.

3. Assistive technology was funded in different ways in different organisations. Some students were funded through an individual allocation of money. While this was positive in that it allowed for an individual to receive the hardware and software he or she required, respondents were concerned that this restriction to a specific individual made it difficult for them to try out possible creative solutions for their full range of disabled students. It also could prevent them from ensuring that assistive technology is available across the college for all students.

4. There were very mixed responses to the question about whether students owned and could retain their specialist equipment when they left college which indicated that this is a complex issue which deserves further exploration both at local and national level.

5. On the whole providers felt most confident about the assistive technology support they were giving to students with dyslexia and to students with a visual impairment. They were less confident that they were providing the most appropriate assistive technology support to other groups of students, particularly those with more complex learning difficulties.

6. Respondents recognised the need for on-going training and support and for easier ways to keep abreast of new developments in the area of assistive technology."

This original research report is now being extended through a research survey including similar questions in order to gain a 'longitudinal view' of AT development in the sector. This research is based on a survey that attempts to understand the development needs of the sector in order to inform the design and delivery of the workshops and to provide evidence around the current state of assistive technology provision within the General Further Education and Independent Specialist College sectors. A further aim of the DART 2.1 project research is to produce guidance materials for Colleges that will address the assistive technology development needs that have been identified by survey respondents or by people who have taken part in focus groups.

CONCLUSIONS

28 Colleges have participated in the deep support activity to date. New Assistive Technologist roles have been created in several of the recipient colleges which has led to an enhanced assistive technology service for students. Through both the deep support activity and the workshop series staff in the sector have been upskilled. The results of the original research have led to the commissioning of a larger scale study in 2014/15.

The project has identified a clear need to develop AT and AAC practice in the FE sector (applications outnumbered available places by 3 to 1 and the research has indicated a signficiant training and development requirement around the effective provisioning of assistive technology), which has led to further funding for the current project and may lead to a longer term continuation of the project.

The 2014-15 research project aims to inform and influence Jisc and possibly government policy on Assistive Technology provision in the College sector.

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Using the ProxTalker to Make Communication More Tangible

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INTRODUCTION

The STEPS Center for Excellence in Autism is a private school for students ages 2 ½ – 22 years old with Autism Spectrum Disorder or related diagnoses in Strongsville, Ohio, USA. At STEPS Center we use an individualised approach to educating, teaching communication and providing behavioural supports to students of varying needs. The staff work in accordance to our guiding principles to foster meaningful relationships that honour each student. At the STEPS Center we have been using the Logan®ProxTalker® communication device with our students whose progress has been stagnant when using traditional methods of AAC. The ProxTalker uses unique technology to give verbal output to those who need the sensory support of moving tangible objects, pictures or symbols when communicating. Our students with Autism Spectrum Disorder have demonstrated difficulty mastering abstract concepts and often require these concepts to be broken down into more tangible learning units. The students who have been assigned to use ProxTalker devices were noted to have additional deficits in the areas of motor planning, visual performance, initiation with AAC and generalising mastered skills to other settings. These students demonstrated a difficulty with attending and showed little interest in using dynamic screens for communication alongside demonstrating the same barriers in their academic programming targets. Our students achieved increased communication and academic gains by using the ProxTalker to strengthen deficit areas listed above with a modified communication protocol.

INTRODUCING THE PROXTALKER

When students are introduced to their ProxTalker devices, they receive instruction to use the device for communication and with pre-requisite academic skills. These academic skills included receptive identification of three dimensional objects or photos which had a voice output tag attached. We made academic stimuli tags for the ProxTalker to assist with strengthening visual performance by distinguishing between objects that were displayed on the devices felt (cloth) pages. The additional tactile feature of moving an object tag to the location button on the device and touching the object on the field strengthened the identification of the object. The correct choice was additionally reinforced by the auditory sound recorded on the tag with the appropriate corresponding name for the object/picture. We found that our students were able to demonstrate mastery of receptive identification targets using the additional input that the ProxTalker provided in the areas of visual, tactile, motor planning and auditory reinforcement. We also found that the students increased attending and visual scanning skills with additional instructional focus. These skills generalised to both academic and communication skills.

This demonstrates teaching the concept of the pronoun 'you' during instruction. The individual keeps the pronoun tag on their person instead of having all pronouns within the pages of the student's device.

Initially students were introduced to the ProxTalker for communication using voice output tags in a medium that was easy for the students to distinguish. For most students the starting point was either 3 dimensional tags or photographs to represent desired items. Line drawing symbols were not often used due to previous failures with discriminating the line drawings and to decrease abstract concepts during initial instruction.
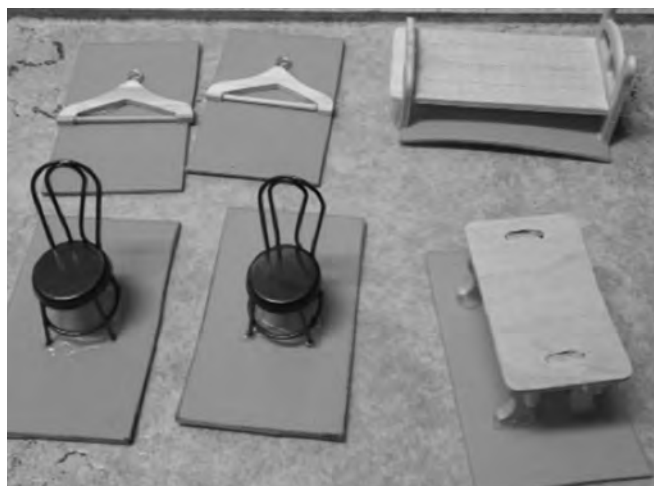
Progression of communication instructional targets:

- Initial tags. For each student, regardless of using 3 dimensional tags or photograph tags- the goal was to systematically progress to using symbols for more universal access to less limiting communication.

- Contextual Scenes. The tags were arranged on contextual scene pages to establish the concept of categories. Examples of these included using a photograph as the background scene to where the tags were stored. Food item tags were placed in a photographic background of a lunchbox, cupboard or

Top left: An example of using academic stimuli that can be used on the ProxTalker tags to teach academic skills. *Centre*: An example of teaching object identification using three dimensional objects attached to ProxTalker tags to increase input during instruction. Students can match identical objects to each other, select from an array and match similar items using the device. *Above right:* An example of teaching the category concepts using three dimensional objects on ProxTalker tags.

refrigerator, toy item tags found in the sensory room were placed in a background of the sensory room. Using this contextual scene background during initial communication training assists the student to learn the tag representations in the actual context instead of being arbitrarily arranged on a sheet because of being a 'noun' on a page with other non-related tags.

- Transition Tags. Once our students mastered the photograph tags in the contextual scene pages and demonstrated improved visual performance skills, we were able to transition to symbol tags on the pages.

- Pronouns. Our students were introduced to the concept of pronouns at a much later stage in communication training. The pronoun tags were photograph representations of the student for 'I' and different staff and peers for 'You', 'His' and 'Her'. Individuals who were identified as 'You', 'His' and 'Her' would wear their tag on themselves to assist with making these concepts more tangible and prevent the student from thinking these pronouns were an extension of self.

An example of using a background photograph for teaching contextual scenes as tag pages on the ProxTalker.

- Ownership. Seeking out the device of increasing distances was introduced slowly throughout different stages. The students had previously demonstrated difficulty with taking ownership of AAC devices and we did not want the same lack of progress to prevent communication acquisition. We found that our students demonstrated an increase in ownership of the ProxTalker in comparison to previous AAC technology with traditional proximity methods.

PROGRESSING TO ACADEMIC SKILLS

As our students progressed using the ProxTalker to communicate requests, comment about environment and engage with others, more academic skills were targeted using the device. All receptive identification programs including letters, numbers, sight word, objects, photographs and categories were taught using stimuli that had tags for voice output on the ProxTalker. Students were also able to answer questions related to a text with their ProxTalker when tags were pre-programmed. The students were also required to use their device during group instruction times (e.g. calendar, science lessons, etc.) just as their verbal peers would participate to answer questions and to fill out worksheets. Our staff members noted that the students engaged more independently with their ProxTalker with tags that were programmed that were similar to their peers in their group.

STEPS APPROACH

What started as a research project to demonstrate the relationship between behavior and communication with students that were stagnant in traditional AAC procedures, has now become embedded practice for the STEPS Center. We have written a guide that makes communication more tangible and embeds academic programming that strengthens communication skills to help others share this success and guide them in ways that proved successful for us.

By using this approach with ProxTalker devices at the STEPS Center we have found growth in the areas of academic acquisition, communication skills and engagement with others for those students that had a consistent lack of progress historically. These teaching procedures have been adopted by surrounding public schools that also have students with a history of lack of academic, communication and behavioral progress that require a more concrete way to learn communication.

Employment: An aspiration for those with Severe Communication Impairments?

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BACKGROUND

I am a Speech and Language therapist, currently working at Manchester Metropolitan University, training undergraduate Speech and Language therapy students. I have worked in AAC for over a decade and one of the most exciting and challenging aspects of this is that there are now young people leaving School and College who I have known since they were toddlers and who have had access to AAC for all their lives. This got me thinking about their next destination. Two individuals that I have kept in touch with are now at home with their parents. Whilst this may be the choice these young people have made, it is in stark contrast to the life choices that many of the students I am surrounded by on a day-to-day basis, choose to make. So this marked contrast got me thinking – as a professional supporting young people who use AAC, should we be supporting them towards employment, managing their life , further study or training?

Many of the UK Specialist Colleges do work towards these goals as part of their courses but I felt I was in a good position to look at what the research was saying and to gain the views of the young people themselves by inviting them to the University to talk together about their experiences.

WHAT DOES THE RESEARCH SAY REGARDING EMPLOYMENT?

Many of the research articles are based on work carried out in the United States and Canada. The benefits for the employed person who uses AAC are discussed at length eg "financial independence" and "increased self –esteem", (Light, Stoltz and McNaughton, 1996). A more recent book by Beukeleman and McNaughton, 2010

talks about "good job matches" for people who use AAC (pwuAAC) being important to the success of their employment, these involve 4 aspects being addressed: a fulfilling work activity, appropriate time commitment, a committed employer and obtaining needed support.

In the UK there are huge challenges currently around personalised budgets and other supports for young pwuAAC. There are few people in the UK who are employed who use AAC: I felt the reasons for this and the current opportunities for those living in the UK needed to be explored.

METHOD

I identified that holding focus groups would be the best way of gaining these insights. In 2006 McNaughton, Symons, Light and Parsons had used online focus groups and as they made it easier for pwuAAC to take part, avoiding significant travel and alterations to Personal Assistant support arrangements. However I decided not to use this method as it meant that anyone with literacy difficulties was excluded from the research. I felt that this would exclude too many potential participants and therefore limit my findings.
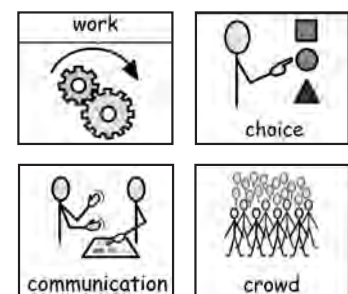
I planned to audio record and transcribe the groups. Following the guidelines from Attride and Stirling, 2001, I would then identify the main themes that arose.

PARTICIPANTS

The criteria I used to recruit participants were:

- 18-30 years old
- Using a high tech AAC system
- Able to give informed consent to participate in a focus group.

I can hear many of you querying the

decision to select only those who used high tech AAC and I agree that does limit the participants again. However I did this for the practical reason that if someone uses a high tech system then he or she can be audio recorded as part of the whole focus group. Including people who use low tech AAC would have meant using video, requiring a very different form of ethical approval at the University. If I had had to interpret the communication of people who used low-tech AAC this could have lead to more subjective findings.

I received a Research Accelerator Grant from Manchester Metropolitan University to carry out the focus groups. This was enough money for me to plan a group of 8 pwuAAC with 2 PAs each, with all expenses reimbursed.

I felt I had thought of everything and that I should have no difficulty in attracting enough participants for the focus group. The reality was very different.

It was 5 years since I last worked in the NHS and naively I thought that little had changed. For instance Health and Safety regulations meant that it was impossible for 2 PAs to stay over without access to a hoist to help with transfers. Another stumbling block was that, despite being able to cover much of the costs involved in attending the focus group I had not anticipated that, of course, it was expensive to ask 2 PAs to stay overnight to work the following day at the University. The increase in pay was prohibitive for many would be participants.

However despite some difficulties the focus group was able to take place. Participants travelled to Manchester and back in a day and were supported by family members and college staff in some cases. It took place over 2 sessions following exactly the same format.

The issue of informed consent was the first item that we needed to address as participants arrived. This process needed a lot of support and explanation.

In order to help the discussion I sent the participants an email containing the topics to be discussed to allow preparation prior to their attendance.

FOCUS GROUP QUESTIONS AND RESULTS

When you were at school did you talk to people about what you would do when you left school?

This question was prompted by the experience of my two sons being frequently asked about their future on leaving school. Did this happen for pwuAAC. Participants said they spoke to friends at school not teachers.

Did you do anything at school that helped you think about what you would do after you had left school?

The experience of participants varied, some schools had lessons where discussions about the future took place, but not all.

Did you do anything at home that helped you think about what you would do after you had left school?

Participant's said they spoke to specific family members such as their mum or cousin.

Did you do work experience?

Participants had a range of work experience. Not all of it was viewed positively but that can be seen as a good way to work out what you may like doing in the future compared to what you do not like doing.

Different work experience jobs included -cleaning laptops/ supported childcare in a nursery/garden work 'with Dad'.

Opinions on their experiences included; "Clean laptops rubbish", "Would like to do work experience in a garage or shop", Work experience was "Boring".

Is getting a job something you are interested in?

It was easier to say yes to this if they had a clear idea of what would be a good job for them. "On reception here" "in a garage", "no clear idea"

OR are there other things you would like to do with your time since leaving school? What are they?

The idea of 'volunteering' came up. As I gave a definition of the concept one of the participants looked at me and asked "why would you work for no money?" It was clear that often I was introducing new ideas to them.

What barriers have you discovered that make it difficult to get a job?

Equally the idea of 'barriers' was new to some. Those identified were to do with the physical difficulties of accessing buildings and transport. Significantly no-one identified difficulties with communication as a barrier to employment. One positive comment from 1 participant was "I don't let anything get in my way"

What would you think would be helpful in getting a job?

Work experience was identified as helpful in getting a job. Also "having, friends to help me", and the third helpful thing was "a driver"

What could schools /College do to make it easier for you to get a job?

Having a range of work experience was the only thing that the participants identified might help them into employment.

Have you considered self-employment?

One person said they gave talks to schools about AAC as a form of self-employment. But this was actually on a voluntary basis with travel costs reimbursed. Others said they had not considered self-employment as an idea.

Do you know other people who use AAC, who work?

I thought it would be useful to see if role models had played a part in the way young pwuAAC thought about their future. 2 participants knew other students who had left college and who had a job. Interestingly none of them mentioned more famous role models such as Lee Ridley or Professor Stephen Hawking.

WHAT I LEARNT ABOUT CARRYING OUT RESEARCH WITH PEOPLE USING AAC

The focus group research could have been improved by running a pilot or by having a pwuAAC plan the questions and the group with me.

- Clarification was needed around the questions for the pwuAAC because many of the ideas were new to them. If the participants had been sent the exact questions before the focus group (rather than the topic areas) they may have been able to discuss these ideas with other people.

- Informed Consent is a complex business if you do it correctly, using adapted information. I felt that I had done this but 2 participants, who originally said they would attend a second session decided that they did not want to stay when they heard the detail of what would be asked.

- Parental expectations and experience can affect the type of discussions that pwuAAC are involved with on a regular basis. This in turn can help the young people to frame their own ideas about their future. However parent's own experiences of work can negatively influence pwuAAC: one participant came from a house where none of the adults worked.

- The experiences of people who become disabled later in life are very different to the experiences of those who have been born with a disability and this difference can influence their expectations.

- Many communication strategies were used in addition to the high tech AAC systems. I relied on note-taking whilst listening to capture this information. If I did it again I would have another person taking notes and possibly video record the session.

The Focus group highlighted 2 areas of development:

- Young pwuAAC need to discuss the future long before they need to make any decisions, to enable them to formulate ideas and concepts.

- Training for employers to provide more suitable work placements.

Thank you to Manchester Metropolitan University for supporting this project.

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#CM Occasional Series: Insights & Interviews
Barry Smith

An Interview with Catherine Harris, Chair of Trustees

Hi Barry – thanks for being prepared to be interviewed for the Journal-we look forward to sharing your experiences of being a trustee for Communication Matters.

But first....

Tell us a little about yourself

Hi I am Barry Smith I am 36 years old, I have Cerebral Palsy which is a physical disability and I lived in Irvine in Scotland. I use a Power Chair when I am outside which I loved, and when I am in my home I moved around on my bum. Apart from me doing this I use a Lightwriter which a communication aid and a mobile telephone down as my speech are hard to understand. I have support worker for things I can't do for myself.

What was your first experience of using Augmentative and alternative Communication (AAC)?

I had a Bliss Board. The Speech Therapist show me if she point to a sign on the Bliss Board, by using her index finder. After she did this she asked me to do the same so I did, then for the first time in my life people did understand what I saying to them. The Speech Therapist came to work with me, on this about once a week for an hour each times, about three weeks of first trying this, she told my Mum and Dad "I don't believe how well your Barry is getting on with this". Then I had my assessment at the SCTCI in a hospital in Glasgow. The outcome where was I seen a few High tech communication aids. They look at how I used my Bliss board and asked me "could you see yourself user a different communication apart from your board in time." I see good little computer for my class work and the speech therapist told us she would had to speak to the school head teacher about getting this for me. Then I got a Lightwriter.

You were nominated as a trustee in 2014 for CM – why did you decide to stand for nomination?

I wanted to give something back. Most time in my life I am a happy person and it make me felt so good inside myself, and if I could help anyone with anything I would. When anyone asked for me help sometimes it make me feel so good in my heart.

What did you enjoy about the role?

I liked giving something back and telling people my story. I like the Conference.

What was challenging about the role?

Lots of e mails which are hard to understand. Long meetings and I come from Scotland. Support worker needs to help me.

We provided you with a 'Buddy' who is another trustee to help you but was there more we could we have done to support you.

I did not know it would be so busy. I need help with all the emails. Skype was sometimes hard to get on. Maybe know things in front of meetings.

You have stepped down as a trustee, but are still helping the trustees as a 'friend of CM'. Thank you for this. What areas do you feel you can especially contribute in?

I am helping Marion and Sergio with ideas on people who use AAC. I can answer questions on AAC. I come to Conference. I will tell my story.

CM2013 Barry received the Alan Martin Award for his Contribution to the Arts through Poetry

Barry served during 2014/15 as a trustee. He stepped down for personal reasons in March. The Board have had much discussion on how we can better prepare people for the role of trustee and especially support the needs of someone who uses AAC. We recognise that people who use AAC are central to our membership and want to reflect their views and value their contributions. We are planning to have a consultation group of people who use AAC to input to our strategy and events planning. We would ask you in advance of meetings for your views on topics which are coming up on the Board agenda. If you would like to be involved as part of a consultation group please do contact the CM office.

Are you looking for AAC knowledge?
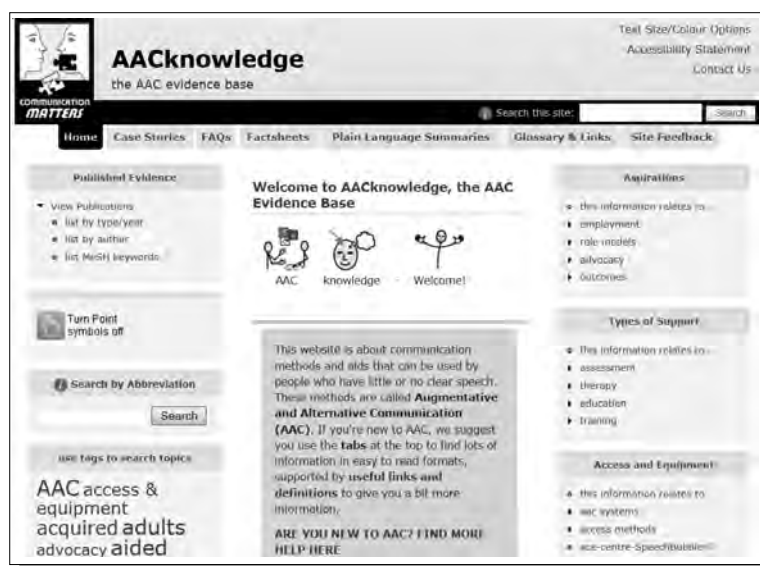
www.AACknowledge.org.uk brings together information and research evidence about AAC in one place. In order to meet the needs of a wide audience it provides different ways of finding out more about AAC.

Do have a look at **www.AACknowledge.org.uk** and let us know what you think using the site feedback form.

The website features:

- A bibliography of published research into AAC
- Plain English summaries of research articles
- Case stories
- Factsheets
- Frequently asked questions
- Glossary
- Links to many other sources of information

Augmentative and Alternative Communication

Thiis the official journal of the International Society for Augmentative and Alternative Communication (ISAAC), published quarterly by Informa healthcare. AAC publishes original articles with direct application to the communication needs of persons with severe speech and/or communication impairments for whom augmentative and alternative communication techniques and systems may be of assistance.

AGOSCI in Focus

AGOSCI in Focus (formerly AGOSCI News) is the newsletter of the Australian Group on Severe Communication Impairment. It is an ISAAC affiliated publication and is published twice a year.

ISAAC Israel Newsletter

ISAAC Israel Newsletter is an ISAAC affiliated publication. Published annually in the spring of each year, in Hebrew with a few English abstracts.

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