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REGULAR COLUMNS

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Dreaming of a Work-Life Balance

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INTRODUCTION

Let me take you on a journey. Throughout this paper, you will see examples of my paintings and artwork. It is my journey in life so far, from an imaginative child in the Australian bush, through to my adult life, in which I am trying to balance work and my creative life. It hasn't always been easy. I feel like I have led the life of a trail blazer, always fighting to break through barriers and find new paths. Living independently, finding employment and shaping my career, has been a challenge in a world where people assume that 'you can't do this'. Communicating with local government and politicians, and fighting the system, only makes me want to push further beyond the limits. I still fight these battles for myself and continue to help others to fight them through my work. I hope that at least other people can follow some of these paths, and help others with disabilities in turn.

CHILDHOOD

Let me start with my childhood. I have always been a dreamer. Inspiration comes from my childhood where books and characters danced through my mind. My parents swamped me with books long before I could read and write. Nothing stopped my imagination, and that became my strength: to believe in dreams and to have goals no matter how small. I learned from a young age that if I wanted to be part of the real world, it would be up to me, with the support of my family, to create the picture we would like to see.

I learned by watching what my family did and laughing with them. We did a lot together as a family, like camping. I remember us all in a rubber blow up boat, turning over and us all falling out. I learnt by having a go. My family let me experience the world and didn't limit me. They never wrapped me up in cotton wool. They never said You can't do this.

For me, communication was laughing and crying. My Dad said I was the only person in the world who could laugh and cry at the same time. I could be giggling at something, then bawling my eyes out the next minute because I was frustrated. Laughter and tears could only express so much, and I didn't have words for the rest. My body language and a few key words were all I had, so a lot of my world was in my senses: the way things felt, smelled or tasted was joyful. I was always involved. Imagine this picture. When I was about eight, my Dad carried me to the top of a band stand so I got to experience what it was like being up high. Now think of how different my experience would have been if I had just stayed on the ground to watch. I got to experience the world, not just as a distant spectator.

Luckily, with all these experiences, I laughed a lot more than I cried.

SCHOOL YEARS

And then I moved into my school years.

At home I was always creating something. I wanted to knit so with the help of giant Rocket Needles, I managed to. I knitted my Dad a scarf for his birthday. Who would have imagined I could knit? OK, I did lose a lot of stitches, but Mum would come running and put me back on track.

Even at a young age, I had developed my own opinions, and had to work to get what I wanted. Mum bought me old fashioned clothes. If I wanted anything else, I had to work for it. So I earned my first pocket money by potting plants and selling them, so I could buy trendy clothes to wear. I was always working on something.

School was a different matter. I was bored. They were preparing me for a nut house. Every afternoon for a year we had what they called 'cottage industries'. I got to tear up newspapers. What for? They were making paper, but I never got to do the good stuff like putting it together. That's all I did - tear up newspaper. It was awful. I didn't have AAC, other than a very basic letterboard. I did not have any control or any way of standing up for myself. Strangely, I just did what I was told at school but I was naughty at home. I copied my brothers! Ah, I learned a lot from them. The only time I ever got in trouble at school was for laughing with a friend. It's hard to imagine that I had much to laugh about.

In my classroom we had one typewriter for all of the kids, and no key guard. It seemed like the verbal kids got all of the attention but kids like me were the underdogs. I never had enough time to finish anything. I don't know how I've learned so much because I didn't have much education in those first sixteen years. My home environment must have been very powerful.

YOUNG ADULT YEARS

But then when I was fifteen we had what was called 'The Panel' where every kid was sent with their family to discuss the future. It was awful, like a threat, and I did not have any AAC, other than my basic letter board, so everything was discussed without my input. The only thing they talked about was what workshop I'd go to. That was it. The end of the line. It depressed my family and it depressed me. It was like all of my choices had been taken away, and everything was decided for me.

In my last two years of school, when I was seventeen years old, I did have a fantastic speech pathologist. The sessions with her were particularly important to me, because I had received my first AAC electronic communication device, and our therapy sessions became more about having a social discussion. Either about my expressing my feelings, or discussing a current affair issue of the time. This was important because I was still behind in my communication learning. She gave me the time to practise my discussion skills.

Towards the end of school, I went on a work experience placement in a sheltered workshop. They said I would be paid $6, but at the end, no-one offered the money. I found enough courage to say one clear word: "MONEY". I got my $6, and I stood up for myself for the first time.

I knew my skills were limited when I finished school, and I knew that if I was going to do anything, people were going to have to communicate with me. It would be up to me to make it happen. This was an important lesson. Don't give up, no matter how tough it gets.

SHELTERED WORKSHOP

After school, I didn't qualify for any supported employment in the sheltered workshops. So my only option was to go to a day centre, which had activities for people with disabilities. I spent a year there, but I was so bored. Lunch time was two and a half hours, so there was not much time for anything else, and the programmes were not interesting for me. I started taking books with me; I think people started seeing me as a bit of a snob. Not surprisingly, I didn't have a lot of friends there, but some of the staff seemed to understand me, and encouraged me to do my own thing. I was also learning to communicate using my Canon Communicator. My typed messages came out on ticker tape paper. It did not have a voice output. This helped me to connect socially.

Eventually, I got enough money to buy a typewriter, and brought that in with me. I took over a small, private room, and that is where I wrote my first book of poetry. My inspiration to be a communicator has grown from these early years as a poet, when I desperately needed to find a way to communicate. Poetry empowered my voice, and I learned to express what I was thinking and feeling in short word bursts on the page. From this experience of creative expression, I think I developed maturity, and broadened my connections with the outside world.

My poem *The remarkable canon that speaks!* shows how my communication skills were evolving at the time, and how important this was to me. I use the Lightwriter SL40 to recite the poem.

It's funny, because the Canon did not speak, but even then, my imagination showed I was dreaming on! So in a way, being at the centre was good for me, because it gave me the time to write my poetry. It was good thinking time.

EARLY WORKING LIFE

At the end of 12 months at the sheltered workshop, I announced over dinner one night that I wanted to leave and do something more. My parents said, "OK, you can do that, but first you must look for something to do. You're not going to just be sitting around home, so get that idea out of your head." That made me very determined to work on what to do. I started by writing letters to the local schools. Of course, I was creating a job for myself, but it meant I could play with ideas and start inventing a role.

One Principal took a liking to my letter and offered to interview me, even though he said I couldn't get up the stairs. I said, "No worries. We can sit outside." I wasn't going to miss this opportunity! It was a great interview because we talked very openly about how we could make it work. At the end, he said, "If your Dad can help by making a ramp, I will give you 1 month to try it out one day a week." So there you go. With a bit of persistence and imagination, I had my first job as a voluntary teacher's aide.

Over time, people got to know about my passion for English literature, and invited me to listen to children reading, and advise them about story writing. This all enhanced my skills in writing and reading, as well as my social communication. I had many moments of discouragement by some of the teachers and parents, who were nervous about my presence and who doubted my skills and abilities. In a way this was good because it made me more determined to find ways of dealing with these break downs.

I ended up doing this work for seven years, eventually working there four days a week. Even though I didn't get paid, I don't regret the experience, because I learnt so much, and got to know many people. Why didn't I get paid? I never asked! I didn't have enough belief in myself. I certainly wouldn't encourage young people to do that now! It's fine to start with, but seven years without pay is a bit much! However, I did get a of lot recognition for this work. In 1986, I received an Order Of Australia Medal, which is the equivalent of your M.B.E.

In the mid-nineties I was ready to move on into small doses of employment, and took on public speaking engagements in disability awareness. I also found ways of publishing my work. However, I still volunteered many hours to be on committees and try to advocate for others, particularly for communication difficulties. This had some very difficult moments, because I did not have the support I needed, or suitable AAC. I was valued as a person who went along to meetings, but I was not valued for my input, because I hardly said anything! However, I continued to go along, for the sake of meeting people and listening to discussions. I had decided to see it like a step by step process, and to use my voluntary work as a way to meet people and to enhance my skills. It was worth it.

COLLEGE AND STUDY

Eventually I decided that if I wanted to move forward, I would have to do further study. During the early nineties, I enrolled in short courses in the areas of my interest, such as professional writing and editing, technology, and various employment training workshops. At the college, I was lucky enough to find out about the disability officers there, who worked with me to set up a volunteer program. I was introduced to a man who volunteered his time to come to classes with me. He was a fantastic support to me, because he was able to clarify things I missed, or simply did not hear. He helped by taking notes, and he also acted as my communicator because I did not have voice output on my AAC communication device.

The volunteer was encouraged to spend time with me outside classes. This was great because he got to know me better, and to know what communication support

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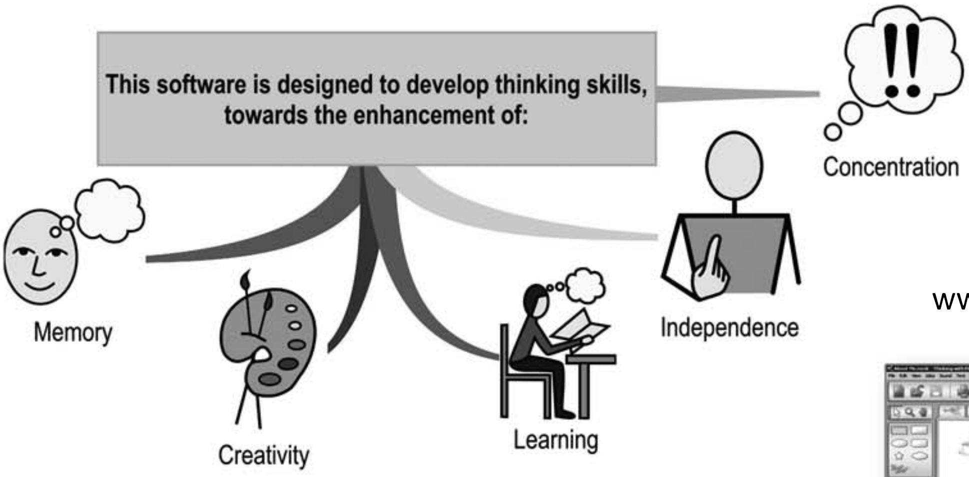

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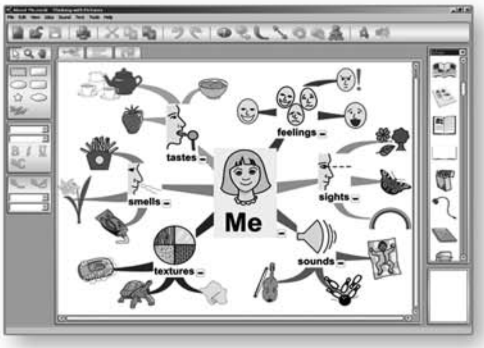

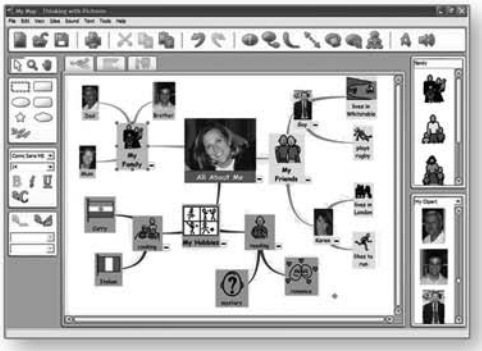

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I really needed. We were able to create some rules in class, to make sure I was able to contribute more. The downside was that some students and teachers made the assumption that he was putting words into my head, and that it was not really my opinion. I have had to work really hard to prove that I do have opinions of my own. I might take longer to express opinions, and I might not say what people expect me to say.

The point is, I didn't have the same education and learning experiences. Remember, I spent half my early school years ripping up newspapers! I have had to learn things as an adult, how to define my opinions, and then find the best way to articulate them. I think this is something that most people miss when it comes to including AAC communication users, but by putting myself in this situation, I had to learn how to express myself. I use a different way of expressing my opinions, but what I have to say is real.

COMMUNICATION

As much as my study, volunteer work and friendships encouraged me to develop my communication, there was a much bigger reason. It opened my eyes to a whole other world of expression. It changed everything. What was this amazing factor? Well, it was love, of course. Love in the beautiful form of my true love, Ian.

Having a man in my life meant more gadgets and boy toys. Ian set up my computer, introduced me to email and kept track of new communication technology. When we met, I was still using my Canon Communicator, and he was there when I first started using a Lightwriter. These things opened up an entirely new world for me. I was able to start communicating with people in new ways, and deepened friendships as a result. I could take the time to communicate, write letters and emails, and in doing so keep contact with friends from around the world. This was the first time I really used voice output too, so people really had to listen. It was my voice – the voice of 'Batty Betty' – coming from my typing, not an interpreter. Betty gave me power. I thought of her as Wonder Woman, so I guess that gives you an idea of how confident the Lightwriter made me! I only needed the costume and golden lasso!

Sadly, Ian died in 1994. I will never forget him, and I will always be grateful for the opportunities and encouragement he gave me. He opened up my life to technology, encouraged my dreams about travel, and made me believe in myself. With this new confidence came new opportunities.

Since that time I have continued to embrace new technologies, and have used many different methods of communication. I have had several different AAC communication devices, and I'm not scared to try as many as I can get my hot little hands on! For example, you might have noticed that I use a Pathfinder, but I am also trying out the new Lightwriter. I'll probably end up with both, as they are fantastic in different ways. Yes, I am greedy! But it is important to use the best communication for each situation. My life is really varied, so for me, it will always be important to use a range of strategies. I have a communication book, and spelling board. I use my speech, and sign language. Technology is only one aspect of the AAC communication aid user's world.

LEAVING HOME

Leaving home was the next challenge. In 1995, I was still living at home with my parents. I had my own little unit in what used to be the carport, but I still had the support and security of my parents being right there. I thought I would never want to live alone, and I was happy to stay in my comfort zone. However, I knew it was not good to avoid thinking about my future. I came in contact with a housing support service, and started attending some of their information meetings. I also met with people who were brave enough to live on their own. I started to think about things for myself, and wondering if maybe I could do it. I started to think that maybe I would enjoy living by myself, and having more freedom in my life.

I was introduced to a case manager, and we spent a lot of time talking about living independently, and what my options were. The process included thinking about where I would like to live. Whether I would need a two bedroom place, and what services I needed to be close to. Then we discussed options for attendant care, and we identified some of my specific needs. I decided that I wanted to live by myself in an area close to my family, where I could catch the train easily. Finally, we were ready to lodge applications for public housing and attendant care hours. The good thing about having a case manager was that she saw me through the whole process, every step of the way. From when I first confronted the idea, to when I moved into my unit.

I have been in my place since 1997. In my early days of living by myself a lot of things went wrong, and I spent a lot of time solving problems, and getting things fixed. I needed many changes to make the house more accessible for me. Running the house, managing my attendant care hours, and keeping track of all my bills are huge things that I had to learn. There were moments of wondering if I would ever enjoy a social life. I went through a stage of feeling like I was managing my house, and nothing else existed.

But within months, things started to change, and I could relax a little. I began to invite friends over, and get started on my garden. I also got my own dog, Molly. I still say, moving out and living alone is one of the biggest things I have achieved, because I felt like I had achieved freedom.

ART

Another amazing thing happened to me when I moved out by myself. One night, I had a very vivid dream. A dream about colours and paint brushes. The next day I went to the supermarket and bought a packet of coloured pencils. I had never had my own pencils before - not since I was a kid. Drawing hadn't entered my mind before, but after the dream I felt like I had to give it a go.

I came home from the shop feeling kind of excited, but also childish and embarrassed. I did not let anyone see what I was doing for weeks. At first, I drew little flowers, then gradually became more and more excited. Watching the colours growing on the page felt like opening a present. Purple was my favourite discovery! It is such an energetic and vibrant colour. I bought a book on how to draw, and studied techniques. That was when I started to let people see what I was doing. To my delight, people got excited with me! This told me that it wasn't a stupid idea, and I really wanted to work on it more.

From then on, I have never looked back. I have held two public exhibitions, and sold about fifty paintings. Painting has become an extension of my poetry, another way of expressing myself. I thrive on my creative life to keep me going. When I don't have that, I get more stressed and frustrated. My life becomes cluttered and feels like work! Work! Work! Even though it takes a lot of energy, my art work actually makes me feel very, free, and able to cope. It fills my spirit. Painting adds colour to my world.

ROAD TO EMPLOYMENT

Another big step came in 1998 when I took up my first position in open employment, and have had part-time positions ever since. I would have to say, everything about my work has been a challenge. I have had to do a lot of the ground work, because both my positions were created for an AAC communication aid user, so nobody knew quite what to expect.

When I started working regularly with teams, I felt intimidated, not skilled enough, and I worried about my productivity all the time. To get through this, I had to talk with my colleagues. We worked on ground rules for meetings, so that I had time to contribute. I have a significant hearing impairment, which had to be recognized for meetings and various work activities. We also identified sources of funding for technology that helps me in my work. Recently I was able to get some funding for new hearing aids, which have made a big impact on my communication in the workplace. Luckily, I work with a fantastic team, who are motivated to make a difference for AAC communication aid users. At the moment I am working three and a half days a week with Scope. Yes, this is very similar to Scope in England. I work as a Community Development Worker for the Communication Resource Centre, with Hilary Johnson as my manager. Also. I have recently gone back to my roots working with school children. Only this time I am getting paid! I am working once a fortnight in the after school programme at the Cerebral Palsy Education Centre, with the fabulous Gayle Porter. This programme is for children who go to mainstream schools. They come back to the centre once a week for therapy, mentoring and to hang out with other AAC communication aid users. My role is to talk to the teenagers about whatever interests them, so you can imagine some of the questions I get! They want to know about careers, nightclubs and especially relationships. I feel so proud of this work, because the teachers say the kids have never talked so much! I hope I am leading everyone astray!

The Communication Resource Centre has encouraged me to develop my skills in many ways. In 2005, I did a programme called Leadership Plus, which for 12 months took me on another journey of confidence building. I had never really thought of myself as a leader. I've always preferred to see myself as a communicator. During the Leadership training I found myself wanting to contribute to discussions more, and expressing my opinion. It changed my perception of leadership, and helped me to better my role in the workplace.

By this time I was working in my current job as a Community Development Worker, and it was through this job I first came in contact with the *Daring to Dream* course. I attended a paper by Diane Bryen, at the ISAAC conference in Brazil. She made me realise that people with disabilities rarely have the opportunity to dream the biggest dreams. I realised how lucky I was to be there in Brazil, and I thought, "If I can do this, anything is possible!". I wanted other people to have the same opportunities I had. Talking and dancing with Diane in the days ahead filled me with a new dream. I decided to bring the programme home with me to Australia.

OUT OF THE BOX

The programme eventually became my pet project, called *Out Of The Box: Using Technology to Follow Your Dreams.* Really, it was an Australian version of the American ACES university course. ACES stands for Augmentative Communication Empowerment Supports. It was run by Professor Diane Bryen, my dancing partner from Brazil. It is a summer programme held at Temple University, which teaches AAC users about technology and empowerment. It starts with *Daring to Dream* as its basis. I was lucky enough to teach part of this course in Philadelphia last year. Boy, what an amazing experience! But that is another story.

Our course was similar, but held as a series of workshops over 18 months. We taught our students about the use of technology, computers, telephones and communication devices, but at the heart of it all was Daring To Dream. This was the first workshop we held for our students, so it gave meaning to technology skills they learned in future workshops. Without dreams, these things are meaningless.

Over two years, we held three workshops: *Daring To Dream; Daring To Use Technology; Daring to Communicate.* Running the programme was often hard work. At times I was exhausted, as we seemed to spend half of our time chasing funding, or writing planning documents. This was the hard, sometimes boring, part of my work. But then the personal moments, communicating with students, made it all worthwhile. Like Jennifer. When she joined the programme, she was 23, and had no communication device. She was getting by, but not really doing much in the world. She was often angry and isolated, but still wanted to share her dreams with us. By the second workshop, Jen was asking me to borrow my Lightwriter, and took it out in public the first chance she got. Like a true Australian, she used it to order a beer! The look on her face said it all!

Since then, Jen has made moves towards living independently by getting her own communication device and mobile phone. The process hasn't been overnight. This has taken place over a year, but she is moving forward one step at a time. I love seeing the students embracing their own personal journeys like that. This is where I find the passion and inspiration in my work. I was reminded of this again yesterday when I facilitated the *Catch The Dream.* What a privilege to hear the dreams of these amazing young people! I received the ACES 'Free Speech Now' award for this work, which is great, but it is the people who really make it all worthwhile.

DANCING

And now, my true passion: *dancing.*

All this time – talking to people about their dreams, telling people to dream big, dream often – my own dreams were growing. I would ask other people to share their most precious dreams, and in my head, I was thinking, I want to dance. On stage. In front of an audience.

I have always loved dancing, and watching other people dance, but my dancing always happened inside me. I would often watch other dancers and pretend, I was watching myself. It would entertain me for hours. It still does.

I couldn't stop dreaming about dancing, and I decided to start telling people about my dream. Some of my friends are dancers, and would quiz them on what it feels like for them. For example, do they get hot feet and sore ankles wearing heels? Do they get sweaty arms? Do they get tired and fall over more easily? What about romantic dancing and being close to each other? I told them I wanted to dance, and worried that people might say, "You can't do it!". But they didn't. They encouraged me to have a go, and put me in touch with friends and groups I could work with.

Since I have taken dancing lessons, and been involved in dance performances, I have loved dancing more than ever. Learning ways to express myself creatively, through movements of my wheelchair and with my body, has been an amazing thing to discover. Particularly when you are someone like me with restrictive movements and awkward facial expressions, which is me. Dancing has allowed me to relax much more, and enjoy my physical awkwardness, rather than have to fight with it, all the time. Dancing is a way to express spirituality. I am not talking about religion, but more than that. Dancing has allowed me an opportunity to explore what I believe in.

Sexuality has been an important part of dancing, particularly as we have grown up with the idea that wheelchairs are not exactly attractive to society. So dancing, for me, has broken away some of those barriers in being able to make myself more visual than the lump of metal I sit and ride around in.

I love the feeling of moving my wheelchair in twirls and twists, with some of my favourite songs playing in the background. Dancing in a wheelchair can seem a little more restrictive than dancing on legs, but on the other hand, wheelchair dancers can be very experimental and wild too.

Dancing is the most exciting thing I do. I love it, because it makes me feel free and happy. It takes me to another world. It helps me to forget the problems, and the barriers in my disability world. Dancing makes me feel sexy. Dancing lets me go wild. Dancing is just about me.

CONCLUSION

I would like to leave you with these last words.

When I look back at my journey in life so far, I see that I have drawn such inspiration from the people I have met. The connections I have made through my travels have had enormous impact on my day to day life, more than people realise. And the different technology I have had access to over the years has given me a sense of hope even when there was doubt. Technology has helped me to make connections with people, and people have helped me to embrace new technologies - it works both ways. I have made friends around the world, and travelled to places I had dreamed about but never imagined I would really go to. It took me a long time to realise my dreams. When I was young, no-one really encouraged me to do this. If my parents, and a few friends and teachers had not believed in me, I don't like to think where I would be today. In many ways I have been very fortunate.

People who use AAC communication aids are not taught to speak out. Instead they are expected to be the quiet ones in a group or community.

By encouraging people who use AAC communication aids to be dreamers, dare them to think outside the box, ask them to think about what their dreams are. I have! I heard the dreams of British AAC users during the CM2009 National Symposium. And, believe me, they have some amazing ideas for their own futures. Although there is a sense of uncertainly with barriers confronting them, there is still a sense of control and confidence developing. Please allow these gorgeous individuals time and space to explore their new found journey. A goal is always a milestone, no matter how small, and I truly believe that anything is possible.

People need help to set out on such a journey, especially if they haven't had many opportunities before. Most importantly – make it possible and make it practical. Don't start the process and think it will run smoothly within the first few months. It won't happen. Start the process, start the dreams with the person, and watch each small step to change as it happens. This might take months or even years, but never, ever give up! Keep moving forward, and keep setting more goals. Engage the person and work on it together. Seize the opportunity, not the barrier. Never lose sight of these dreams!

As for me, I will never stop dreaming. I am always growing and changing, as my life is always evolving. My next big dream is to buy my own car. This will give me more freedom, let me connect with my friends more easily, and give me mobility in my work place. Like everything else, it is a balancing act, but I have gotten really good at this! So this is how I attempt to have a work-life balance. ✻

Melinda Smith, *Community Development Worker*

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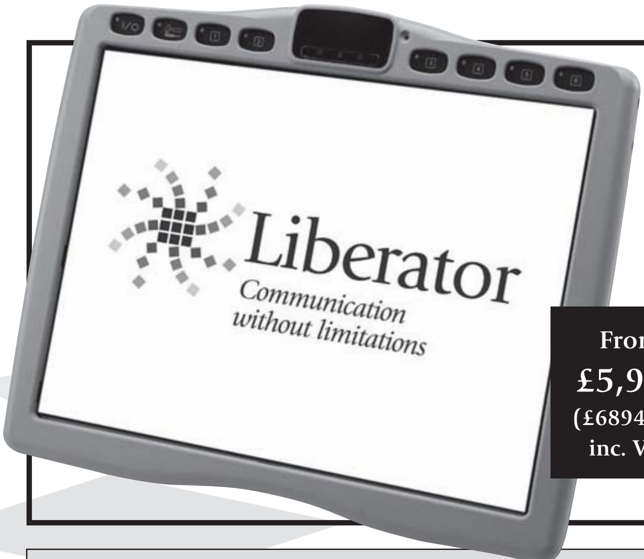

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Preliminary Findings

AAC Funding: The Current Situation

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The preliminary findings of my research suggest that there is currently a fractured policy in the funding for AAC equipment. This has resulted in an uneven distribution of financial resources across the national scale (a postcode lottery) meaning that some end users receive an adequate provision in terms of funding equipment, speech therapy time and assessments, and other people with communication needs clearly do not. There is also still the issue of children losing their vital equipment when they move area or school. In addition there is also a different funding system for AAC equipment between children and adults.

Historically the responsibility for securing funding for this type of equipment has been left up to Education, Social Services, Health Departments to organise and left to the voluntary sector to make up the financial short-falls. In an attempt to remedy the funding disparity for children in need of this type of Assistive Technology the government invested money in the Communication Aid Project (2002-2006), managed by the British Education Communication Technology Agency, and this coincided with the enactment of the Special Educational Needs Bill (2002).

The literature of Scope (2007), Communication Matters (2008) and John Bercow's Review (2008) indicated that there is a large variety of problems in the funding of communication aids with no one area taking responsibility. There is evidence in the literature of much dissatisfaction in the way communication aid assessments are carried out. There is evidence of long waiting times for the arrival of equipment with poor backup service and repair duration times in some areas.

Some areas of England manage the financing of Augmentative Alternative Communication on an individual basis ie, each person requiring communication aid funding would need to apply separately to each area of funding be it; Local Education Authority, the Health Service, Social Services or Charities and this makes the business of procuring funding to purchase communication equipment very long winded, drawn out and complicated.

DeRuyter, McNaughton, Caves, Bryen and Williams (2007) in their article Enhancing AAC Connection with the World stated; the availability of new technology has changed how the AAC end user exchanges information and communicates with others. Significant financial barriers however have prevented many individuals who use AAC from accessing the technology and computer-based activities available in today's 'Information Society'.

There is no doubt that offering a cradle to grave solution is going to be a strain on budgetary allocations as this also has production, business and end user ramifications which all need to be considered. However with some creative and careful planning some of these capital expenses can be offset by standardizing equipment components, wheelchair mounting and keeping all equipment supplied within standard modular parameters. By good quality recycling and refurbishing equipment can be passed on from one end user to another so that someone needing an update or more powerful machine can be supplied with an upgraded recycled one.

An end user suffering from a broken or outdated machine could be supplied out of a central logistical and distributive store, and with a modular system with common components which would allow every communication device to fit onto every mounting system and connect to every switch or input system. This should be done while keeping the end users individual needs uppermost in people's minds.

The two variables of having standardized modular equipment and meeting the needs of the end user can arguably clash with cost-effectiveness. The aimed for end result may be interpreted as the utopian position but every effort should be made to achieve this situation. It is worth noting that geographically England is small enough to get this type of equipment to all its communication aid users in 48 hours from one central store so there is really no excuse for long waiting times for systems to be replaced or returned.

As regards to the Hub and Spoke Model (Reeves and Butterworth 2008) as recommended by the John Bercow Review (2008) each primary care trust, social service department and local education authority has its own individual interpretation for AAC policy. This could make a blanket policy such as the Hub and Spoke Model difficult to implement in the present economic environment. Because individual AAC service commissioners have their own systems and procedures such a policy is open to interpretation of what is needed from an AAC service. However it is only early days yet and it is hard to know what the final outcome is going to be!

The weakness with the Special Education Needs Bill (2002) is the exemption from having to provide Assistive Technology for education services as a reasonable adjustment. Everyone who has an interest in the field of AAC can hope that the enactment this year of the Equality Bill will remedy this situation however there is a need for further lobbying of central government from the disabled community to make the inclusion of Electronic Assistive Technology become a reality.

There is a general consensus of opinion amongst many communication aid end users and professionals involved in Augmentative Alternative Communication that every effort should be made to get the statutory right to be provided with AAC equipment written into either UK human rights legislation or into European Union Law. To have a practical working system in place for the provision of communication aid equipment and a set of standards established to secure a smooth running system rather than a hastily enforced policy.

Although the John Bercow Review Report (2008) is going to be responsible for creating both the Communication Council and Communication Champion to monitor and support the Review's recommendations up to the year of 2011, the plan when it has been implemented will provide seemingly no recourse to AAC equipment for communication aid users over the age of 19. Presently in the United Kingdom there is only what can be described as a fractured policy as the UK government wants both children and adults with disabilities to enjoy an inclusive education and be included within their local community to become meaningful members of society. However, the evidence suggests that the government is not providing the financial support for this to happen.

Both children and adults with multiple communication support needs require AAC to be integrated and be considered as equal in mainstream society. Yet there is a national lack of pooled and ring-fenced funding provision and support infer-structure to follow the end user throughout each stage of their lives. The end user should be at the centre of the multidisciplinary team working which has a co-operative and cohesive approach.

This approach would track and support the end user at every stage of his/her life. The funding would be disseminated to include on-going support and training for new communication aid users and their families in the use of Augmentative Alternative Communication equipment. This would be the standard system approach throughout the country with a robust centralized lead organisation and this approach would make for smooth transitions of every stage of the end user lifecycle regardless of age, education or geographical area that you are living in at the time. ✱

Alexis Egerton, *Research Student*

REFERENCES

Bercow, J. (2008) Interim Report of Review of Services for Children and Young People (0-19) with Speech, Language and Communication Needs, United Kingdom.

Butterworth, I., Reeves, A. (2008) The Provision and Support of Assistive Technology and Augmentative and Alternative Communication in Children Trusts, Final Report. A Children, Young People and Families Grant, ACE Centre Advisory Trust Oxford & ACE Centre North Oldham *www.ace-north.org.uk*

DeRuyter F, McNaughton D, Caves K, Bryen DN, Williams MB, (2007), Enhancing AAC Connections with the World, Duke University Medical Center, Durham, N, C, 27710 USA, Sep;23(3):258-70.

HMSO (2002) Special Educational Needs Bill. Her Majesty's Stationary Office, Great Britain. *www.teachers.org.uk/resources/word/Special-Education-Ne70B82.doc*

Scope (2007), Scope - A Literature Review, Communication Aids Provision, Policy and Government Affairs. London, UK. *www.scope.org.uk/CommunicationAids/LiteratureReview.shtml*

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Using Switches With Pre-school Children

How do we decide who has an access to a voice output communication device?

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INTRODUCTION

The use of voice out-put communication aids, (VOCAs) to support a child's communication opportunities and development can be a challenging area. One issue is that many people think that using a VOCA will automatically help a child to communicate and ultimately solve their frustration. However, the reality is that the child is often given equipment with very little consideration as to whether they have the ability and / or the motivation to use such equipment functionally.

This article explores and considers two types of children who may have access to VOCAs; those who need a VOCA as a tool to develop and increase communication abilities, (both receptive and expressive), and those who need others in their environment to facilitate receptive, expressive and interactive opportunities. This article seeks to reflect on the different processes in involved in moving towards making a decision about VOCA implementation with four pre-school children with a variety of needs.

BACKGROUND

Traditionally, children who are thought of as having PMLD are provided with access to multi-modal forms of AAC support, and this is considered to be good practice, (RCSLT, 2006). Such supports may include training others to interpret non-verbal communication including whole body movement, using tactile supports, promoting access to materials for those with complex physical needs or using specific systems such as objects of reference, (Park, 1997; Thompson, McKerchar & Dancho, 2004; Trief, 2007). Some children may have access to switches where specific sounds or target vocabulary are included. However, there are many challenges in implementing and using AAC with children who have such complex communication and physical needs to enable opportunities to initiate and sustain interaction.

Engaging the concerns and attitudes of carers and significant others in a child's environment is an important consideration when planning to introduce an AAC system. People may view AAC as hindering opportunities to learn speech, or preventing it altogether, (Romski & Sevcik, 2005). Millar, Light & Schlosser, (2006) carried out an analysis of twenty seven cases of children and adults with significant learning disabilities. None of the sample decreased in vocalisation after an AAC system was introduced, and 89% demonstrated gains in speech production or vocal attempts.

Communication partners who will be interacting with the child using an AAC system also need training opportunities. The learning and development of a system in collaboration with carers and educators are important aspects to consider (Hetzroni, 2003; Light & Drager, 2007).

Other people involved with AAC users may have limited comprehension of the benefits of such a system or how it can be used functionally and interactively and therefore need support to understand the rationale underpinning the system selected, (Light & Drager, 2007). Training key communication partners about the rationale underpinning AAC supports can have significant beneficial outcomes for those who need the AAC as their primary means of communication, (Hetzroni, 2003).

In addition, generalisation may be impaired if communication partners are not trained adequately, (Kent-Walsh et al, 2005). Adequate training involves understanding the types of communication attempts being initiated, and how to extend communication opportunities within functional contexts, (Kent-Walsh et al, 2005; Binger & Light, 2006).

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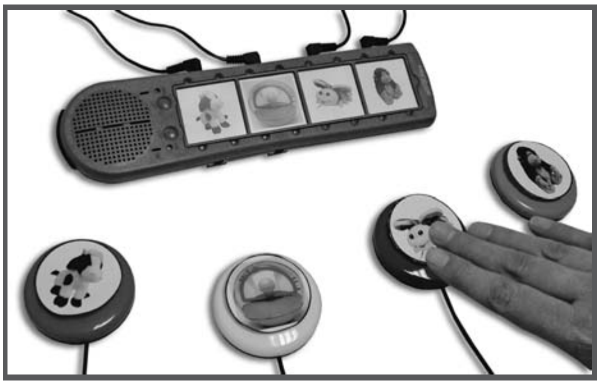

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Many pre-school children who have complex needs use low tech systems, i.e. gestures, signs, communication boards/visual supports, simple voice output communication aids (VOCAs), objects of reference, (Park, 1997; Binger & Light, 2006).

A demographic study carried out in Pennsylvania, USA, revealed that within a pre-school population who had been referred for speech and language therapy intervention. Out of a total of 4,192, 24% required sessions to develop aided and/or unaided AAC. Only 15% of this group used VOCAs (Binger et al, 2006). Binger et al (2006) also found that opportunities to expand such systems are few as people involved often do not plan how using the VOCA can be developed into a more complex AAC system to be built on as the child progresses or changes environments. This issue was also highlighted by Light & Drager (2007), where they found that AAC systems used with children did not consistently plan for adequate expansion of, for example, vocabulary to accommodate a child's needs. This small-scale study seeks to understand the process behind selecting VOCAs for children.

CASE STUDIES

Four children were selected from a specialist CDT pre-school caseload. All four children already had access to switches in therapy sessions and all four had switches purchased for them to use in the home. All parents were actively involved in the decision making about selecting VOCAs for their child. As part of this evaluation, five key areas were considered:

1. Diagnosis and prognostic indicators; did the child's diagnosis influence the decision to select a VOCA?
2. Receptive language function; was an exploration of receptive language an essential part of the assessment?
3. Expressive language skills; what level of expressive ability was the child showing?
4. What were the child's social and interactive abilities?
5. Did the parents express a view about having access to a VOCA?

Case Study 1

Name: D.

Age: 3 years, 1 month

Needs:

- Diagnosis of Cornelia de Lange syndrome
- Known to early years education team, OT, speech and language therapy and physiotherapy
- Upper limb deformities; only has right arm which has one functional digit. Is starting to learn how to use a left prosthetic arm
- Known to speech and language therapy services since babyhood due to significant feeding difficulties

Therapy needs: D receives regular episodes of care from all three therapies within a specialist MDT group, with individual sessions for specific needs.

Presentation at 16 months:

When initially seen at 16 months of age, D was using purposeful eye pointing with object of reference cues in a range of choice and turn-taking settings. She was able to anticipate both in everyday routines and familiar songs and activities. In addition, D demonstrated an ability to participate in a range of cause and effect tasks, and had an understanding of key vocabulary such as *'stop'* and *'go'*. During this time, it was noticed that D had a strong interest in photographs and would frequently attempt to reach and touch them. She also used joint referencing when communicating with others, as well as smiling with use of eye contact to communicate, along with use of reaching, waving and pushing away for [no]. D rarely used any vocalisations during interactions.

D's parent was aware that with her daughter's diagnosis that development of communication would be severely impaired and that augmentative and alternative strategies would be needed to promote communication opportunities. Mrs D's main concern was being able to set up communication supports that D could learn to use and therefore preempt any frustrations emerging. After discussions with the SLT a multi-modal approach was set up, in which non-verbal communication, gestures, voice, objects of reference, use of photographs and switches would be a part of D's communication profile. At 19 months of age, after trials of using the VOCA in a therapy communication group, D took a BIGmack home to use alongside her other strategies. At this time, her receptive function was around a 12 – 14 month level, and her expressive skills were below the 12 month level. Her parents were clear that her diagnosis pre-disposed her to severe speech, language and communication needs. In addition, she was displaying a high level of intent and was making progress particularly within the areas of receptive language. Consequently, these two factors were crucial in the decision to implement a VOCA for D.

At 3 years and 1 month, D is now using a range of communication supports effectively. She attends a nursery provision, and the SLT provides short and regular sessions on the augmentative and alternative communication that D uses. D has a communication chart with symbols placed in an accessible area that she can access herself. She uses a BIGmack at set structured times with peers, with use of symbols, gestures, facial expressions and objects of reference at other times to maximise her nursery learning and social opportunities. She also has a Talk-Trac wrist VOCA with four key words – *'hello', 'bye', 'more', 'finished'* – which D has learnt to press and activate independently. She wears this on her ankle as it is the easiest place for her to manage. Both Mrs D and the nursery staff report that D uses all modes of communication supports within the nursery context, and that she appears particularly responsive when she uses her Talk-Trac and gains a response from her peers.

Case study 2

Name: L.

Age: 2 years 10 months

Needs:

- Microcephaly
- Cerebral palsy affecting all four limbs
- Epilepsy
- Partially sighted
- Known to early years education team, OT, speech and language therapy and physiotherapy

Therapy needs:

L receives regular episodes of care from all three therapies within a specialist MDT group, with individual sessions for specific needs.

Presentation at 2 years 2 months:

L has recently come onto this pre-school case-load. He has had some difficulties with controlling his epilepsy and this has resulted in difficulties establishing a consistent communication profile. A group setting had been important in enabling L to develop a tolerance of other adults and children and to increase his confidence. He learnt to demonstrate responses to others through smiling; turning to the dominant stimulus; using body movement; responding to his name; turning to his parents on command; anticipating in familiar songs and activities; responding to familiar verbal commands, e.g. "Squeeze my hand"; imitation of banging a drum or shaking a toy; recognition of *familiar voices*; and waiting as well as anticipating in *cause/effect* activities. Expressively, L is able to indicate his needs through use of a range of vocalisations; through supported use of objects of reference; through body movement, and through supported switch use.

L is functioning at a pre-12 month level both receptively and expressively. Due to his anxieties with social situations and his severe needs, a VOCA has been implemented with the use of tactile objects of reference and others being aware of responding to his vocalisations, facial expression and body movement to promote opportunities to access the environment.

Case Study 3

Name: K.

Age : 14 months old

Needs:

- Cerebral palsy affecting all four limbs
- Hypoxic ischaemic encephalopathy
- Born prematurely at 36 weeks gestation

Therapy needs:

K receives regular episodes of care from all three therapies within a specialist MDT group, with individual sessions for specific needs.

Presentation at 8 months:

On initial assessment, K was able to track visually and also auditorily, and had a clear preference for and awareness of familiar voices. Anticipation and object permanence skills were also evident. Clear attempts to communicate through whole body movement and use of vocalisations were evident. Eye contact, joint referencing and eye pointing were also used powerfully in communication contexts. At this time, K was displaying age appropriate receptive skills as well as an interest in responding to others through voice and facial expression.

Presentation at 14 months:

K's receptive abilities now include comprehending her name and the names of familiar others; object permanence; key vocabulary such as *'more', 'go', 'stop';* familiar songs and rhymes; anticipation; cause and effect; daily living item location; daily commands, e.g. "Give me"; turn taking tasks. Expressively, K is able to communicate through use of gaze and eye pointing; lifting her arm to indicate what she wants by whole-handed pointing; pushing away for *'No'*; use of a wobble-switch, BIGmack switch and block switch to greet, request specific items and participate in familiar songs and stories. Due to K's diagnosis of cerebral palsy it is known that expressive language skills are likely to be severely impaired unless AAC supports are used. K is showing age appropriate receptive skills, but significantly delayed expressive skills and some level of frustration due to limited expressive supports. The use of a VOCA with targeted vocabulary is an important opportunity for her to develop competence in this area to build on.

Case study 4:

Name: C.

Age: 3 years, 1 month

Needs:

- Severe to profound learning needs
- Epilepsy
- Visual difficulties
- Gastrostomy fed

Therapy needs:

C receives regular episodes of care from all three therapies within a specialist MDT group, with individual sessions for specific needs.

Presentation at 3 years, 1 month:

C has recently been referred to the team. On assessment it was noted that she is beginning to show sensory awareness in response to objects by turning, vocalising and moving her body. C performs some reactive responses, i.e. smiling, crying, stilling, and turning to familiar people. She may make some open vowel sounds and /or smile to express her participation. She shows some anticipation in response to familiar people, routines and activity, by vocalising. Generally, C requires significant others to enable her to participate and access the environment. C has receptive and expressive skills below the 12 month level. A VOCA was implemented as one strategy amongst others to enable others to promote opportunities for C to access the environment and minimise barriers to inclusion.

DISCUSSION POINTS

Focusing on these four cases has brought to light two distinct issues when thinking about implementing switch use:

i) Using a switch as a functional tool to promote, support and facilitate communication. This approach indicates that the child has some potential to initiate and communicate.

ii) Using a switch in a targeted, facilitated way to provide an additional stimulation and support for children with complex needs. This approach indicates that the child needs considerable support to access all forms of communication.

All cases were recommended for a VOCA as the possibilities of developing spoken language were reduced as highlighted by each child's profile. D was able to use VOCAs as part of a multi-modal approach where a variety of AAC was used to develop and extend vocabulary use in a range of contexts. E also used VOCAs to consolidate and extend vocabulary use. These were also used as receptive language supports. Both D and E made developing progress in terms of the range of vocabulary they used with VOCAs and additional AAC. L and C used VOCAs within a different context; as an extra addition to promoting communication within the environment. For these children another person was needed to provide a multi-modal environment.

Children with more complex learning needs presented more challenging issues in terms of management, although all parents reported positive outcomes in switch use even though they remained the main facilitator in using the switch. In particular, parents slowed down the rate of their interaction, thereby allowing children opportunities and time to respond. Use of the switch also allowed increased spontaneous interaction episodes. A similar effect has been described in a study where use of VOCAs can reduce challenging behaviours; reduce the number of unsuccessful communication attempts and change listener expectations, (Mirenda et al, 1993).

A specific criterion for implementing switch use is not clear in the literature or within clinical practice. In particular, what are the necessary cognitive pre-requisites needed, and what are the key steps needed to implement usage? As in all four examples, all the children and their carers received some benefits whether they were attempting to be independent communicators or if they had to rely on facilitated use.

Some studies argue that it is not possible to have generalised requirements for AAC because each intervention must be individualised to meet the needs of the child, (Shane, 1986). Other researchers have indicated that teaching skills such as an awareness of object permanence, causality and imitation pre-switch use can present more opportunities to learn how to use a switch effectively and therefore also increase other communication partners responsiveness, provide more communication opportunities and provide learning opportunities such as scaffolding, (Casby et al, 1992; Cole et al, 1990; Kangas et al, 1988; Rieichle, 1991). Prerequisites should not be a barrier to enabling a child to be included; rather, there should be more distinct guidelines re: facilitated versus developing communication usage. Use of a switch may not be necessarily be determined by cognitive levels, but on environmental needs and communication opportunities. Use may be total, (a complete substitute for verbal speech), or partial, (an addition to some speech/sound use) (McCurtain et al, 2000).

In summary, diagnosis did act as a consideration, in that parents and practitioners were aware of the challenges of developing communication in all four cases. Knowledge of receptive language function was important in relation to how the VOCA would be used, so for example, if the child was showing good understanding, then they would be encouraged to use the VOCA in an independent way. Alternatively, if the child has severe difficulties, then the VOCA would be used in a supportive way to enable some supported access with the environment. All children showed some element of intent which was an important factor in how the VOCA would be used in each case. All parents and carers were actively involved in the decision making process towards implementing use of a VOCA into a child's communication experience.

This article shows that the process with implementing VOCAs needs a more robust pathway. Other aspects of cognition and language need to be considered, but it should not preclude a child with more profound difficulties from accessing such equipment, rather, all involved need to be clear about the purpose and rationale as to why the VOCA is being introduced. ✱

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REFERENCES

1. Binger, C., Light, J. (2006) Demographics of preschoolers who require augmentative and alternative communication. *Language Speech and Hearing Services in Schools,* 37, 200-208.
2. Casby, M. (1992) The cognitive hypothesis and its influence on speech-language services in schools. *Language, Speech and Hearing Services in Schools, 23, 198 – 202.*
3. Hetzroni, O. E. (2003) A positive behaviour support: A preliminary evaluation of a school-wide plan for implementing AAC in a school for students with intellectual disabilities. *Journal of Intellectual & Developmental Disability,* 28 (3), 283 – 296.
4. Kangas, K., Lloyd, L. (1988) Early cognitive skills as pre-requisites to augmentative and alternative communication use: What are we waiting for? *Journal of Applied Psycholinguistics, 11, 291–302.*
5. Kent-Walsh, J., McNaughton, D. (2005) Communication partner instruction in AAC: Present practices and future directions. *Augmentative and Alternative Communication, 21(3),* 195 – 204.
6. Light, J., Drager, K. (2007) AAC technologies for young children with complex communication needs: State of science and future research directions. *Augmentative and Alternative Communication 23 (3),* 204 – 216.
7. McCurtain, A.; Murray, G. (2000) *The Manual of AAC Assessment.* Winslow Press.
8. Millar, D.C., Light, J. C., Schlosser, R.W . (2006) The impact of augmentative and alternative communication intervention on the speech production of individuals with developmental disabilities: A research review. *Journal of Speech, Language and Hearing Research,* 49, 248-264.
9. Mirenda, P., Calculator, S. (1993) Enhancing curricula design. *Clinics in Communication Disorders, 3, 45 – 58.*
10. Park, K. (1997) How do objects become objects of reference? A review of the literature on objects of reference and a proposed model for the use of objects in communication. *British Journal of Special Education,* 24, 3.
11. Reichle, J. (1991) Designing the decisions involved in designing and implementing augmentative and alternative communication systems. Reichle, J., York, J., Sigafoos, J. (Eds) *Implementing AAC: Strategies for learners with severe learning disabilities.* Paul H. Brookes Pub. Co. Baltimore, Mass.
12. Romski, M., Sevcik, R.A. (2005) Augmentative communication and early intervention: Myths and realities. *Infants and Young Children,* 18 (3), 147-158.
13. Shane, H.C. (1986) *Goals and uses in AAC: An Introduction.* Speech and Language Hearing Association, Rockville, Mass.
14. Thompson, R.H., McKerchar, P.M., Dancho, K.A. (2004) The effects of delayed physical prompts and reinforcement on infant sign language acquisition. *Journal of Applied Behaviour Analysis,* 37: 379 – 383.
15. Trief, E. (2007) Research Report: The use of tangible cues for children with multiple disabilities and visual. *Journal of Visual Impairment and Blindness,* 10 (10), 613–619.

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TRUSTEES' NEWS

FROM JANICE MURRAY, CHAIR

I find myself in the unanticipated but no less privileged position of writing to you as Chair of Communication Matters.

These last 18 months have seen huge changes in the profile and reach of the charity and this is due in no small part to the efforts of all members of the Board of Trustees and specifically Toby Hewson and Liz Moulam. Both individuals, prior to their time as Chair, were long standing members of the Board and were instrumental in preparing the ground for those who followed. I am one of those lucky *followers.*

Although I have recently been elected as a Trustee, I am grateful to the Associate Membership for their overwhelming support for me in taking on the role of Chair in fairly atypical circumstances. Whilst I have previously been actively involved in the business of the charity, this period of transition from Associate Member to Chair is requiring some speedy adjustment.

By the time you read this we will have met for our first formal Board meeting and agreed which aspects of the business strategy and plan we can prioritise for this coming year. We have many things to update you on even before that meeting occurs. The key issues the Board have been working to develop come directly from the Business Plan. Some of their activities include:

1. Raising awareness of AAC and those who use AAC

This year's National Symposium saw our largest number of delegates yet, with as many as 40 delegates who use AAC attending for some, or all, of the programme.

A range of activity across Northern Ireland, Wales, Scotland and England continues to raise levels of knowledge in the workforce. Encouragingly, there are instances where AAC is gaining notice amongst politicians, policy makers and service providers. As always, Communication Matters is looking to see how it can better support its members here.

In England, one outcome from the Bercow Review is the development of the Communication Council, within which the only sub-group that has been agreed is the one for AAC. This will heavily involve Anna Reeves as the National AAC Coordinator for England, and it has been agreed that Toby Hewson will represent Communication Matters on that sub-group. We look forward to hearing reports from him on the influence that CM is having in this new and exciting forum.

2. Developing networks and partnerships with government, policy makers and other voluntary organisations

There are a number of developments which Trustees and *Friends of CM* have been exploring over recent months. Some to highlight at present include:

Sally Chan and Dithe Fisher have continued with developments from the position paper 'Assessment standards for provision of AAC' produced in 2008 following a consultation process with the membership. They co-ordinated and chaired a follow-up meeting of the *AAC Assessment Services Forum* held at the symposium in September, 2009. As a consequence, the first national meeting will be held in February 2010 and aims to explore topics on: Models of assessment/service delivery, Standards of good practice, and Outcome measures. This meeting is open to all UK assessment services (in AAC) and funding opportunities are available to support attendance by up to 40 people from assessment services (one representative from each service), for more information please turn to the 'Hot News' section on page 19.

Communication Matters is now firmly established as a partner within the Communication Trust and several of its committees, e.g. Communication Consortium. The next Consortium meeting on 15 December will see a specific focus on AAC, presented by myself and Anna Reeves, in her role as the National AAC Coordinator.

I am anticipating meeting the new Communication Champion, Jean Gross, in December, when I aim present an overview of Communication Matters and its role.

3. Become a focal point for AAC research

We put considerable energies into bid-writing and seeking grants, but almost all were unsuccessful. More positively, this process has been a learning curve for the Charity and one where we have gained considerable knowledge in working through this notoriously tricky mire of funding opportunities and procedures. We aim to put this knowledge and experience to good use as we plan for future funding opportunities available to us this coming year.

FANTASTIC NEWS!

Communication Matters in collaboration with Sheffield University, Barnsley Assistive Technology Service and Manchester Metropolitan University has been awarded £467,751 from the Big Lottery Fund Research Programme. This is a three year project entitled: 'Communication Matters – Research Matters: An AAC Evidence Base'. The key areas of research are:

(i) to assess the prevalence of need for AAC across the UK (no tech, low tech and high tech) (Sheffield/Barnsley);

(ii) to map existing services in the UK and other routes to provision of AAC (Sheffield/Barnsley);

(iii) to provide improved access to best practice evidence to support early identification and intervention for people of all ages who need AAC (establishing an evidence database) (MMU).

This is unbelievably wonderful news and moves us into a new sphere of activity and recognition. As you may be aware, Liz Moulam co-ordinated and delivered this bid, in collaboration with the research partners, we owe her much thanks for this success and especially her drive and attention to detail in those final few days before submission. Thank you so much, Liz! We will provide more detail on these developments through our eNews.

4. Continue with business as usual...

Communication Matters' core business continues to be in demand. We have delivered a number of study days

TRUSTEES' NEWS

and Road Shows over the past year across the UK. These seem to be very well received for those unable to attend the National Symposium or for whom a more in-depth day on a specialist topic is welcome. We are already starting to plan the *CM2010 National Symposium* which will be on 26-28 September 2010 in Leicester. And don't forget to also pencil in your diary the *ISAAC Biennial Conference* to be held in Barcelona on 24-29 July 2010.

NEW BOARD OF TRUSTEES

We welcome newly elected Board members: Mike Clarke, Dithe Fisher, Sandra Hartley and myself. They join Toby Hewson (who was re-elected), Trish Davidson, Sally Chan, Gillian Hazel, Neil Hansen, Simon Judge, Anna Reeves and Tina Voizey.

As Trustees, we are mindful that we need to continually seek the opinion of the Associate Membership in terms of the work and profile of the charity. We welcome feedback and direction that best suits the diverse needs and geographical location of our membership. No doubt, over the next year, we will be seeking more formal feedback on specific plans and activities.

In the meantime, I look forward to working on your behalf.

Janice Murray, Chair of Board of Trustees

PRESS RELEASES

POSSUM ACQUIRES MANUFACTURING CAPABILITY

Possum has announced further expansion of the group through the acquisition of a contract electronics manufacturing business.

In order to safeguard the security of the supply of products and to ensure the highest quality standards of manufacture, Possum has acquired the business and assets of Nortec Production Limited, a contract electronics manufacturing company based in Atherstone, Warwickshire. The manufacturing of Possum products will be moved over to Nortec over the course of approximately twelve months.

Chairman, Philip Robinson said, "It's great to be expanding and strengthening the Possum success story – particularly in a time of recession. The acquisition of Nortec will increase the number of employees in the group to approximately 100 and will strengthen the business by bringing additional revenue streams. With the addition of manufacturing, Possum will be a vertically integrated organisation controlling every stage of supply from product concept, through design and manufacture to installation and customer support ensuring the best possible service to our customers."

eCAT NEWS

FROM DAVID WEATHERBURN

Despite the current economic climate and history of poor-to-patchy funding in our field, this is an exciting time for AAC!

The appointments of Anna Reeves as National AAC Coordinator and Jean Gross as Communication Champion are big steps forward. I have long been impressed by the way the many stakeholders work together to improve services and support for people who use AAC, and these appointments are already creating even stronger opportunities for collaboration and knowledge sharing.

Mick Thomas (Becta) and Anna attended our October eCAT meeting. Mick gave a presentation on Home Access Grants, and Anna gave an overview of her new role, and updates on the Better Communication Action Plan and Children's Community Equipment Services. I was pleased to be invited to represent suppliers on the new AAC Sub-group, chaired by Jean Gross.

POSITION PAPER

This document will set out the British Healthcare Trades Association (BHTA) 'position' on communication aid funding. Once finalised it will be circulated to MPs, government departments and agencies, media, charities and other interested parties. It will reinforce the message about severe underfunding of communication aids, whilst encouraging and supporting progress made so far.

NHS EAT CONTRACT

Thank-you everyone who helped Amanda Crofts (NHS Supply Chain) during the CM2009 Symposium to better understand: (i) the problems people experience when trying to obtain funding; (ii) SLTs' involvement in AAC purchase decisions. Tender documents are due out soon for the new April 2010 supply contract.

AAC AWARENESS

It is vital that we continue to work together to achieve greater AAC awareness. The dedicated 'Communication Village' at Naidex next April will help. As suppliers, we will be looking for a similar high profile for AAC at other major events. The proposed 2011 Year of Speech, Language & Communication provides a fantastic opportunity for us to significantly raise public awareness of AAC.

ON A PERSONAL NOTE...

I was sad to leave Liberator in October. I have immensely enjoyed working in AAC for eight years and hope to stay in touch through my new business [Ed: see 'Hot News' on page 19].

As this may be my last report as eCAT chair, I wish you all continued success in improving opportunities and outcomes for people who use AAC.

David Weatherburn, Chair of eCAT section, BHTA

HOT NEWS

INVITATION TO ATTEND THE NATIONAL AAC ASSESSMENT SERVICES FORUM

At the CM2009 National Symposium in September, there was a meeting for AAC assessment services in the UK. The focus of the meeting was the proposed establishment of a Forum for all providers of AAC assessment in the UK. The meeting began with feedback from a questionnaire circulated to centres and services seeking their opinions about the role of this forum. Results were not unanimous but on balance respondents wanted the forum to meet twice a year: once nationally and once regionally. There was some agreement on London as the venue for national meetings. There were numerous suggestions for agenda items. Although the meeting was well attended, a number of services were not represented.

The AAC Assessment Services Forum has now been established, coordinated by Sally Chan and Dithe Fisher. A full day UK National meeting of the Forum has been organised to take place on 4 February 2010 in London. The discussion will include service delivery models and outcome measures. Becta has kindly agreed to pay the travelling expenses for up to 40 people to attend the meeting (one representative per service). Note that places are allocated on a first come, first served basis.

Important: If you are a provider of AAC assessment services and wish to attend the National Forum meeting on 4 February, please email Patrick Poon at *admin@communicationmatters.org.uk*

It is important that the full range of assessment services should be included in the Forum, even if they are not able to attend the February meeting. If you were not at the September meeting, and would like to be involved in the Forum, contact Sally Chan *sallychan@blueyonder.co.uk* or Dithe Fisher *dfisher@aberdeencity.gov.uk*

For more information about the AAC Assessment Services Forum, visit the Communication Matters website *www.communicationmatters.org.uk/aacservicesforum*

*

ABILITY WORLD LTD

David Weatherburn, formerly of Liberator, is setting up *Ability World Ltd* which will offer assistive technology for acquired conditions and the elderly. More details will be available at *www.ability-world.com*

*

TALKSENSE

Tony Jones has recently left Liberator and opened *TalkSense,* a new business and website offering AAC training and support, such as a free 'symbol design' service. The TalkSense website contains a growing number of free downloads and services: please visit *www.TalkSense.weebly.com*

HOT NEWS

COMMUNICATION CHAMPION ANNOUNCED

In October, The Children's Secretary, Ed Balls announced the appointment of **Jean Gross** as England's first Communication Champion.

The appointment of a Communication Champion was a recommendation in the 2008 Bercow Report on services for children with speech, language and communication needs, and forms part of the government's Better Communication Action Plan developed in response to the Bercow Review.

*

NATIONAL AAC COORDINATOR ANNOUNCED

Anna Reeves has been appointed as the National AAC Coordinator for England. Based part-time at Becta, she will be be working closely with the Communication Champion and will ensure that AAC provision and support is addressed in the implementation of the Better Communication Action Plan.

*

RCSLT HONOURS FOR CHAIR OF 1 VOICE

Our congratulations to **Katie Clarke** for being awarded the prestigious Honorary Fellowship of the Royal College of Speech and Language Therapists. Katie is the co-founder and Chair of '1 Voice - Communicating Together', a UK wide charity supporting children and families using AAC.

"Katie has taken her positive, empowering approach to supporting her own daughter's communication and shared this with isolated families across the UK who use alternative and augmentative communication, and the professionals that support them." [RCSLT Bulletin, November 2009]

The award acknowledges and honours non- and overseas SLTs who have contributed outstanding services to speech and language therapy and for the benefit of those with communication disability.

*

BIG CHALLENGE '09 AWARD WINNER

Congratulations also to **Terry Gibson** and her son **Michael Reed** for winning a £4,000 grant from Big Challenge '09 for a project which aims to bring communication to people who don't have any AAC, raising awareness, and increasing language, literacy and multimedia skills for participants and audience.

DIARY DATES

11 December 2009 London
Communication Matters Road Show in London
FREE Tel: 0845 456 8211 www.communicationmatters.org.uk

13-15 January 2010 London
The Special Needs Fringe
Inclusive Technology: 01457 8197905 www.inclusive.co.uk

14 January 2010 London
Missing the Target? Exploring Target Setting for Children With Multi-Sensory Impairment
Contact CM: 0845 456 8211 www.communicationmatters.org.uk

21 January 2010 Edinburgh
Personal Communication Passports
Contact CALL Scotland: 0131 651 6235 www.callscotland.org.uk

28 January 2010 Oxford
Moving on from PECS
Contact ACE Centre: 01865 759800 www.ace-centre.org.uk

25 February 2010 Edinburgh
MDVI and Technology
Contact CALL/SSC: 0131 651 6235 www.callscotland.org.uk

4 March 2010 Edinburgh
Books for All: Audio Resources
Contact CALL Scotland: 0131 651 6235 www.callscotland.org.uk

10 March 2010 Oxford
Switches – Who, why and how?
Contact ACE Centre: 01865 759800 www.ace-centre.org.uk

13 March 2010 Edinburgh
Technology Discovery Day
Saturday get-together organised by ACiP:S for adults who use AAC
Contact CALL Scotland: 0131 651 6235 www.callscotland.org.uk

DIARY DATES

25 March 2010 Edinburgh
Introduction to BoardMaker 6
Contact CALL Scotland: 0131 651 6235 www.callscotland.org.uk

22 April 2010 Edinburgh
The Development of Language and Communication
Contact CALL Scotland: 0131 651 6235 www.callscotland.org.uk

29 April 2010 Edinburgh
ICT and Early Years
Contact CALL Scotland: 0131 651 6235 www.callscotland.org.uk

6 May 2010 Oxford
Making Sense of Eye Gaze Technology
Contact ACE Centre: 01865 759800 www.ace-centre.org.uk

20-22 April 2010 Birmingham
Naidex 2010 at the NEC Birmingham
Visit Communication Matters in the 'Communication Village'
More information: www.naidex.co.uk

15-17 June 2010 (TBC) Edinburgh, Dundee, S Lanarkshire
ICT and Inclusion
Contact CALL Scotland: 0131 651 6235 www.callscotland.org.uk

24 June 2010 Oxford
AAC – What is there to say?
Contact ACE Centre: 01865 759800 www.ace-centre.org.uk

24-29 July 2010 Barcelona
ISAAC 14th Biennial International Conference: Communicating Worlds
More information: www.isaac2010.org

26-28 September 2010 Leicester
CM2010 National Symposium
Contact: 0845 456 8211 www.communicationmatters.org.uk

STUDY DAY

Missing the Point?

Exploring Target Setting for Children With Multi-Sensory Impairment

Thursday 14 January 2010, London

More information & booking form at:

www.communicationmatters.org.uk/studydays

How Fast the World of Communication Aids Moves On

BARRY SMITH
Email: bsbsmith40@googlemail.com

WHO I AM

My name is Barry Smith. I have been using a Lightwriter since one year before I left school. It gave me speech to start college with, the next year. When I went for assessment they were not too happy because I only had a Bliss board which was a low tech communication aid with no sound output on it.

Everybody has different needs, this is how a Bliss user speaks. With a board, some people could point with their finger to the symbol. If the person could not point but could look, the person who has no speech could eye point to the word they wanted to say. Then the person they were talking to could see where they were looking and could read it. But one bad thing about this was if a listener could not read, they could not understand.

I liked the layout of the board because they would always put the same kind of words together so it helped the person using the board to find the words they needed. Most people's boards had colour coding on it to help the communication use, like all the 'doing words' were green and they were together.

I asked my speech therapist to work together with me so she would understand my language and help me get the right communication aid for my needs

Liz asked the SCTCI communication aid centre to bring a couple of speech aids into the school for me to try and see if I liked any of them. Liz worked with me and she showed me how to work the first Lightwriter. Then I saw two more communication aids before, I made up my mind. I liked the Lightwriter because it was a nice size. The people from SCTCI said that me and Liz could have it on loan. After I left school, Linda Page met me and gave me my first Lightwriter, with a bag. The bag was like a money belt because you wear it around your waist.

FIRST LIGHTWRITER

One day when I was at college Linda came to see me. She gave me a new Lightwriter that was just out, at the time. When they brought out the deep keys, it was helpful because some people need to press harder, and the sound was a bit better.

In 1998 they brought out another new one. It was better, because the keys were deeper than before, and it predicted words. After you had written some letters you had to set it up by pressing the MEM button two times. In small text, it would show you the next letters of the word you might like to use. But the only thing was, it came up with words no one would use, and it didn't remember what words you had used before. The keyboard was better for me to use because it had a deep keyguard over it. You could not put your hand on keys by accident. The sound was different and you could change the voice – there were more male and female voices to choose from. This Lightwriter was fast. You could save longer messages into the memory, as well.

Then about six mouths after this I decided to get it mounted on my wheelchair because it kept falling on the ground which was not any good for it. Therefore, I seen Linda and got me one. Then one day when I was at my day centre at Red Cross House, she came to see me because my wheelchair was not working. I had a back up chair but my mount would not fit on it. Therefore, Linda asked someone to make me one that has an arm that can move around when I want to access my wheelchair by myself. That works for me even ten years on.

IN FEBRUARY OF THIS YEAR

In February of this year I got a more up to date Lightwriter. It can do more things and it looks different as well because it is a new design. One of the things I liked was that the sound now comes out better because the speech output is now next to the screen, not at the back. The person who is using the Lightwriter can now do more things, so it's better. Something the SL40 can do as well as being a communication aid is to support people in having a better life. Some disability people may find it hard to turn things on, like the light or a lamp, but now they can program their SL40 to turn the things on and they can make it work using the Lightwriter. Texting is good for people who find it hard to communicate.

One more thing that is good about the SL40 is that you could drop it out of the upstairs window of a two-storey building and if it lands on grass it will still work.

Lightwriter is still developing it; they say they will update it for the next three years free.

A few more things I find helpful are that you can save long pieces of text. It can save a book. You can write notes and save to a notebook, and you can program in a long talk to the notebook then save it all in one bit. It also has editing – by putting your caps lock on you are able to use the backspace to go back and change words without deleting. But you must make sure the caps lock is on before you backspace because if you don't, it will take your work out and you would have to type everything back in again…

HOW CAN SL40 HELP IN LIFE?

My new SL40 helps me with texting people, which is really good because I cannot hold the telephone that well and people

Freedom to communicate

For over 35 years, Toby Churchill Ltd has been developing and manufacturing technologies to assist people who live with a speech impairment.

Our commitment to investment and R&D has enabled us to develop a range of dedicated communication aids that enhance the speed and scope of communication.

Our latest model, the Lightwriter® SL40, is the first in a new generation of Lightwriters that are changing users' lives. Light but robust in design with high quality Acapela voices, the Lightwriter® SL40 allows the user to carry out different activities from the same device including speaking, writing notes and even sending SMS text messages.

Lightwriter® SL40. The freedom to communicate.

Leigh: "The Lightwriter® SL40 was essential during a medical emergency when I had to communicate with an on-call doctor after an allergic reation. I like the new word prediction and also the Notebook feature where I have stored all my personal medical information in case of any more emergencies!"

Beth: "The Lightwriter® SL40 has changed my life. I talk with everyone at school, text my friends and use it anywhere. What I like the most is the new word prediction. It's different from before but easy to learn and use."

Brian is delighted that he can text friends and family so easily. His wife says: "He used to find it difficult to hold his mobile phone and often dropped it." Now she can go out knowing Brian can always contact her from his Lightwriter® SL40.

TOBY ! CHURCHILL

dedicated to communication

For more information contact Toby Churchill Ltd.
Norman Way Industrial Estate, Over, Cambridge CB24 5QE
01954 281 210
info@toby-churchill.com
www.toby-churchill.com

do not know what I am saying. It could help with personal safety. Just say someone was out by theirself and something was up, they could send a text to get some help. The predictor saves time – it is quicker than speaking to someone.

I like having a notebook. Some people find it hard to write because of a physical disability. But now they can write into their Lightwriter and save the work as well. You might worry about how long a message you can save under a letter, but it could save a book. That is how big the memory is. No need to worry any more about being late, because it has a clock in it. And if someone is not able to turn on a light or a lamp, it can be programmed into it so people can access it themselves through the Lightwriter.

IN TEN YEARS TIME

What I would like to see in ten years time is for Lightwriter to bring out new software that gives Internet access to people who do not have access to a computer but who use a Lightwriter. Someone who uses a Lightwriter could even work for a bank. This would help employment and make new jobs for people and it would also raise awareness about communication with people using Lightwriters.

The world moves on and Lightwriter is keeping up to date with the times. People might be able to access their Lightwriter as if it were a computer. For example, people who use a Lightwriter might have access to the internet and also to MSN, to let everybody message live from their Lightwriters. This will help everyone who uses Lightwriter to do things they couldn't do before, like online banking, which would help people who don't keep well. The down side is how to save this kind of information?

As well people might be able to do online shopping from their Lightwriter - but the down side with this would be that people may stop going out. ✱

Barry Smith

JOINING COMMUNICATION MATTERS & ISAAC

What is Communication Matters?

Communication Matters is the UK Chapter of ISAAC (International Society for Augmentative and Alternative Communication), so members of Communication Matters are also members of ISAAC.

Our Vision: A world where all individuals have a right to a 'voice' through the provision of equipment and ongoing support services.

Our Mission: Communication Matters values people who use any form of communication and promotes the individual's right to participate in all aspects of life by using their most appropriate means of communication to express their thoughts, feelings, needs and desires.

What are the benefits of Membership?

Members of Communication Matters receive:

- The Communication Matters Journal three times a year.
- Reduced rate at Communication Matters Study Days.
- Reduced delegate rate at the Annual Communication Matters National Symposium.
- Regular electronic newsletters with the latest news in AAC developments, information about Communication Matters Road Shows, study days, other events, and more.
- Access the member's area of the CM website.
- All the benefits of ISAAC membership, including ISAAC publications at substantially reduced rates (AAC Journal, ISAAC-Israel, AGOSCI News), and special delegate rates for the Biennial ISAAC International Conference. If you join early in the year, you will receive a Membership Directory.

How do I become a Member?

If you live in the UK, you can become a member of Communication Matters (and therefore of ISAAC) by contacting:
Tel: 0845 456 211 admin@communicationmatters.org.uk
www.communicationmatters.org.uk

If you are outside the UK, you can become a member of ISAAC or subscribe to this Journal by contacting:
ISAAC, 49 The Donway West, Suite 308, Toronto, Ontario M3C 3M9, Canada Tel: +1 416 385 0351 info@isaac-online.org
www.isaac-online.org

What is ISAAC?

- ISAAC stands for International Society for Augmentative and Alternative Communication.
- ISAAC is a big international organisation that focuses on AAC.
- ISAAC was formed in 1983 and has over 3,700 members.
- ISAAC members live in more than 50 countries around the world.
- There are ISAAC Chapters in Australia, Canada, Denmark, Finland, French-speaking Countries, German-speaking Countries, Ireland, Israel, Italy, Netherlands-Flanders, Norway, Sweden, United Kingdom and United States of America.

ISAAC's Vision: AAC will be recognised, valued and used throughout the world.

ISAAC's Mission: To promote the best possible communication for people with complex communication needs.

What does ISAAC do?

- Advocates for augmented communicators & their families.
- Supports the use of AAC around the world. This includes countries that do not know about AAC.
- Has an exciting awards & scholarship program for members.
- Encourages the development of AAC products & services.
- Produces a series of books for people involved in AAC.
- Has an international conference every two years.
- Sponsors a peer-reviewed scientific journal – Augmentative and Alternative Communication (AAC). Peer-reviewed means that each article is anonymously reviewed by three people who are experts to see if it is suitable for publication. Visit the website at: www.isaac-online.org/en/publications/aac.html for more details.

What do ISAAC members receive?

- Full access to *ISAAC Information Exchange,* an international resource for sharing knowledge, experiences and perspectives on AAC.
- Access to ISAAC website and past Bulletin articles
- An International Directory with a list of all ISAAC members. A new Directory is published every year.
- ISAAC members can buy the AAC Journal at a 54% discounted rate.
- ISAAC members can attend ISAAC conferences and meetings at 15% or more discounted rate.
- ISAAC members can buy other ISAAC products and resources at an average discounted rate of 25%.
- ISAAC members network with professionals & AAC users world-wide.

Can we provide the bells and whistles?

Supporting PC-based VOCAs and accessible computers

LIZ HOWARTH & ROHAN SLAUGHTER
Beaumont College, Slyne Road, Lancaster, LA2 6AP, UK
Email: slaughterr@beaumontcollege.org

INTRODUCTION

There are both advantages and disadvantages of PC-based voice output communication aids (VOCAs) [1]. One advantage is that, in addition to voice output, the same device can run any Windows software, making it available to the user given that an appropriate interface can be provided. A disadvantage of PC-based VOCAs is that they are more sophisticated than dedicated devices, and therefore typically require greater levels of technical support to keep them running effectively. Without the appropriate levels of support, technical problems may prevent use of the voice output software, removing or reducing the user's ability to communicate.

Even where AAC practitioners feel that their clients would potentially benefit from the additional opportunities offered by a PC-based device, there are issues around whose responsibility it is to provide the extra level of service required to facilitate this. Work is required to set up the interface and technical configuration to provide IT applications in an accessible way, and then to provide the ongoing support for the user to learn how to use these applications effectively, and technical support to keep them working. This is 'new work' that was not required of AAC services five years ago, and in a field which is already under-resourced and where the primary focus is on face-to-face communication, it can be difficult to resource this 'extra' level of service.

At Beaumont College we are running 'The Wheeltop Project', with sponsorship from BT, which aims to improve access to communications technology for young people with physical and learning disabilities. We have used the sponsorship to buy equipment and software, and to fund a new 'Technologist' position in the college to carry out the associated work. Through the project we have worked with our own students and other young people in the local area to set up portable, customized tablet PC systems with a customized access method and interface to suit each user's needs and preferences. Most but not all participants use their device as a voice output communication aid. We present firstly the reasons why we wanted to try to achieve this, and secondly the model we have used at Beaumont College in order to do so.

BEAUMONT COLLEGE

Beaumont College is a specialist FE college in Lancaster, run by the disability charity Scope. We currently have 91 students aged between 18 and 25 who have a broad range of physical and learning disabilities. We offer a creative arts curriculum with basic skills embedded in all subjects and a focus on developing independence. We have achieved 'Participating provider' status in Becta's Technology Exemplar Network.

The college has many years' experience of providing AAC across the range of low tech, light tech and high tech systems. It currently employs 2.6 fte Speech and Language Therapists and 2.1 fte Speech and Language Therapy Technicians, as well as Occupational Therapists and IT professionals who have also been involved historically in AAC provision. The Communication team recognised that the advent of PC-based devices brought more opportunities for students but found, as discussed above, that it was difficult to provide the extra staff input required to exploit these opportunities.

REASONS FOR PROVIDING AN IMPROVED TECHNOLOGY SERVICE

The reasons the college decided to pursue a way to achieve this included the following:

- As an educational establishment Ofsted [2] requires the college to ensure that "Technology is used effectively to promote and support learning".
- Becta, the government agency for the use of technology throughout learning, states that [3] "There is a strong body

of evidence linking the use of technology to improvements in learning and outcomes for learners”

- One of the College’s own foundations states that we aim to support our students in “Learning to use technology in a way that supports freedom and independence”
- Scope’s mission is “Helping disabled people achieve equality” and we feel that this is an equal opportunities issue: our students’ non-disabled peers in mainstream colleges, their siblings and society in general now takes access to technology for granted.
- A study of Internet-based communication among people with autism [9] found that several participants identified benefits of text-based communication as opposed to face-to-face conversation, including:

  - Reduced social, emotional and time pressures
  - Visual anonymity
  - Flexible pace
  - Permanence of text
  - Greater sense of control

  It is interesting to consider whether some of these advantages may also apply for people who use AAC.

  There is also evidence [8] that exposure to text in any form improves literacy and motivation to engage with written communication, that texting allows children to experiment with language in an informal, playful and unscrutinized way and that the associated privacy allows independent development of relationships and practise of skills.

- We feel that access to technology can support a range of opportunities including the following:

  1. *Opportunities to improve literacy skills*

     Case study: R is unable to control a mouse or other pointing device or keyboard. Until recently she participated in ICT sessions by directing staff on what she wanted to find on the internet, or by dictating text for them to type. She now uses a switch to control an on-screen keyboard with symbolized word prediction and auditory feedback, and is working on independently identifying the first letter of the words she wants to use, then copy typing or using word prediction to complete the word. She can then use a button on the keyboard to save or email her work directly to the tutor, providing her with much improved opportunities for developing her literacy skills.

  2. *Opportunities for improved curriculum access*

     Case study: As a creative arts college we offer a dance course which includes exercises in choreography. Until recently this was heavily facilitated by staff transcribing students’ ideas. Working with the dance tutors we have now developed an interactive, symbolized choreography resource. This allows students to access the relevant vocabulary as a group, using a Smartboard via touchscreen, joystick or other pointing device or a switch, to make a record of their ideas and to refer back to it for rehearsal.

  3. *Opportunities for improved social inclusion*

     Case study: O comes originally from the Philippines and uses the wireless internet access on his device to access a range of social networking sites to keep in touch with friends and family from around the world, and well as Philippine TV soaps, news and weather. He has also used his device to prepare and deliver presentations on the project outside of the college, and to make contributions to the college blog about these events. He uses his language pack to generate the text for these activities and can then easily copy and paste this into other applications.

  4. *Opportunities for improved independence and privacy*

     The students we have worked with have told us that they value the additional independence and privacy afforded by, for example, being able to send or receive a text message or email independently without needing to rely on someone else supporting this and being privy to its content.

  Additionally, there is evidence available from studies [4-9] indicating that access to technology benefits young people in many and diverse ways.

WHAT APPLICATIONS DO OUR STUDENTS WANT TO USE?

Music players

Music plays a very important part in many young people’s lives [10]. This is not a new phenomenon! But for some of our students the opportunity to independently control what music they listen to, at what volume and when, can be a new and valued experience.

The Internet

In our experience, providing meaningful access to the Internet for our students is the biggest challenge of all the applications students want to use. For those who aren’t able to use a pointing device, navigation via hyperlinks can be difficult, and for those who aren’t able to read, making the content meaningful and enabling navigation can be problematic. While we haven’t found an ideal solution to either of these problems, we are working with systems such as switch control of the mouse pointer, scanning around hyperlinks, mouseless browsing [11] and auditory feedback via screen readers to try to provide the best access we can, tailored to individuals’ needs.

Email

Having tried unsuccessfully in the past to make standard email packages accessible to our students, we now use and adapt the simplified email interface provided by the Grid 2 software [12] very successfully with many. A combination of pre-stored phrases with an on-screen keyboard and word prediction, where appropriate, allows students to compose messages ranging from 2-3 pre-stored phrases to fully autonomous, spontaneous text, using either direct or switch access.

Mobile phones

A survey in 2006 [7] found that, of 11-17 year-olds:

- 78% say having a mobile phone improves their social life.
- 25% say their mobile phone has resulted in more frequent contact with grandparents.

These are surely beneficial consequences of access to a mobile phone. However, more ambiguous findings include that:

- 35% say they regularly contact people they don’t want their parents to know about.
- 37% “sometimes dodge calls from parents”.

These latter points indicate that some young people use mobile phones to establish private relationships, asserting their independence from parents. This raises questions of safety for any young person, but particularly for the vulnerable young adults we work with. Our e-safety policy is discussed below.

OBSTACLES TO AN ENHANCED IT SERVICE

The resources required to facilitate access to such applications include the necessary skills and time required to set up

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the appropriate configurations and interfaces to meet individual users' needs and preferences, and then to provide the necessary ongoing technical and learning support. These are significant, and the college would have struggled without extra resources to develop this new service.

A further obstacle to providing an enhanced IT service is the issue of e-Safety. A number of our students are vulnerable adults and need support to use social technologies such as Facebook. We undertake individual risk assessments with each student who wishes to do so. A member of the technology team works with the student's keyworker to determine the appropriate level of support for the student and will ensure that the student's profile on each service they intend to use is appropriately configured to minimise the risk of inappropriate contact. Access to Web 2.0 services is controlled via our firewall, and access is only provided once the risk assessment is complete. We developed our e-safety guidance from work done by Becta [13].

HISTORY OF OUR PROJECT

Our project began in 2004 with one of our student's bad experience of an early PC-based communication aid. N wanted access to IT applications such as email and the internet, but had frequent technical problems with her device, with lengthy repairs sometimes leaving her without her communication aid for weeks at a time. This prompted the college technology department to provide a replacement device for her, using an Itronix tablet PC with the Grid 1 software to provide voice output.

The intention was to integrate a device for N, and potentially for other students, using off the shelf components. In this way we hoped to provide cheaper AAC and personal computing systems, more easily maintained 'in-house' to reduce the need to send devices away for repairs. The use of 'mainstream' hardware means that the college IT team can more easily support students' systems, for example by keeping backup images and spare devices that can be used to provide fast replacements when devices need maintenance work.

The Itronix prototype was later replaced with a Motion tablet PC. We discovered in 2006 that Smartbox were integrating their latest model using the same tablet from Motion, so we then decided to purchase some solutions from them to work with other students. We have since continued to both buy in systems from Smartbox (most recently their Powerbox systems) and integrate our own solutions, most recently with the Fizzbook Spin mini-tablet touchscreen PC. We have also worked with Dynavox systems where these were identified as the best AAC solution for a particular student, although their less powerful processor may provide slower performance with some additional applications.

In 2007, BT offered to sponsor our work, providing funding for equipment and a full-time Technologist post over 3 years. This also allowed us to begin 'outreach' work, covering a number of our feeder schools as well as a mainstream school and work with an adult in the community. Part of the funding was also allocated to support Scope's *No Voice, No Choice* campaign, to campaign for better services for people with speech, language and communication needs.

TEAMING MODEL

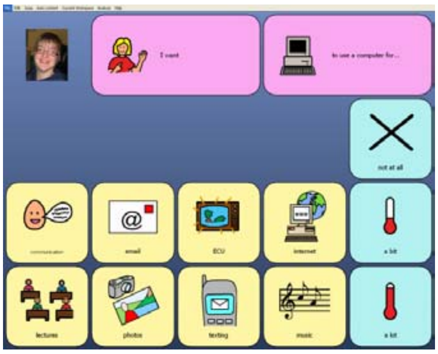
Our AAC Community of Practice (CoP) includes Speech and Language Therapists and Technicians, Occupational Therapists, IT staff, Physiotherapists and Teachers, and meets fortnightly. Our typical AAC assessment involves several professionals from the CoP but is led by the SLT for the purpose of selecting the language pack and access method. However, where there is likely to be significant use of IT applications on the same device, this 'extra' level of service is now led by the Technologist, with SLT and other input as required. In this way the 'bells and whistles' are introduced and configured for each individual by the technologist once the AAC system is in place. Within the technology team the 'mainstream' and 'special access' IT staff are all in the same department, and room! This means that the technologist can quickly and easily get help with technical issues where required. We feel that this is a major benefit in resolving technical problems with students' devices.

The ability to share information with and seek help from other professionals regularly and easily has been a major factor in the success of our project so far.

Technologist's role

The Technologist has weekly 1-1 sessions with each student taking part in the project, where they work together to configure the applications and interface according to the student's needs and preferences, and to give dedicated time for students to learn to use new applications.

Guidance on access issues, mounting etc. is sought from colleagues as appropriate. The technologist also provides regular support in curriculum sessions to support the student to use their device in context, for example to contribute to the college blog. Initial and ongoing technical support is provided as required.



FEEDBACK

We have not yet collected formal feedback from the people taking part in the project, but we have included some quotes from participants and from staff we have worked with in schools.

"There are lots of benefits of using the Wheeltop that are a big help to me. One is the wheeltop being very portable, I can go on the internet and check what's on at cinemas, I also use messenger so I can talk to my friends on line and it lets me to send all my texts. BT have been fantastic – they listened to everything I had to say and now they are helping with funding. I am really happy they are helping me and others. Plus my ambition now is to keep up with my role model talks where I help children with difficulties. Without help from Beaumont College and BT I could not do all this." – N

"I use my wheeltop talk and internet and music and email and write blog. The best thing is I can edit my pages." – O

"We were bowled over by the things you introduced us to. Personally I feel a lot more confident about planning for the future and trying to meet S's needs … it's such a liberating idea to be able to integrate the communication software with all the facilities of a standard laptop."

– Roger Davies, Head of IT,
Queen Elizabeth School

CONCLUSIONS

Sherlock [1] asks whether it is desirable that so many high-tech VOCAs are now PC-based. It is certainly true that not every person who uses high-tech AAC will want to make use of extra ICT applications, and that where this is the case, PC-based devices can present significant technical problems for little benefit!

However, for those disabled people who do want access to mainstream ICT and need a specially customized interface, portable PC-based systems can provide great opportunities for access to the digital world, and can open up alternative methods of communication such as email, texting and social networking.

Through this project we are finding that we can provide the 'bells and whistles' of access to mainstream ICT to our students where appropriate, however this requires considerable resources. We are still in the process of collecting data on the time spent with students through this project, but it is clear that we could not have achieved the current level of service we offer from our position three years ago without the sponsorship from BT.

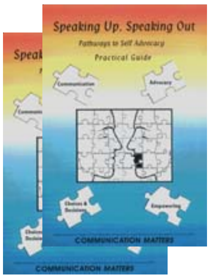
The project has given the college the 'boost' it required to start up such a service, however the college is now beginning to view this kind of provision not as 'bells and whistles', but as a normal part of our work. Now that our sponsorship is due to end the college plans to continue the service we have established through the continuation of the Technologist position, since the provision of improved access to technology for disabled people has now been established as a high priority for the college and for Scope. ✱

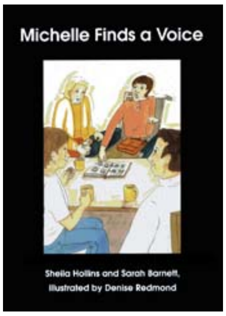
Liz Howarth, *Technologist*

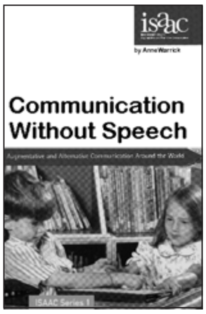
Rohan Slaughter, *Technology Manager*

REFERENCES

1. 'Do we need the whistles and bells? PC-based VOCAs in the real world' (2008), Chris Sherlock et al
   http://www.actwmids.nhs.uk/AAC/communication-matters-national-symposium-2008-presentations/ACT%203%20CM%202008%20Provider%20style%20PP.ppt
2. Ofsted Common Inspection Framework for Further Education and Skills (2009)
   http://www.ofsted.gov.uk/Ofsted-home/Forms-and-guidance/Browse-all-by/Other/General/Common-inspection-framework-for-further-education-and-skills-2009
3. Becta Impact of technology on educational outcomes (2009)
   http://partners.becta.org.uk/upload-dir/downloads/page_documents/research/impact_of_technology_on_outcomes_jul09.pdf
4. Young People and ICT (2001)
   http://www.dcsf.gov.uk/research/data/uploadfiles/ACF2AB1.pdf
5. Young People and ICT (2002)
   http://partners.becta.org.uk/upload-dir/downloads/page_documents/research/full_report.pdf
6. Ofcom Media Literacy Audit: Report on media literacy amongst children (2006)
   http://www.ofcom.org.uk/advice/media_literacy/medlitpub/medlitpubrss/children/
7. The Mobile Life Youth Report (2006)
   http://www.yougov.co.uk/extranets/ygarchives/content/pdf/CPW060101004_2.pdf
8. Children's use of mobile phone text messaging and its impact on literacy development in primary school (2009), Clare Wood, Emma Jackson, Beverly Plester & Lucy Wilde, Coventry University
   http://partners.becta.org.uk/upload-dir/downloads/page_documents/research/reports/childrens_use_of_mobile_phone_text_messaging.pdf
9. The Internet: A comfortable communication medium for autistic people? (2008), Penny Benford, PJ Standen
   https://www.ntu.ac.uk/cels/he_projects/projects/other_projects/interactive_technologies/85310.pdf
10. Music Experience and Behaviour in Young People (2009), David Bahanovich, Dennis Collopy
    http://www.ukmusic.org/files/UK%20Music_Uni%20Of%20Herts_09.pdf
11. Mouseless and more:
    http://www.mouseless.de
12. Sensory Software International
    http://www.sensorysoftware.com/
13. Safeguarding Learners:
    http://www.becta.org.uk/safeguardinglearners







Spreading the Word(s)

AXEL BÖHM & JULIE ATKINSON

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INTRODUCTION

Access to Communication & Technology is the West Midlands regional Electronic Assistive Technology (EAT) assessment and provision service. As such, it has a key role in educating families, carers, professionals, students and the general public about AAC (as well as wider EAT issues.)

Over the past 12 years, ACT have invited Axel to present lectures to a number of different groups, including Speech & Language Therapy Undergraduates, NHS Disability Awareness training, BTEC Advanced Diploma in Speech & Language Support, and the West Midlands AAC Care Pathway training courses.

Using a combination of pre-stored presentations and text to generate novel messages, Axel conveys some of the highs and lows of his communication systems. During presentations, he invites his audience to come onto the platform and stand behind him to see close up how he uses the HeadMouse to access his vocabulary, and how his vocabulary is organised, thus allowing his audience a unique insight into his communicative world.

He presents a variety of lectures (an example of which is transcribed below) describing his progress from his early communication as a child, using low tech systems, to being an effective augmented communicator, using a Vanguard II voice output communication aid with WordCore 45 vocabulary, accessed by a HeadMouse. He describes how he has learnt to use a range of communication systems introduced over many years.

Feedback from attendees about the contribution that Axel makes is always highly positive. For example, when participants were asked what they enjoyed most on a recent course ("Introduction to AAC"), participants commented, "Seeing a service user and getting their view", "Really great to meet an AAC user and find out how he uses his AAC" and "Great having a user's perspective." Indeed, following a presentation which Axel gave to her when she was a student, one newly qualified Speech & Language Therapist subsequently arranged for him to attend her SLT staff meeting to lecture about his experiences.

AXEL'S EXPERIENCES OF COMMUNICATION

Hello everyone; my name is Axel. I would like to tell you about some of the communication difficulties I encountered while I was growing up.

Early Communication Strategies

I had to use several ways of alternative communication, because, when I was young, talking computers had not been invented. When I was very young, I only used my eyes to communicate, looking at things I wanted to talk about. My mother then asked questions and I could indicate "Yes" or "No" by nodding or shaking my head; sometimes it took lots and lots of questions! For instance, how would you tell at home that a child was naughty at school and pushed the fire alarm button and big red fire engines came, or that a bee had stung a child, when you can say only "Yes" or "No"? Or how to tell your mother that you could not go to sleep, because a mosquito was flying around your head ready to bite, but every time mother switched on the light to ask what was wrong, the mosquito stopped buzzing; I did manage to do this in the end after a lot of questions.

Sometimes I was not so lucky with other people, especially in hospitals, when the nurses did not know me. I had no way of saying that I was crying because I was thirsty. Instead of water, I got more painkiller syrup. Does it happen to you that sometimes strangers put sweets or money into your lap? It happened to me many times; now I can say "Thank you", while before I just sat there mute; probably these people did not realize I could not speak and thought me very rude.

Now I have a rather scary story to tell. When I was 17 years old, I started to live in a residential home, where I met several young disabled people and I made special friends with a boy called Deon. I slept in a room with 6 other people. From there a bus took Deon and me to School every morning. Before we got up, a Nurse would come around and give us our medication. But one morning, Nurse was in a rush; she gave me my tablet and she left my bed neighbour's tablets on a locker beside my bed. When another Nurse gave me my breakfast, she threw my bed neighbour's tablets into my breakfast and I tried say, "No that is wrong" with my face. About my bed neighbour, he had strong medication as he was a bit of an aggressive guy, who always threatened to break my computer. In the morning rush, I could not tell anybody of the mistake the Nurses had made; only once on the bus, I told Deon. At School, I started feeling very tired and fell asleep; my teacher noticed I had also turned very pale but she didn't know what was wrong. Deon realized that it could have something to do with the extra tablets and told my teacher about it. I was rushed to hospital, where my pulse apparently was hardly noticeable and I kept on sleeping. My mother was called but when she arrived, the doctors could assure her that all would be well after I slept off the effect of the tablets.

Low Tech Communication Strategies

Things got better when I learnt to spell, at the age of 6, and I started to use a communication board, with all the letters and numbers in three rows. My communication partner passes a finger along the rows and I look up when the finger arrives at the letter I need. This is a very slow process, but I use it often, even now. Instead of the board I can also use labels, posters or shop fronts, when we are out and about without my communication aid.

Using the communication board

I like to attend meetings with other people who use communication devices. At the Communication Matters conference in 2008, I saw somebody using a transparent communication board – a piece of transparent plastic with the letters of the alphabet stuck on it at large intervals. I liked it instantly and copied it. My carer holds it fairly close to my face and as I look at a letter; the carer can see where I am looking so it is very fast and much better than the board I described earlier.

Using the transparent communication board

Introducing Technology

When I was 11 years old, a friend built a keyboard for me with large keys arranged in a semi-circle; I used a head-pointer to access it - a long metal rod fastened to a helmet.

The letters came up on a screen, but there was no voice. My mother took the keyboard to school every day. My teachers had always learnt quickly to communicate by asking Yes / No questions, but this new typewriter made communication a lot easier when I wanted to say something long.

Using my headpointer & semi-circular keyboard

When I was 16, my teachers talked to me about a LightTalker communication aid, but I had no chance to try one out. When we ordered it, we were not sure whether my head control would be good enough for the 128-location overlay. My mother and I were very glad when I learned how to use it within a few weeks, with some help from my twin brother. Finally, people could hear me talk and it was great fun to be able to have the LightTalker fastened to my wheelchair so I could speak wherever I went. It gave me a lot of independence - I didn't have to rely on my mother's help so much any more when talking to friends or strangers.

I taught myself the QWERTY program at first, then when I could speak well, the 'Words Strategy' MAP was put into the LightTalker also.

My teachers were quite proud that I had managed to use the LightTalker so quickly and asked me to show off my new skills at a conference in Kimberley. Kimberley is two hours by plane from Cape Town where I lived. I was to fly there on my own. My mother and a teacher strapped me in to a seat in the aeroplane and another teacher received me in Kimberley. All went very well at the conference too. But on the flight back, nobody had told me that the plane would make a detour via Uppington, so, when the plane landed after 2 hours, nobody came to fetch me and I had no way of communicating with the stewardesses. Instead, after a while, the plane started off again. I was quite relieved when, at the next landing 1½ hours later, my mother was there to receive me.

Using the optical headpointer with the LightTalker

I came to England from Cape Town (in South Africa) in 1991 with my mother. I got a DeltaTalker in June 1996; I accessed its 128-location overlay with an optical headpointer. It was faster and lighter than the LightTalker, and I could use it as a keyboard for my computer; this meant I could email my twin brother, Benno, who still lives in Cape Town.

The optical headpointer & DeltaTalker

In August 2005, I was very lucky to get funding for a new device, the Vanguard II, which is similar to the DeltaTalker but has many new features.

I now use Word Core 45 MAP; it has word prediction and I can download from my computer - this makes editing a lot easier. It is operated by a HeadMouse (a reflective dot on my forehead) – no more wires! The Vanguard is fitted with an infrared device for Environmental Control - now I can control my TV, my DVD and my radio. Basically, I can control anything that can be operated by a remote control. One of my toys is a digital camera; someone needs to take the photos, then I can download them to the computer and send them to friends via email. I have a hands-free phone in my room but I need assistance with dialling. In 2009 I also set up Facebook to be able to communicate with my friends.

Using the Vanguard II with the HeadMouse

The Future...

I like to attend meetings with other people who use communication devices to get an idea of how others cope without being able to speak. My wish is to help other disabled people.

I am a Gold Ambassador for Liberator - this gave me training to help people, but the Ambassador project no longer exists.

To end, there are still times communication can be frustrating. Sometimes I don't know how to spell a word and people don't know what I am talking about. Sometimes, in a group conversation, the Vanguard is too slow - by the time I have written something to contribute, people are on a different topic.

When I am talking, one of my pet hates is if someone tries to guess what I want to say; but it does often speed up the conversation. ✱

Axel Böhm
Julie Atkinson, *Speech & Language Therapist*

ACKNOWLEDGMENT

The authors would like to thank Liberator Limited for sponsoring Axel's attendance at the Communication Matters CM2009 National Symposium.

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A Pilot Study

The Multi-Modal Nature of Communication Between Natural Speakers and Aided Speakers

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INTRODUCTION

It has been demonstrated by several authors that augmentative and alternative communication (AAC) is not the sole modality of communication for AAC users, and in fact interactions between aided speakers (AS) and natural speakers (NS) are typically multi-modal (Soto & Hartmann 2006; Beukelman & Mirenda, 2005). 'Natural' modes of communication such as gesture, eye contact and vocalisation have been identified as being favoured in AAC user interactions with NS peers (Clarke & Kirton, 2003). However, AAC devices still play a valuable part in communication. This was shown in a qualitative study of four teachers' attitudes towards AAC by Smith (1994) who found that all of the teacher's identified AAC as an important modality of communication.

It seems that the communicative contributions of the natural speaker in aided-natural speaker partnerships are a source of potential influence. Light et al (1985) found that the modalities of communication employed by young AAC users were influenced by the natural speaking communication partner. This indicates the mutual influence of conversation partners over the interaction process and the transactional nature of conversation (Cheepen, 1988).

The importance of the natural speaker is echoed by Murphy et al (1996) who stated that communication is a cooperative process and therefore the successful use of AAC is as dependent on the conversation partner as it is on the user. Within education, the most important conversation partners for an AAC user is their teaching staff due to the amount of time they spend and the influence they have on an individual's learning (Popich & Alant, 1999). As a result, staff-pupil interactions are highly significant for an AAC user's language development (Millar, 2001).

THE AIM OF THE STUDY

Motivated by a need to develop a coding structure for analysis of communicative modalities used in AS/NS interactions for a PhD research project, a small pilot study was conducted. The aim was to examine communicative modalities employed in classroom-based interactions between pupil – aided speaker (AS), and teaching staff – natural speaker (NS).

METHODS

Access to existing video data from another research project covered by ethical approval was granted. There were two communication situations: one dyad of AS and NS, and one triad of one NS and two AS. The data were collected in a special school classroom environment during a group discussion regarding what the AS liked doing in the Sixth Form.

PARTICIPANTS

Aided speaking participants were three young people with cerebral palsy in the Sixth Form of a Special School. The communication aids and access used by each participant is shown in Table 1. The NS participants were a Teaching Assistant (TA) and a Speech and Language Therapist (SLT) familiar with working with the AS in the educational environment. All

Participant	Communication Aid	Access
AS1	Tellus	Switch + Scanning
AS2	Dynavox	Direct selection
AS3	Tellus	Switch + Scanning

Table 1 Table showing the communication aids and access methods for each AS participant

participants filmed as part of the data had given informed consent.

There were two stages to the pilot study:

Stage 1

The first stage involved the development of a coding frame for recording the multi-modal communication behaviours in use in the dyads. An initial viewing of the data identified the observable behaviours of (i) vocalisation, (ii) AAC encoding, (iii) AAC output, (iv) gesture, (v) sign, (vi) eye gaze and (vii) environmental reference.

Momentary time sampling (MTS) was the preferred method for its efficient capture of participant behaviour over more time consuming methods, such as continuous recording (Martin & Bateson, 1993). The observer records the occurrence or non-occurrence of target behaviours exactly at the end of a pre-specified time interval (Brulle & Repp, 1984). Moments sampled are representative of participant behaviour over the recorded time period. MTS is a systematic observation method which yields the proportion of total communication acts spent using any one communicative modality, i.e. a merging of duration and frequency. A 10 second interval was employed as recommended by Brulle and Repp (1984) for its higher reliability.

To indicate the end of each time interval bleeps were superimposed on the videos at every 10 seconds. The researcher therefore coded the communication modality in use at a 'moment' indicated by a bleep on the video. Due to the nature of AS/NS interaction, non-verbal communication was expected to occur and change frequently, therefore to capture an accurate data set ten seconds was selected for its high reliability (Brulle & Repp, 1984). The data were burned to DVD for coding. MTS was carried out using the draft coding structure. Throughout the initial data coding it was apparent that several communication acts were being missed by the draft coding structure. This lead to adjustments to the coding structure and the development of a secondary structure to which codes for facial expression and shared attention were added.

Shared attention refers to a situation in which participants both look at the same object and are both aware of the fact that they share a focus (Tomasello, 1995). This code was required as there was often a period of shared attention when the AS was encoding on their AAC device.

Stage 2

A second trial of the coding structure was carried out on the same data set. It was recognised that some of the categories in use were too vague to ensure reliable coding of the modalities. For example, vocalisation was being used to code any verbal communication, and eye gaze was not specific enough to inform a coder of the desired communication act. For this reason, each category was defined in depth (see Appendix for code definitions) and some final adjustments were made (Table 2) before conducting the final analysis.

RESULTS

It was evident from the data coded that there were some distinct differences in the frequencies of communication modalities used and the number of communication acts completed between the NS and AS (Table 3). For example, *facial expression* occurred 17 times by AS with only 6 occurrences recorded for the NS. Another modality that appeared important for communication for both AS and NS was *eye contact* (AS: n=45; NS: n=69).

The analysed data were combined for the dyad and triad in order to compare AS and NS use of communicative modalities. Raw data were analysed to provide the proportion of total communication acts for each group expressed as a percentage (Table 4) revealing some clear differences between AS and NS (Figure 1).

The primary modality of communication for the NS was *speech*, and although speech was not used much by the AS *vocal gesture* did hold a communicative function (11 occurrences, 4.8%). However, for both NS and AS the communicative modalities, that total the second and third highest proportion of communication acts were *shared attention* and *eye contact*. This may support the Light et al (1985) suggestion that the modality in use by the communication partner can influence the communication of the AAC user.

It is also important to note the high ratio between *AAC-encoding* and *AAC-output* for AS. There were 73 occurrences of AAC-encoding coded, however this led to only 9 *AAC-outputs*. This demonstrates the notable difference between the input and the output of AAC devices, and the amount of effort an AS must put in to produce a communicative move from an AAC device.

DISCUSSION

The purpose of this pilot study was to develop a coding framework and methodology that would enable the capture of multi-modal communication during social interaction between AS and NS. A coding structure has been successfully designed, and shown to capture the modalities used

Communication Modality	Code
Speech	Sp
Vocal Gesture	V
AAC-Encoding	AAC-E
AAC-Output	AAC-O
Eye Contact	E
Gesture	G
Sign	S
Facial Expression	F
Env. Reference	Env.
Shared Attention	SA
Neutral	N
Not Possible to Code	NPC

Table 2 Table showing the final coding structure, used to identify frequency of different communication modalities used in NS, AS interaction.

Communication	AS1	AS2	AS3	NS1	NS2	Total
Speech	0	1	0	65	49	**115**
Vocal Gesture	2	2	7	0	0	**11**
AAC-Encoding	45	11	12	1	4	**73**
AAC-Output	1	3	4	1	0	**9**
Eye Contact	21	16	8	48	21	**114**
Gesture	0	6	0	7	1	**14**
Sign	0	0	0	0	0	**0**
Facial Expression	5	10	2	5	1	**23**
Env. Reference	0	0	0	7	9	**16**
Shared Attention	31	15	29	47	28	**150**
Neutral	39	37	11	39	11	**137**
Not Possible to Code	3	0	4	2	3	**12**
Total	147	101	77	222	127	**674**
Total Communicative Acts	**105**	**64**	**62**	**181**	**113**	**525**

Table 3 Table indicating frequency of communication modality used and total number of communicative acts for each participant.

Communication	**AS Total Use (%)**	**NS Total Use (%)**
Speech	0.4	38.8
Vocal Gesture	4.8	0.0
AAC-Encoding	29.4	1.7
AAC-Output	3.5	0.3
Eye Contact	19.5	23.5
Gesture	2.6	2.7
Sign	0.0	0.0
Facial Expression	7.4	2.0
Env. Reference	0.0	5.4
Shared Attention	32.5	25.5
Total Communicative Acts	**44.0**	**56.0**

Table 4 Table showing the proportional use of each communicative modality and total communicative acts produced expressed as a percentage for the groups AS and NS.

by both NS and AS in interaction. As a result, this coding structure will now be used as an outcome measure in the associated full PhD project ‘Telling Stories’.

This pilot has found some distinct differences in the modalities used by AS and NS with the dominant role of the NS also demonstrated, as evident in proportion of total communicative acts (56%) which is consistent with the findings of others (Pennington & McConachie, 1999).

For NS, speech is the most commonly used modality, which was expected. This is due to the communication hierarchy found within an educational context, within which speech naturally comes to the top as it is the most automatic communication modality (Flewitt, 2006). Vocal gesture and eye contact appeared to be used by the AS participants to attract attention, however further study would be needed to provide evidence for this. This supports the findings of Harris (1982), who found that non-speaking participants were most likely to use gesture, vocalisation and eye contact to gain attention.

Clarke & Kirton (2003) found that ‘natural’ channels of communication such as gesture were the dominant type used by aided communicators. In the current study, despite the use of many ‘natural’ communication modalities, AAC encoding was found to be the most frequently used by the AS, which indicates high use of an aided mode of communication, opposing the findings of Clarke & Kirton (2003) described above. However, as noted previously the high proportion of AAC-encoding (29.4%, 73 occurrences) only led to a small proportion of AAC-outputs by the AS (3.5%, 9 occurrences). This clear difference in the input to output ratio of AAC devices demonstrates the effort required from an AS to create an output. It is therefore unsurprising that AS make use of a number of other communicative modalities to support their aided communication.

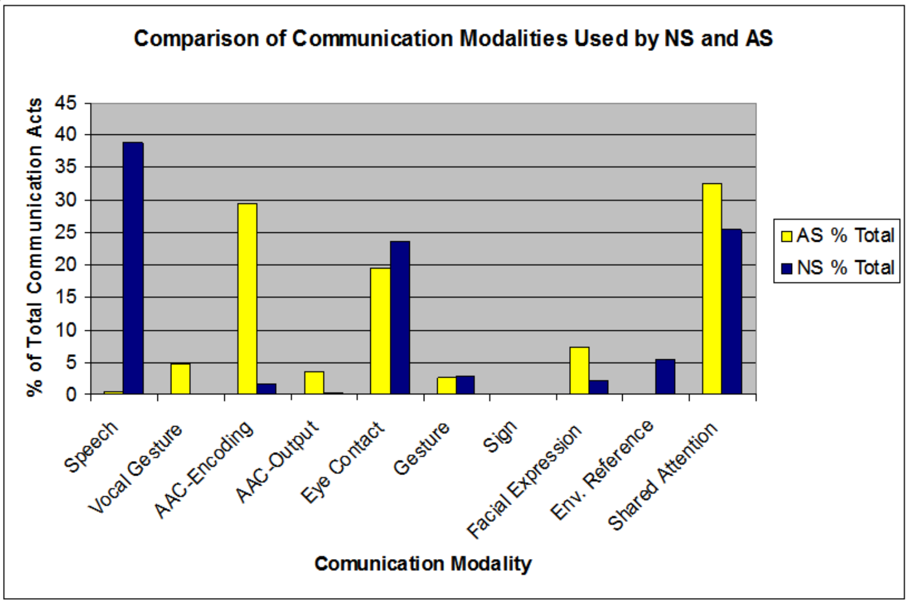

Figure 1 Graph showing the comparison of proportion of total communication acts (%) for each modality between AS and NS.

Interestingly, similarities between the two user groups were also revealed, for example eye contact, gesture and shared attention. It may be that the modality choice of the natural speaking communication partner has affected those used by the AS partners as per Light et al’s (1985) findings. However, reviewing the transcripts and data has indicated that this may be due to the NS checking back with the AS after a period of AAC-encoding. Therefore, further investigation would need to be completed to accept or reject this hypotheses.

CONCLUSION

The present study was a pilot, set up to support the development of a coding framework to be used in a more detailed study of the story-telling interactions between aided speakers and their teaching staff. As such, its scope was limited by sample size and using an already collected data set. Reliability has not formed part of the current study. This is planned for a later stage along with the development of the momentary time sampling methodology, e.g. observer training process, coding rules.

The study has demonstrated the presence of differences between communicative modality use in NS and AS, supporting past research. Several communication modalities have been shown to be important in AS/NS interaction, and the multi-modal nature of this type of interaction has been confirmed.

However, due to the limited scope of the current study, future research would seek to increase the number of dyads and the number of occasions for data collection. Data for the main PhD study will also be collected within a well planned and piloted research environment, ensuring all aspects of communication are clearly captured by the video recorder. This will significantly decrease the number of occasions on which it is not possible to code the communication in use due to video or audio capture problems.

The coding structure has been edited and refined, and employed with momentary time sampling provides a potentially useful method of quantifying and qualifying the relative proportions of communication modalities employed by interlocutors during interaction. ✱

Pippa Bailey, *Research Student*

REFERENCES

Argyle, M. (1975). *Bodily Communication.* London: Methuen & Co. Ltd.

Beukelman, D. & Mirenda, P. (2005): *Augmentative and Alternative Communication:*

Supporting Children and Adults with Complex Communication Needs. 3rd Edition. Baltimore: Paul H. Brookes Publishing Co.

Brulle, A. & Repp, A. (1984): *An investigation of the accuracy of momentary time sampling procedures with time series data.* British Journal of Psychology, 75, 481 - 485.

Flewitt, R. (2006): *Using video to investigate preschool classroom interaction: education research assumptions and methodological practices.* Visual Communication 5(1), 25-50.

Harris, D. (1982): *Communicative interaction processes involving non-vocal physically handicapped children.* Topics in Language Disorders, 2 (2), 21-37.

Light, J. Collier, B. & Parnes, P. (1985): *Communicative interaction between young nonspeaking physically disabled children and their primary caregivers: Part III - modes of communication.* Augmentative and Alternative Communication, 1, p.125-133.

Martin, P. & Bateson, P. (1993): *Measuring behaviour.* 2nd Ed. Cambridge: Cambridge University Press.

Millar, S. (2001): *Supporting Children Using Augmentative and Alternative Communication in School.* Communicating without Speech: Practical Augmentative and Alternative Communication, ed. Cockerill, H. & Carroll-Few, L. London: MacKeith Press.

Murphy, J. Markova, I. Collins, S. & Moodie, E. (1996): *AAC systems: obstacles to effective use.* International Journal of Language and Communication Disorders, 31 (1), p.31-44.

Penington, L. & McConachie, H. (1999): *Mother-child interaction revisited: communication with non-speaking physically disabled children.* International Journal of Language and Communication Disorders, 34, p.391-416.

Popich, E. & Alant, E. (1999): *The Impact of a Digital Speaker on a Teacher's Interaction with a Child with Limited Functional Speech.* South African Journal of Communication Disorders, 46, p.73-82.

Smith, M. (1994): *Speech by any other name: The role of communication aids in interaction.* International Journal of Language and Communication Disorders, 29 (3), p. 225-240.

Soto, G. & Hartmann, E. (2006): *Analysis of narratives produced by four children who use augmentative and alternative communication.* Journal of Communication Disorders, 39, p.456-480.

Tomasello, M. (1995): Joint Attention as Social Cognition. In: Moore, C. & Dunham, P. (Eds) *Joint Attention.* Hillsdale, NJ: Erlbaum, 103 - 133.

Von Tetzchner , S. & Martinsen, H. (2001): *Introduction to Augmentative and Alternative Communication.* 2nd Ed. London: Whurr Publishers Ltd.

APPENDIX 1: CODING CATEGORY DEFINITIONS

Target Behaviour: Speech

Definition: Speech refers to human communication through audible language (Encyclopaedia Britannica, 2009). In the case of this study, this includes all recognised vocabulary including fillers (erm, umm).

Elaboration: Speech is coded when any participant initiates or is during production of a recognised vocabulary, including all fillers (e.g. err, um).

Target Behaviour: Vocal Gesture

Definition: Vocal gesture refers to the voluntary production of a communicative vocalisation that is unrecognisable as any form of vocabulary.

Elaboration: Vocal Gesture is coded at any point in which a participant produces a vocal utterance that cannot be identified as part of a recognised vocabulary or as a filler within an interaction.

Target Behaviour: AAC-Encoding

Definition: AAC-Encoding refers to any encoding of an AAC device via the access mode being used by the participant e.g. - touch of the device, switch access, eye gaze.

Elaboration: AAC-Encoding is coded when the participant is initiating or in the process of accessing the AAC device through the expected access method (touch screen, eye gaze, switch) in order to produce a communicative output.

Target Behaviour: AAC-Output

Definition: AAC-Output refers to any information sent by a participant to a communication partner(s) by synthetic or digitised speech produced from an AAC device. (Beukelman & Mirenda, 2005).

Elaboration: AAC-Output is coded at any point during an output which has been produced by an AAC device as a result of AAC-encoding by the participant.

Target Behaviour: Eye Contact

Definition: Eye contact refers to an instance in which participants are looking at each other in the area of the face (commonly the eye region) (Argyle, 1975), or when one participant is attempting to do this but this is missed.

Elaboration: Eye contact is coded at any point during which both participants make or are holding direct eye contact, or at any point when one participant looks at another to make eye contact, even if this is missed by the conversation partner. This is not dependent on length of eye contact/attempted eye contact.

Target Behaviour: Gesture

Definition: Gesture refers to voluntary bodily actions by hands, head or body which are intended as communicative. (Argyle, 1975).

Elaboration: Gesture is scored at any point from initiation to termination of a gesticulation being used, that is not part of a recognised form of sign language, or in reference to an object within the surrounding environment.

Target Behaviour: Sign

Definition: Sign refers to any use of a recognised Sign Language vocabulary (e.g. Makaton, BSL, Signalong) by any participant

Elaboration: Sign is coded at any point during the completion of a sign that is identified as being from a recognised sign language vocabulary by any participant.

Target Behaviour: Environmental Reference

Definition: Environmental Reference refers to the act of making a gesture towards something within the communication environment specifically to refer to it.

Elaboration: Environmental Reference is coded when any participant uses voluntary hand gesture to indicate an object/ person within the communicative environment.

Target Behaviour: Facial Expression

Definition: Facial expression refers to an individual using the face to form expressions that are recognised as demonstrating an emotion or state.

Elaboration: Facial expression is coded when a participant voluntarily produces a facial display that clearly represents and communicates to other participants an emotional state (E.g. smiling, frowning) (Beukelman & Mirenda, 2005).

Target Behaviour: Shared Attention

Definition: Shared attention refers to a situation in which participants both look at the same object and are both aware of the fact that they share a focus (Tomasello, 1995, Cited in VonTetzchner & Martinsen, 2000).

Elaboration: Shared attention is coded when two or more participants are both looking at the AAC device with joint awareness of the shared focus.

Framework for definitions taken from:

Barlow & Hersen (1984): *Single Case Experimental Designs: Strategies for Studying Behavioural Change.* Oxford: Pergamon Press PLC.

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