

# Communication Matters



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**THE JOURNAL OF COMMUNICATION MATTERS / ISAAC (UK)**

**AAC Implementation - Communication Book - Next Steps - Literacy Instruction  
- Creating Support Materials - Challenging Attitudes - Key Words to Sentences -  
Symbolising in PowerPoint - Patients in Acute Care - Digjobb - Communication  
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*Well done to Lucy and others, seen here enjoying a workshop as part of our Mentoring Project. Find out more on page 7.*

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# Chair's Report

HELEN WHITTLE

I hope you are all safe and well.

This is the second Chair's Report I have written since the beginning of the lockdown in the UK. Over the months, we have been able to see more clearly the effect that the coronavirus pandemic has had on lives and on the ways we communicate more widely. We have also become more aware of the effect that it will have on many charities, including Communication Matters (CM).

Many of you will have received our special request letter to inform you of our current situation; please share this with your family and friends. A copy can be found on page 3.

Emily, our Charity Manager, was furloughed for April and May but is now back at work with a new emphasis on fundraising. As a charity, we are looking at ways of reducing costs, and also at providing adapted services and resources that will be useful to AAC users and their supporters.

One of the new initiatives that is proving to be a success is the AAC user chats that are being co-ordinated by Laith Ritchie and Andrea Sharples. These opportunities for a chat with other AAC users have seen enthusiastic involvement from an increasing number of users. You can find out more about these meetings from Andrea on page 6. As a Board, we are conscious of the fact that we currently do not have an AAC user who is a Trustee, and so it is great that the AAC user group have agreed to give the Board of Trustees feedback relating to new initiatives and other queries that can help steer CM in these uncertain times. It is likely that this method of rapid and remote communication can be harnessed to develop an AAC user group that can guide CM in the future. ISAAC is also arranging for online chats: some of these are available during the night due to time differences, but some are more accessible to us in the UK.

As the CM Conference was sadly cancelled, we are looking to put on a series of small, online events to keep us connected despite not being able to meet at the Conference. Please keep an eye on our Friday Announcements and social media pages for the latest news.

The Mentoring Project is now in the second year of the 5-year funding we received from the National Lottery Community Fund. In light of the pandemic, face-to-face training courses have been suspended, but online meetings and training are now being used to help deliver the qualifications successfully during lockdown. The courses have proved a welcome, accessible series of sessions to work towards during lockdown for a number of AAC users. You can read more of these developments from Verity on page 7.

In an attempt to reduce costs and promote sustainability, we are trialling this version of the Journal as a one-off PDF download. We would appreciate any feedback about this change in its production. Please email [admin@communicationmatters.org.uk](mailto:admin@communicationmatters.org.uk) with any comments or suggestions. We really want to know what you think of this edition and how it works for you. As a reminder, the past years' CM Journals are available as PDFs on the website here: <https://communicationmatters.org.uk/research/journals/>.

Please share this version of the CM Journal with friends, family and colleagues to spread the word about AAC in the UK. If this encourages readers who wouldn't normally have access to a copy to become members of Communication Matters (<https://communicationmatters.org.uk/about-us/join-us/>), or make a one-off donation (<https://www.justgiving.com/communicationmatters>) then that would be fantastic. Thank you.

## A huge THANK YOU

to our Trustee, Saff, who did  
a fundraiser on Facebook for  
her 50th birthday in May and  
raised an amazing

**£450**

for Communication Matters!  
Thank you!



**Have you got a birthday coming up  
and would like to raise donations for  
CM? It's easy to set up!**

If you have Facebook go to  
<https://www.facebook.com/fundraisers/>  
or you can donate via our JustGiving or  
Virgin Money Giving pages.

**Donate your birthday to  
#SaveCM**



2<sup>nd</sup> July 2020

Dear Member and friend,

I hope you are well and adapting to the challenges that these uncertain times present to us all.

I am writing to you personally, as I felt it was appropriate to inform you that unfortunately Communication Matters, like many charities, is facing financial difficulties. The principal reason we can provide the services we do as a charity is due to membership payments and the small 'profit' generated from people attending Study Days and the Conference. As we have had to cancel both the Conference and the Study Days, we are now using our reserves.

If we continue as we have done historically, then it is likely that we would cease to exist at some point in the second half of 2021.

We have a 3-pronged plan to ensure this does not happen:

1. Applying for grants aimed to help charities through these difficult times.
2. Doing some virtual events which should be cheaper to run and hopefully will still raise some modest revenue.
3. With reluctance, asking our members if they feel able to make a one-off donation to ensure that we can continue to operate. We have 190 members and if say 50% were able to contribute £10 that would raise £950. Please do not feel under any obligation to donate. We are painfully aware of the fact that COVID-19 will cause financial issues for many of our members. But if you are able to donate, please go to: <https://www.justgiving.com/communicationmatters> today.

Your money will help us continue to: run our website; host remote support groups for AAC users; produce our journal which gives useful advice and support to families and others about technology and communication; explore virtual events; and provide regular weekly updates about free resources and online training opportunities via our online AAC Forum.

No amount is too small!

If you are able to make a one-off donation, please go to: <https://www.justgiving.com/communicationmatters>

If you are able to set up a monthly recurring donation, please go to:

<https://www.justgiving.com/communicationmatters>

If you aren't able to donate, you can still help in other ways: Firstly, please share this message with your friends and family. Secondly, what about starting your own fundraising page on JustGiving? It is easy to do and there are many challenges you can set yourself in lockdown to help raise funds for us. You can find out more at: <https://www.justgiving.com/fundraising/tips/fundraising-page-toolkit>

Rest assured we remain 110% committed to navigating our charity through these difficult times, so we can continue to support our members and the wider AAC community and in due course hopefully hold another conference (when appropriate) where we can all:

- a) Appreciate one another's company and support
- b) Ensure that the best AAC knowledge and technical help is available for our members
- c) Enjoy the conference dinner and dance in fancy dress!

Thank you for your help.

Kind Regards,

Helen Whittle (Chair of Communication Matters, on behalf of the Board of Trustees)

# Trustees' News

## In memory of Bruce Baker



### Foreword by Janet Scott

When I heard that Bruce Baker had died in May of this year, I thought it would be nice to have a short tribute to him in the Communication Matters Journal. The response has been overwhelming, with input coming from far and wide. When Bruce Baker and Minspeak® first appeared on the scene the AAC world was a quite different place than it is now. Symbol-based communication was mostly no-tech, or simple devices with predetermined vocabulary/phrases. Read the full tribute and get a better idea of how his legacy continues to influence AAC today, on <https://communicationmatters.org.uk/blog/>. I hope that this abbreviated collection of memories will give you a picture of Bruce Baker, the man behind Minspeak®.

**Martine Smith:** I was a novice Speech and Language Therapist when I first met Bruce Baker. My AAC world at that point largely revolved around copying, cutting and pasting graphic symbols, battling with laminating paper that insisted on bubbling as I tried to create durable communication boards. Something was needed to bridge the gap to speech synthesis for those who could not read and spell. Bruce invented that bridge, the revolutionary Minspeak framework. I wrestled with written descriptions of Minspeak, trying to understand what it could do, but it was only when I first heard Bruce describe it that it all fell into place. A giant in every sense, we owe him an enormous debt.

**Sally Millar:** Bruce Baker was unique - a real hero; giant brain, polymath, original thinker, and a committed, passionate and generous champion of people who use AAC. The world of AAC will be a paler and poorer place without him.

I remember very clearly first meeting Bruce Baker in 1986 at the ISAAC Conference held in Cardiff. His

presentation hit me like a lightning bolt - it was an absolutely seminal moment in my whole AAC career. The one thing Bruce as a presenter required was an endless supply of Coca Cola, and once he got 'wound up' into his talk, he would speak without any notes - and without apparently drawing breath! - for hours on end. It was exhilarating.



*Bruce at CALL Scotland*

**Janice Murray:** I had the privilege of attending a day-long workshop presented by Bruce in Edinburgh in the late 1980s. He spoke eloquently and academically about the theory behind 'minimum effort speech'. In fact, he was effervescent! I was a convert to the 'Minspeak' principles and its usefulness to people who might benefit from it. He was a true inspiration in terms of encouraging us all to think outside of the box.

**Stephen von Tetzchner:** The sad message of the passing of Bruce Baker awakened many memories in me. Bruce was a prominent member of the AAC community and ISAAC from the very start. He had a life-long devotion to evolving aided communication, and his original ideas and the Minspeak system represent important contributions to the field. His articles in the computer magazine Byte in the 1980s were intellectually stimulating when electronic communication aids hardly existed, and they helped gain insight into aided communication processes.

**Janet Larcher:** I remember him always bringing his mum on trips with him, his liking for malt whisky and for browsing British antiques. I was always amazed that he had seen the inscriptions on the Egyptian tombs and used that as a basis of an icon-based communication method - that was mind blowing. He was a very sweet and charming man with a massive intellect who I suspect also had an iron will and the ability to drive a hard bargain!

**Peter Zein:** To my dear friend Bruce Baker. I am glad I did meet you because you did believe what you were doing is correct to help people in their life and when I did meet you in Pittsburgh it was amazing because your passion about giving language to people.

*Peter using Bliss Minspeak Words Strategy on his Accent communication aid*



# Trustees' News



*Bruce and Shirley*

But I don't forget you my friend because you did help me to use my Blissymbols on your Minspeak and that was amazing thing because both Shirley McNaughton and Bruce Baker worked together.

I am going to say thank you to my friend Bruce Baker. I will not forget you sleep well my friend.

**Gillian Rumble:** Bruce Baker's inspirational creation of Minspeak opened up a world of vocabulary to people using Touch and LightTalkers (cutting-edge technology at the time) who were limited to fixed overlays of 128 locations or less.



What made Bruce the best of company was his sense of humour and fun. I could always rely on him to have the most outlandish of stories to tell. I have many happy memories of sitting with him, catching up on the gossip or laughing at one of his hilarious anecdotes. The last time I saw Bruce was when he invited Judy King and me to present at the Pittsburgh AAC Language Seminar Series in 2016.

**Judy King:** I have never known another person who had such a vast memory, intellect, and ability to impart knowledge in such depth on a wide variety of subjects. He was also tremendously compassionate and helped so many people. I presented with him at CM in 2008, which was quite intimidating since he would suddenly throw the spotlight on you to ask for examples of therapy to support his presentation, which often went slightly off at a tangent.

**Toby Hewson:** I met Bruce 2 or 3 times at Communication Matters Conferences. He was very quiet and kind man. He wanted me to go to his Pittsburgh Employment Conference 1 year for AAC people but I was emergency chair Communication Matters and I couldn't go. I was sorry because his Conference I would Love to go.

**Deborah Jans:** My memory is of going to my first AAC lecture while working in London at a school for children with physical disabilities. We were off to see some American called Bruce Baker. This was one of my first introductions to the world of AAC. I remember being floored by the idea of multi-meaning icons and the way we could give our clients more vocabulary without making the communication aid very big.

**Nicky Grey:** A truly inspirational, devoted and dedicated practitioner. Many years ago, I remember attending a Communication Matters conference in Leicester and listening to his wonderful presentation. It has stayed in my memory forever. Attending his workshop made a huge impact by developing my own skills and knowledge, and this has influenced my ongoing practice in the field of AAC.

**Mark Street:** I have fond memories of Bruce Baker both professionally and as a friend. Bruce and I spent many weeks working together over the years, and he taught me so much and shared his knowledge and experiences. As a friend, Bruce and I had many fun times together and shared some great experiences. We travelled the length and breadth of the UK and USA, often stopping when passing a bookshop or antique furniture shop. It wasn't unusual for him to return home with far more luggage than he originally came with. Although many people may have not met Bruce they will be profoundly affected by his work in the field of AAC. His legacy will last; he will be very sadly missed.

*Judy, Bruce and Gillian in Pittsburgh 2016*

# Trustees' News

## Communication Matters AAC User Focus Group

**ANDREA SHARPLES, CM TRUSTEE**

Communication Matters (CM) has the voices and opinions of AAC users at the heart of all the organisation's activities. To make sure these voices are heard, Communication Matters is recruiting interested AAC users to a focus group where the direction, activities and ideas of Communication Matters can be discussed.

As a start to this, AAC user chats took place virtually in May and June, discussing a range of topics and initially just getting to know each other. The chats took place on Zoom and were open to all people who use AAC.

Two CM Trustees, Andrea Sharples and Saffron Murphy-Mann, attended the meetings and Laith Ritchie, ATmentor, supported with the organisation of the chat.

As well as lots of ideas about ways to keep busy during lockdown, many ideas for CM were also discussed.

All agreed that everyone would miss the CM Conference this year, especially the opportunity to socialise with other AAC users, families and professionals. The group had lots of ideas for online events to get the CM community together during October - AAC Awareness month - so watch this space!

The group also chatted about ways to fundraise for CM. Events such as a 'talkathon', sing and sign, t-shirts and other ideas were discussed to help raise money for CM.

AAC users also discussed how they felt about missing the opportunity this year to present at the CM Conference. The pros and cons of recording presentations vs waiting to present live in 2021 were talked about.



*First AAC Users Virtual Meeting*

The group agreed that they would like to be a focus group for CM, which will be key to its future direction. Future dates will be advertised on the CM Friday Announcements, so if you are an AAC user and would like to give CM your opinions, please join us if you can!

If you are interested in joining future meetings, please email:

Andrea Sharples (CM Trustee) [andrea@attherapy.co.uk](mailto:andrea@attherapy.co.uk), or Laith Ritchie (AT Mentor) on [laith@attherapy.co.uk](mailto:laith@attherapy.co.uk).



*Second AAC Users Virtual Meeting*

# Trustees' News

## Update on the Mentoring Project

VERITY ELLIOTT, PROJECT LEAD

### National Lottery Community Fund – Year 2



We are now in our second year of a five-year funded project with National Lottery Community Fund and it's been a challenging but rewarding 6 months.

### Where there are challenges, there are opportunities

Whilst there have been some significant challenges for everyone with regard to COVID-19 and lockdown, we have been able to adapt and change, and there is good news regarding how we have managed to review our delivery for the range of funded qualifications and opportunities.

The increased use of communication platforms such as Zoom and Microsoft Teams has enabled us to focus on distance learning and the wonderful opportunities that this provides. This is a new way of working for us and for our partners and AAC users, but it seems that everyone is getting used to some new and creative ways of working.

It is thanks to Kent & Medway Communication & Assistive Technology Service (KM CAT) colleagues, who first requested distance learning as we had booked some courses and were ready to start just before lockdown. We began with two AAC users completing Entry Level 3 Personal & Social Development. The qualification consists of four units and we arranged a number of Microsoft Teams sessions, the first for introductions and induction to the units and to start Unit 01 'Developing Self', with three more sessions for the other units (based on Relationships and Interpersonal skills) and a final session for review and celebration.

It has been a wonderful experience due to the collaboration with KM CAT colleagues, the AAC users, parents and carers. The feedback has been more significant than we first imagined, for example, one parent told us that her daughter had really enjoyed having something purposeful to do in lockdown, and another carer said that it had made the young person they support become more reflective and think about her independence. Both young people want to continue, and we are currently planning some more learning activities related to problem solving and independence.

KM CAT colleagues who supported the delivery told us, *"We would really like to continue to do this type of work with our students as it has helped to develop communication and interaction skills alongside AAC use. The focus has been on the young people being part of and in control of their learning rather than adults 'doing it for' them. Over the last four weeks there has been evidence of improved independence, greater engagement and active communication while the young people have taken on board the skills developed in the units. Overall we have seen very positive changes."*

In addition, we were aware that a group of AAC users who had already completed the mentoring qualification and

who work with ATtherapy, were also ready to progress to Level 2 qualifications. The units selected focused on different aspects of employability and performance in the workplace, in particular mindset and motivation, problem solving, innovation, teamwork and social media in the workplace, as well as other relevant units. AAC users start with the same first mandatory unit; they then select their own portfolio from a range of optional units to make up the full qualification. The feedback to date has been really good and the progress has been inspiring.

*"Writing in proper paragraphs gives me the space to formulate my own thoughts"*

*"I remember the first time, I didn't know what to do but I am growing in confidence and really enjoying the course and feedback about my work, thank you"*

*"I enjoyed working through the work at my own pace"*

*"It has been good, finding out about relevant laws. I feel really proud and I like the honest feedback"*

### The learning so far

The positive outcomes related to distance learning have been wide and unexpected. We were aware that lockdown had a significant impact on everyone and, in particular, AAC users. But we were unaware of the full extent of the impact and potential for self-development and personal achievement. It is evident that distance learning and sharing together, even through remote communications, has provided additional benefits; for example, building confidence, developing independent learning skills, significant recognition of the individual's own sense of achievement and 'can do' attitude, using AAC and other software to its full advantage and in creative ways, and so on. Most importantly, the use of social media and video platforms has enabled far greater accessibility with small group work and individual 1-1 support and guidance.

### Next steps

We will continue to develop our distance learning opportunities and it is wonderful to see how these can be further adapted to meet service needs and most importantly, individual learner needs.

We are already in the process of developing some opportunities in Bristol & Plymouth, Ipswich and South Manchester.

In summary, we are able to fund more AAC users with a wide range of learning and development opportunities, including progression, as the money we save on travel and hiring venues can be re-directed to where it is needed most.

### For more info:

Please go to <https://communicationmatters.org.uk/what-we-do/projects/mentoring-project/> or contact **Verity Elliott** on [verity@creativityinpractice.co.uk](mailto:verity@creativityinpractice.co.uk) or 07891 959048.

# Getting Parents on Board with AAC Implementation

**BARBARA VAN'T WESTENDE,**

Speech and Language Therapist, AssistiveWare

**MURIËL KOK,**

Senior Researcher, AssistiveWare

Email: b.vantwestende@assistiveware.com

## Introduction

In the Netherlands, Augmentative and Alternative Communication (AAC) is not always a priority in educational settings. AAC systems are often basic and students seldom progress beyond choice-making and requesting. To get AAC 'going', AssistiveWare started a school pilot project to increase AAC knowledge and to implement core vocabulary. Key activities in this project included school visits and workshops to teach AAC best practice. The school pilot project served as a 'sandbox' for exploration and testing. We increased our understanding of what works well, to guide professionals and parents towards AAC best practice.

For effective implementation, it is important that all people involved are guided and supported in the use of AAC. AAC implementation is like a triangle: it involves the AAC user, AAC professionals and parents (*Figure 1, Triangle of AAC Implementation*).

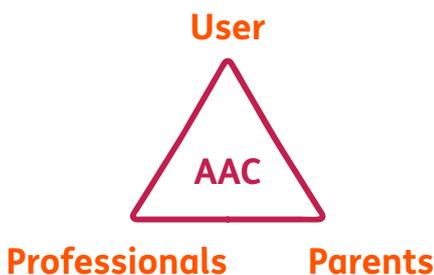


Figure 1, Triangle of AAC Implementation

Supporting the communication environment with parents is crucial for success in

AAC. Difficulties within this environment can lead to major barriers in participation for AAC users. The role of parents as successful communication partners can contribute greatly to positive outcomes.

## Motivational Model

Within the school project, we focused on the way AAC professionals can support parents starting an AAC journey with their child. From earlier experience we knew that each parent needs their own personal guidance. There is no universal way of guiding a parent. Each parent needs something different when it comes to implementing AAC in daily life.

We used qualitative research and personal experience to identify four key motivations for parents. The model we used was based on Jung's theory of personality (Callebaut & Hendrickx & Janssen, 2002). These motivations in parents can be seen to affect how they choose and use AAC with their child. The motivations summarise their needs, behaviour, challenges and frustrations. It also shows what works for them, how they can be best approached and how to motivate them.

When taking a closer look at this Motivational Model (*Figure 2, Motivational Model*), you can see two axes.

The horizontal axis represents *ego-oriented* versus *social-oriented* (I versus We). This helps us to see if we are more self-motivated or motivated by social or group situations. And the vertical axis represents *openness* versus *feeling insecure* about the future (secure versus insecure).

This helps us to explain if someone will be open, presume competence and go for it or whether they will feel worried and insecure.

Every step a parent takes is based on them wanting the best for their child. To understand parents better, it is useful to consider their place in the model.

We know from the theory (Callebaut, Hendrickx & Janssen, 2002) that people are not always in the same place in the model. In fact, someone can switch between feeling insecure to more secure and from ego-oriented to more social-oriented depending on the subject or situation they are in.

Additionally, everyone has a basic motivation that they address when it comes to new situations and new information. For most parents, implementing AAC is a new journey and brings them back to their main motivation: the place in the model that makes them feel comfortable.

To better understand parents' needs, it helps to consider their 'safe' position in the model.

Within the school project we noticed that most of the parents were below the horizontal axis of the model. Most of them were feeling insecure. We supported some parents that were ego-oriented and some that were more social-oriented.

## Personas

Based on our personal experiences and the research insights, two personas were created representing these two "types" of mums. Personas are fictional

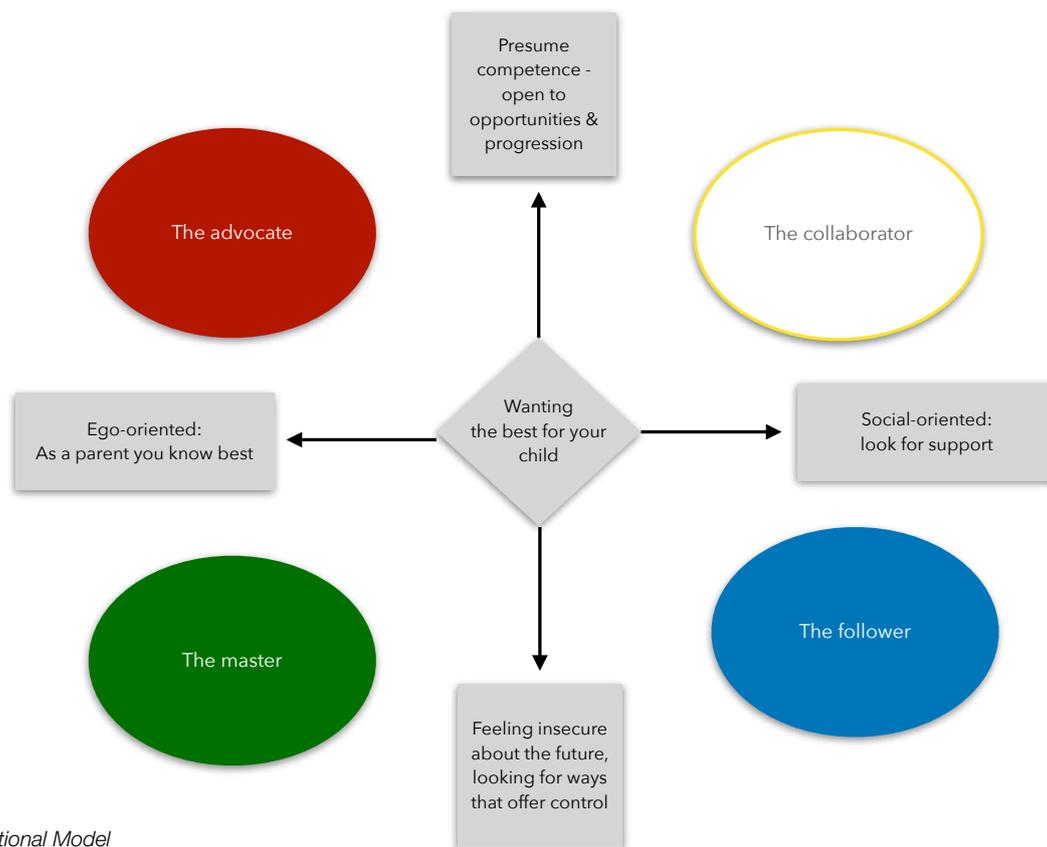


Figure 2, Motivational Model

representations of an audience or user group. The characters we created represent the different motivations of parents.

Working with a persona can give the AAC professional a better understanding of how to approach parents, based on their motivation for implementing AAC.

For these personas we chose two mums. Most of the time, mums take the lead when it comes to the AAC journey and its implementation. But personas can be used for each and every person in this AAC journey.

If we look at the Motivational Model, we focused on the ones below the horizontal axis.

The mums can feel more insecure and can be ego-oriented (Figure 3, Femke) or they might be social-oriented (Figure 4, Nienke). Each persona has her own needs when it comes to implementing AAC in daily life. These personas need a different way of guiding, and guidance, to make implementing AAC easier.

### The first persona is Femke

Femke strives for independence. She always challenges health care professionals and likes to be one step ahead of them. She takes the lead when it comes to making AAC choices and implementation decisions. She wants to fully master

AAC before she will introduce it to her daughter. This means that she has a lot of knowledge, but has difficulty starting to actually implement AAC with her child.

A Speech and Language Therapist can guide Femke by supporting her independence: she needs to feel in control of any decision that needs to be made. Femke needs to be informed about the

small steps in the journey she is taking. Everything needs to be well prepared and thought through. Sharing the same goals is important to her, 'being on the same track'. Guiding and stimulating her to take the next step are important. She needs to be provided with the right information to encourage her to take the next step when introducing AAC to her child.

**Femke**  
Mother of Emma  
Non-verbal  
Atypical RETT syndrome

“ I am her mum, I know what she wants and needs. Others should not tell me what is best for her. ”

Femke needs to be:

**Who is Femke?**

- Striving for **independence**: she knows best what her daughter needs
- Challenging** health care professionals: she is not avoiding any discussion
- One step ahead of the professionals (she is always **well-prepared**)
- Taking the lead** in AAC choice & implementation
- Fully **mastering AAC**, before she will introduce it to her daughter (and before involving others)

- Supported** in her independence: make her feel like she is in control of any decision
- Informed** about small things in the journey: make her feel everything is well prepared and thought about
- In control of decisions** that are made: make her feel that you are both on the same path
- Guided and stimulated** to take new steps: provide her with the right information that encourages her to take the next step



Figure 3, Femke persona

## The second persona is Nienke

Nienke feels insecure about all the decisions involving her child. She is building a safety net for her child. This safety net consist of professionals she trusts. She is heavily focused on the “here and now”. She feels satisfied with “what is”. She is looking for support and expert guidance on AAC implementation.

A Speech and Language Therapist can guide her by providing her with small chunks of information. She needs to feel that she can understand everything and, most importantly, that she can apply it to her own personal situation. Next to giving her bite-sized chunks of information, she also needs the professional to guide her in small steps. She prefers to be taken by the hand. The therapist has to understand

her situation and follow her path. Nienke needs a lot of encouragement: she can do this! The therapist has to make her feel proud and secure about every step they will take together. Togetherness is the keyword in guiding this mum in implementing AAC in daily life.

## Conclusion

Considering parents’ position in the Motivational Model provided us with the opportunity to better guide parents during their AAC journey. By doing this, the process of getting started with AAC can be made easier and smoother. Everyone can feel onboard and involved.

Often, much time is spent talking about AAC systems and AAC users. Instead, by taking a specific and close look at communication partners (such as parents), it can help any team work together towards successful communication.

Let’s try to close the triangle in AAC implementation and make sure that there is good collaboration between AAC users, parents and professionals.

## References

Callebaut, J. & Hendrickx, H. & Janssens, M. (2002). The Naked Consumer Today: Or An Overview of why Consumers Really Buy Things, and What This Means for Marketing.



**Nienke**  
Mother of Joost  
Non-verbal  
No diagnoses

“ We follow our SLP when it comes to AAC. I trust that she knows best what works for our son. ”

**Nienke needs to be:**

- **Provided** with small pieces of information: make her feel that she can understand it and apply it to her own situation
- **Guided** in every small step: make her feel that you understand her situation and follow her path
- **Encouraged** ‘she can do this’: make her feel proud and secure about every step you take together
- **Understood:** give her a sense of togetherness



Figure 4, Nienke persona

## My Fundraising Challenge for Communication Matters

**Communication Matters** means a lot to me. As you may be aware they are facing financial difficulties and will likely cease to exist in the next year. This would be a huge loss to all of us in the AAC community – we cannot allow this to happen! So, I have decided to spend the month of August raising awareness and funds for CM. I love riding my mobility scooter but do not have my communication device on it. I will ride my scooter most or maybe every day throughout the month (whilst observing social distancing) and aim to do #500mileswithoutavoic

Search on Facebook: @500mileswithoutavoic



**Jamie Preece**

Visit my fundraising page: <https://www.justgiving.com/fundraising/jamies500mileswithoutavoic>

# Developing a User-Centred Communication Book for the Super Core Vocabulary

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## Background

Children learning to use AAC often start with paper-based AAC, building their language and communication skills using symbol boards or books. Often, if and when they progress to a communication device, they are faced with learning a new symbol vocabulary and a new layout.

Super Core is an AAC vocabulary designed and used in Grid. It focuses on making it easier for children to learn and thrive using symbol AAC. All design decisions were made with this audience and this aim in mind: from consistent word locations, to presenting activity-specific vocabulary alongside core words to help teach meaning throughout the day, across contexts.

It was always hoped that it would later be possible to create a robust Super Core Communication Book which followed these same design principles in a format that was easy to use and easy to learn with. We wanted to offer Super Core in both electronic and paper-based forms,

addressing the gap in the communication solutions on offer from Smartbox and allowing for a full circle approach to AAC.

## Balancing challenges

The process of designing the Super Core Communication Book was complex and included many challenges which often involved balancing different issues against one another simultaneously, as the following article will explore.

## Beginning the process of design

We started the design process in a way that will seem familiar to Speech and Language Therapists everywhere – with hours and hours of printing, cutting, laminating, and sticking!

From the start, we were challenging ourselves to create something that was hard-wearing but lightweight and portable; something that provided access to a full and comprehensive vocabulary whilst being intuitive to use.

We needed to ensure the book could be accessed directly, but also by those with more complex access needs through PAS (partner-assisted scanning). It is worth noting that throughout this complex design and development process, we have been lucky enough to work with a volunteer team of real-life researchers and have seen the book being used in real world environments, at various stages of development.

Throughout the entire project, this meant creating five different versions of the book, with a minimum of 150 pages per version, and trialling eight different folder designs, not to mention the endless rolls of sticky tape, paper cuts, lamination pockets and cups of coffee!

## Project aims

Based on working with groups of AAC professionals, combined with the clinical experience within Smartbox, we confirmed our intention to make a book which was:

- Lightweight and portable
- Durable and water resistant
- Able to be personalised
- Affordable
- Suitable to use by itself, or as part of an AAC system
- Suitable for those already using Super Core, or those new to Super Core
- Ready-made, ready-to-buy, with no time (or laminator) required!

We also aimed to make the book as consistent with the design principles of Super Core as possible. The book needed to be easy to use and navigate, and provide a comprehensive robust vocabulary while supporting the development of language. To aid this, it was key that the structure was faithful to the location and hierarchy of the vocabulary found in the electronic version of Super Core.

## How long does it usually take to make these resources?

We used a range of sources to find out how long people typically spent creating a communication book. Answers included: "I would say about a week if you worked on it continually", "I've done one in 6-8 hours but I had help", "It took about 14 hours", and "2 whole days if your printer is down the corridor and other people keep using it!".

At our talk at Communication Matters in September 2019, we asked the same question, and over half of attendees said it took more than a day. This is time spent *making* AAC instead of *teaching* AAC!

## Key challenges

### Navigation

With the navigation, we needed to convert a multi-dimensional vocabulary, designed around dynamic screen changes, into a 2D environment. We constantly brought focus back to the fact that this had to be done in a way that kept navigation simple and intuitive.

The initial tab-based solutions took on a life of their own and sprouted tabs left, right and centre! In order to simplify navigation, the book was divided into three key sections – core, activities and topics – each with a numbered index on a tabbed divider. All tabs were colour-coded and numbered, to give additional cues which could be used to navigate by both the communication partners and the AAC learner. The colour-coding and layout of tabs was also designed to replicate Super Core for Grid as closely as possible.

### An off-the-shelf product

Our aim was to create a book that could be used immediately, allowing the focus to be on introducing, facilitating and teaching communication without needing to spend hours making a resource.

Personalisation of vocabulary is key to any AAC system: it ensures that an AAC user can talk about what is most meaningful and important to them. For example, the need to include the names of their family and friends, favourite places, and personal information such as biographical or health information.

We agreed on two main ways to personalise the book. Firstly, by providing all the 'activities' and 'topics' vocabulary available as additional packs to be used with the book. This meant that all core vocabulary necessary for getting meaning and

intention across was available from the off, but the ability to only include content relevant to the user would make each book feel tailored to that user.

When designing the book, we made sure that the cell locations were as consistent as possible with the existing Grid 3 resources, so that it would be possible to make changes to the Super Core 30 grid set in Grid 3, and then use the Print from Grid feature to print those changes and include them in the book.

### Keeping the core consistent and always available

Fundamental to Super Core is that it is a core vocabulary system, based around core words which are highly frequent and highly functional.

In Grid, there is a consistent block of core

vocabulary which replicates itself across over an average of 50 grids, making it possible to access this vocabulary across a wide range of contexts and activities.

In early versions of the Communication Book, we explored the option to include the core on every page. This resulted in a lot of added bulk and weight, so we quickly agreed to explore other options. We ultimately decided to include a core vocabulary page at the front of the book which could be removed and used alongside other pages, and also to include a mini core which would be visible at all times. We acknowledged that the size of these symbols was much smaller but would still allow for modelling and partner-assisted scanning of vocabulary for those users with less accurate access or visual impairment.



1. Tilly uses the 'Cooking' vocabulary within the activities pages to make cakes at home with her family



2. Using the 'Animal' Topic page, Tilly learns about wild animals at nursery

### Weight, size and portability

It quickly became obvious that the book needed to be as lightweight as possible, to ensure that it was portable. There were several issues which contributed to weight and portability: the material the pages would be made from, the volume of vocabulary and the folder.

Feedback on early versions stressed the importance of a folder which was tough enough to be resilient, but not so tough that it could be used as a weapon! Research also told us that the book would ideally be able to stand up by itself, to enable communication partners to model language within activities where they might need their hands free to manipulate materials whilst also pointing to words in the book. So, after several different folder designs from several different manufacturers, we were pleased to find a folder which met these criteria!

In terms of the paper, regular paper stock was out of the window as it can hardly be described as robust! We were asked early on why lamination was not a suitable solution, and weight was a huge factor (also the fact that the pages became damaged very quickly) as we couldn't very well have a book that weighed more than our electronic devices!

We explored a wide range of paper types, and discovered a tear-resistant, water-resistant paper which seemed ideal.

However, when all the pages were printed and added to the folder, this paper made the book weigh over 5 kilos.

We worked with our printer to find a much lighter paper type which brought the weight of the book down to around 2 kilos, inclusive of all pages and the folder itself. Whilst this was above our target weight (we had the lightest of our communication aids in mind), this was something



3. The Communication Book is a perfect tool for self-initiated exploration of vocabulary

we agreed we had to compromise on, in order to ensure a robust solution and provide access to a really comprehensive, adaptive range of vocabulary.

The possibility of making the book smaller in order to reduce the weight and increase portability was explored but early feedback suggested that this would result in less accessibility for individuals with visual impairment, or increased motor skill demand for those directly accessing the book.

With that in mind, we agreed to keep the book at A4 size, using the layout and cell size of Super Core 30. The cell size of Super Core 30 was also preferred due to the larger font size, increasing the prominence of the written labels to support literacy as well as allowing communication partners to model language. The consistency across Super Core 30 and 50 means that even those using the Super Core 50 grid set would still be able to benefit from using the book.

And finally, a strap was added to the folder so that either communication partners or AAC users themselves would be able to carry the book with them more easily.

### Feedback so far

This paper was presented at Communication Matters 2019, and when we asked the audience for their initial thoughts on the book and its design, the feedback was overwhelmingly positive, with the book described as “robust”, “exciting”, “comprehensive” and “innovative”.

Initial user testing has also provided us with some of the following comments:

*“She loves it... you can see how happy she is that you understand her”, Tilly’s mother*

*“He has been able to tell us some really specific things and really surprised us”, Ben’s SLT*

*“Well thought out to match the Super Core app”, Anon*

*“There is no need to make it myself; projects professional image to parents/schools, vs home-made look of my usual core books”, Anon*

### Further development

We’re proud to be the first AAC company to offer a robust, comprehensive, ready-to-buy and -use communication book, designed to be used individually or alongside a comprehensive electronic vocabulary system.

As with any Smartbox product, we’re always keen to develop and improve our products, and we always value the feedback we receive. We look forward to hearing even more feedback on the Communication Book, and continuing its development long into the future!

### References

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



4. Split across Core, Activities and Topics, a wide range of words are readily available



5. Using a simple and intuitive tab system and mini core, the book allows users to quickly and confidently build sentences

# Next Steps on Your AAC Journey

## A film for the team around a child, who are preparing for a specialist AAC assessment

### CHRIS SHERLOCK AND CATRIONA BURKE

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For teams, families and clients anticipating a specialist Augmentative and Alternative Communication (AAC) service assessment, usually there is the hope that a Voice Output Communication Aid (VOCA) will be provided. Therefore, a great deal is felt to hang on the event of the assessment for those involved and those new to the world of Augmentative and Alternative Communication.

For ACT and services like ours, while we understand the assessment as a significant event in a client's journey, we know that it is not the moment of the

assessment that will make the difference to embedded and successful use of AAC for a child or young person (YP). Much more significant is the amount of sustained and consistent support needed to work towards language and communication goals with and for a child or YP. Long-term success is almost always a result of the family and local team pulling together with a good understanding of how to support daily AAC use with shared perspectives and approaches. Significant effort is required from all involved.

In England there are 14 services funded

by NHS England (NHSE) commissioned to provide specialist AAC assessment and, where prescribed, provide AAC systems including VOCAs. These services are commissioned to meet the needs of people with the most Complex Communication Needs (CCN - those who cannot use speech as their main form of communication); these are expected to be 10% of the population of people who might use Augmentative and Alternative Communication. Most of the 14 specialist AAC services serve adults and children in their region, with the most complex needs. ACT is one of those services serving the West Midlands, which has a population of 5.7 million spread over 6 counties.

In 2017, ACT carried out a service evaluation survey. A previous member of the ACT team, Hannah Jeffery OT, (Jeffrey, H. 2017) returned to work to carry out this study. Her role as an interviewer was made more impartial by her lack of involvement with recent clients. Hannah used a list of 167 ACT clients assessed in the years 2015/2016/2017, extracted from the ACT database, to find people to survey through phone interviews and visits. During the time of the survey, sadly 3 patients passed away, reducing the sample size to 164.

Survey inclusion criteria were:

- clients classed as 'Noncurrent' (i.e. episode of care complete, no longer receiving input), referred between 01/04/2015 and 31/03/2016, who were issued with a piece of equipment that was still with them.



- clients classed as ‘Current’, referred after 31/03/2016 until date of data extraction (15/6/2017), who were issued with a piece of equipment still with them.
- clients who had been referred for any, some, or all of our commissioned services: AAC, environmental control and computer access.

Of the sample of 164 clients:

45 agreed to be surveyed

98 were unable to be contacted to arrange a phone or face-to-face interview\*

21 declined to answer the survey

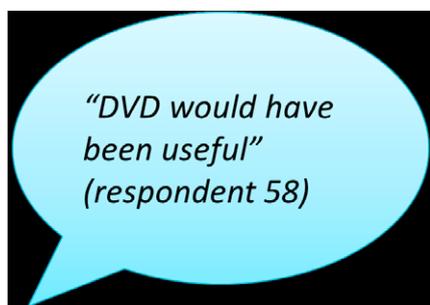
\*This is not unusual for us as we often struggle to contact clients who have such significant disabilities, and the purpose of the survey was to communicate directly with people who are our clients.

## Outcomes of one of the survey questions

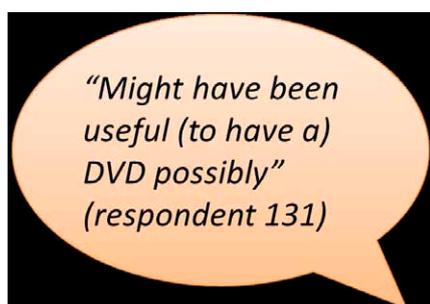
**Question 1. How do you feel about the information provided before your assessment?**

### Theme 2: Format of service information

The ACT service leaflet was not memorable to parents and they suggested other formats, such as a DVD.



*“Didn’t know before the appointment what we would be getting. We knew the service but not what was on offer from the service.... A DVD would have been good it’s a bit of a new world if you don’t know what’s available, you don’t know what would suit your child” (respondent 65)*



*“A more visual explanation especially for children with limited communication being able to show them where they’re going, the assessment room, what things might happen, would allay the parents’ fears as well as the child’s” (respondent 154)*

Hannah made a number of recommendations as a result of the whole survey; one was that a change was needed to the format of the information about ACT pre-assessment, and that a film should be created about assessment that provided more information in a more accessible way. The need for the film also went back to our clinical experience of witnessing the great emotional investment teams and families make in anticipation of a specialist AAC assessment, and the disappointment and frustration they feel when a referral is not accepted if NHSE eligibility criteria for assessment have not been met. The film was planned to try to show more of how the assessment is only part of the “next steps on an AAC journey” that has already begun.

Key to the NHSE criteria (<https://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-d/d01/>) for those who might have a specialist assessment are:

- Cause and effect understanding
- Understanding of the purpose of a communication aid
- Clear discrepancy between level of understanding and ability to speak
- Low-tech/paper-based AAC has not met all their needs; associated with having a clear idea of what a Voice Output Communication Aid will add to their functional communication.

Key issues for local teams and families are:

- Having a clear idea of the goals for the child/YP in terms of what successful and functional communication might look like for them in the longer term
- Getting paper-based AAC embedded in the child/YP’s life

And although it is not immediately explicit in the criteria:

- Getting going with support for the child/YP, to learn to use that paper-based AAC system, so that the skills of the user and those around them are growing before a VOCA adds complication. We know that device abandonment is common, but that a team who are ready to model and use

AAC throughout a child/young person’s day appear to make a significant difference to outcomes.

In order to achieve creating a film, we had to find a way forward without any extra funding or resources. Our team were offered a CQUIN (Commissioning for Quality and Innovation <https://www.england.nhs.uk/nhs-standard-contract/cquin/>) which was an incentive, although no funding was attached. Some money was found from within our budget to pay for the Clinical Illustration teams’ work. The CQUIN focused on quality improvement within the ACT pathway.

“To provide patients, relatives and their local team with greater insight of what to expect at the initial assessment and full pathway for the AAC and or EC services, auditing their perceived value”. With rationales of:

- Improving understanding; the assessment process for AAC takes in excess of 2-3 hours. The team plan to produce an online video that can be accessed by the local team following referral.
- Setting out what pre-work the local team is required to complete prior to the assessment.
- Helping to manage the expectations of the family as to what will happen at the assessment.
- Providing a local refresher that will help to improve the knowledge and skills of the local team in managing low-level need for future patients and improve the quality of referral and outcomes for specific clients.

During 2018-19, a film was created and a workbook written. In order to do this, we worked with children/YP, their families and professionals who had been through our assessment pathway before, plus the Birmingham Community Healthcare (BCHC) Clinical Illustration team who were really helpful and supportive of the process as well as actually doing the filming, editing and animation.

We created a story board and a title, and asked for comments from stakeholders on the plan, making appropriate revisions. Then we found people to be filmed, dates and venues. We also asked for photographs of “AAC used in the wild” from other families, to give more examples of AAC being used for functional communication in real-life situations.

As filming visits drew closer, we needed to plan and share questions for interviews



given the same “look and feel” as the film by the use of illustrations based on the animations in the film as well as some of the photos of “AAC in the wild”.

Next, we need to thank those involved, and celebrate and share the film with them. We then plan to pilot the film with teams who have been through the assessment process and those about to do so. This will include building in ways to audit the outcomes of the film, to see if it helps to meet the original aims of the CQUIN, and to explore if the feedback from teams and families matches the hopes that were expressed for a more accessible information format. This may eventually involve another service evaluation.

The ACT team will now reflect and use the film material in other ways, for example training. We will also think about films for other groups with CCN, for example people with acquired communication impairment through brain injury or neurological disease.

We look forward to sharing the film, finding out how it might help and sharing that news too.

With immense thanks to all of the children, YP, parents and professionals involved, Hannah Jeffery, Kate Owen and the whole BCHC Clinical Illustration team.

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before each date. For the actual filming, we needed to travel, get signed consent and a space to film.

Once we had the film, we needed to review the “raw” film clips, pick out the parts we wanted to use and identify time stamps. We then worked with Clinical Illustration to create a logical film linked to the storyboard and film clips we had chosen.

Gaps in the storyboard were filled with photos, voice-overs and animations,

therefore gathering ideas, examples from other sources and important animation elements was required.

We had to write the voice-over and record it and re-record it as we reviewed and trimmed the film, making corrections and additions. The film needed to be a length that was reasonable for a team to watch together, and so it ended up at 23 minutes long. Then we were ready to share the draft in March 2019 and get feedback from four audiences and ACT. After this, there was more work to do by the Clinical Illustration team, which they did with great dedication. At the same time, we began in earnest to plan and write an accompanying workbook for the film over the summer of 2019.

Now, in November 2019, we have nearly found a safe internet home for the film within our trust Vimeo site, using a password as promised in the consent for filming. The book is written and has been



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# Comprehensive Literacy Instruction for Beginning Conventional Learners: Translating Theory into Practice

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Individuals who use AAC experience a particular benefit from integrated instruction in language and literacy, since independent, conventional literacy skills are the modality upon which they communicate and connect with the larger world (Koppenhaver, 2000). Ultimately, learning to spell and use language provides a direct means of sharing thoughts, ideas, and feelings (Erickson, Koppenhaver, & Cunningham, 2016). This paper introduces the concept of conventional literacy as it relates to individuals who use AAC; it introduces a framework for implementing daily comprehensive, conventional literacy instruction. Finally, it concludes with a description of one application that allows parents, teachers, and clinicians to provide the kind of daily, evidence-based instruction that leads to growth for individuals who use AAC with conventional skills.

Research from the last several decades drives home the idea that all learners, regardless of ability, can learn to read and write. Today we know that meaningful, ongoing, comprehensive instruction leads all learners toward the endpoint of education around the world, which is to create citizens who can use their knowledge of the alphabet flexibly across contexts and partners (Erickson, Hatch, & Clendon, 2010). For individuals who have disabilities, the path is usually long, and progress can be difficult to measure, yet there is no greater priority for these individuals since independent, conventional literacy skills are often deeply intertwined with communication, especially for individuals who use AAC. Together, these facts

underscore the reality of literacy instruction as the de facto instructional priority for individuals who use AAC.

**Where we once thought** of language as a precursor to literacy, we now approach language and literacy as capacities that develop concurrently and in mutually reinforcing ways (Erickson et al, 2016). This shift makes all the difference for individuals who use AAC for several key reasons: (a) it exposes them to rich and meaningful experiences and instruction long before students demonstrate any mastery, (b) it connects them to the natural pleasures and purposes that drive literacy and language, and (c) it delivers varied and meaningful opportunities to

explore and apply new knowledge across all domains of listening, communication, reading, and writing.

Once we agree that all individuals can learn to read and write and that comprehensive instruction is critical, we must effectively select the method of instruction that is most likely to build on the knowledge and skills learners have accumulated.

This framework (see Figure 1) helps adults make decisions regarding what is most important to address in literacy instruction, based on four simple questions. It is easy to use, does not require vast training in literacy instruction, and nor does it demand that teachers or

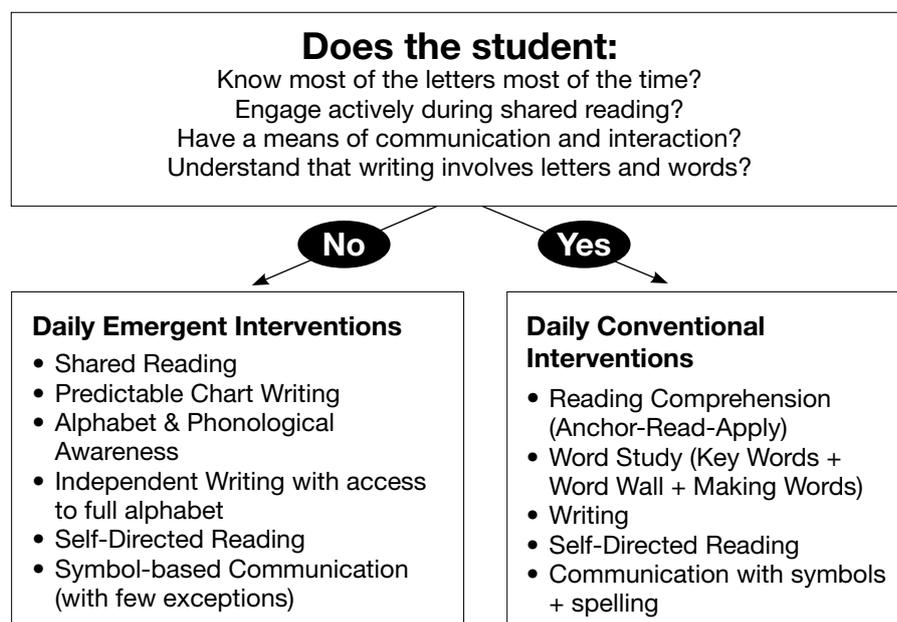


Figure 1. Comprehensive Emergent and Conventional Literacy Plans Based on Student Knowledge and Skills

therapists have extensive knowledge of individual students.

The four questions in the framework address student knowledge and skills in literacy. When we can confidently answer “YES” to all four of the questions, we have maximized the likelihood that the individual will benefit from comprehensive, conventional literacy instruction. Accordingly, we can proceed in providing daily exposure to the four literacy instructional routines that are most effective at this level. These are: reading comprehension, word identification and decoding, writing, and independent reading. Throughout, we must consistently pair these routines with symbol-based communication supports and opportunities to learn to use spelling to support face-to-face communication. By providing daily exposure, support, and interaction with the full scope of these routines, we provide the kind and quality of comprehensive instruction that leads to independence.

### **Conventional Literacy Instructional Routines**

**Reading Comprehension:** Reading comprehension instruction is intended to help learners construct an understanding of text they read or listen to others read. Most reading comprehension instructional routines have three parts: (1) activating, building, or anchoring background knowledge that relates to the text; (2) setting a clear purpose for reading or listening; and (3) completing a task that allows the individual to demonstrate understanding relative to the purpose for reading or listening. Learners also benefit from interactions while reading with adults who make explicit comments as to how they think about and consider new texts. This kind of modeling is critical to the efficacy of these routines. By reading and rereading the same text multiple times, adults can help students develop the ability to read the same text for multiple purposes and apply comprehension strategies or purposes across multiple books.

**Word Identification and Decoding Activities:** There are many ways to address word identification and decoding. For students who use AAC, we emphasize both spelling-based and analogy-based approaches (Erickson et al., 2016; Hanser & Erickson, 2007). It’s important that during the time dedicated to this instructional end, we ask learners to think about

how letters and sounds form words we know and use every day. This element of instruction helps learners strengthen both their orthographic and phonological skills, while also engaging with meaning and context. Throughout, teachers ask learners to build knowledge of real words and to focus on how decoding strategies can be applied not just to individual words, but to words in general.

During the spelling-based portion of this instructional routine, teachers select a set of 5-8 letters, including only one vowel, until learners consistently put the vowel in the right place while making words. Learners are instructed to make a series of words by adding, changing, or deleting letters. Informative feedback, which reinforces knowledge and clarifies errors, plays a critical role in providing word-learning instruction. Learners then sort the words they made according to onset letter/sound, rime, and word-length. This process helps them study the words they’ve made and determine how they are alike and different. The last step is to ask learners to use what they learned in the lesson to do something they were not taught directly. For example, learners might be asked to use the words they’ve made to make a new word that shares an onset, an ending, or a spelling pattern.

During the analogy-based portion of this routine, teachers identify personally relevant or meaningful keywords that represent some of the 37 most common spelling patterns in written English (Wylie & Durrell, 1970). Next, students explore these words and learn to use them to read and spell other words with the same spelling patterns. As students build knowledge of keywords, they can use this to read, spell, and use hundreds of words we frequently encounter in our everyday reading, writing, and communicating.

**Writing Activities:** Several key priorities make writing time meaningful for learners who use AAC. The first is that they must have access to all 26 letters of the alphabet. Next, they must be encouraged to write for personally relevant reasons and real audiences. Both of these elements cultivate motivation and connect the role and purpose of writing, which is to share how and what we think. Lastly, learning to write is a lengthy and evolving process for everyone under any circumstance. It is especially true for learners with disabilities, since they

rarely have access to the early writing experiences (like scribbling and drawing, for example) that lay the foundation for later, conventional writing.

For learners with motor impairments that preclude writing with a standard pen/pencil or using a standard keyboard, an alternative pencil might be required for writing. An alternative pencil that is fully accessible and easy to use is required to make independent writing successful. Alternative pencils can take many forms, including but not limited to onscreen keyboards, alphabet flip charts, braille charts, etc. and provide a way for students with physical disabilities to begin to translate thoughts into print. These supports, not to mention emerging new personal technologies, are providing critical inroads in supporting all students as they engage in writing, even before they have developed conventional ways to express their thinking.

**Independent Reading Time:** It can be easy to forget that we all need independent practice to learn new things. During this time, we challenge new knowledge and refine assumptions. Accessible technologies (e-books, eye-gaze software, etc.) and websites (Tarheel Reader, Bookshare, etc.) play a critical role in providing truly independent time with books. Learners need both the independent means by which to navigate books as well as access to a wide range of books that reflect various topics, genres, reading levels, etc. During independent reading time, learners begin to understand that reading helps them connect, discover, escape, learn, etc. Opportunities to self-select books plays a critical role in motivating independent reading and helps learners repeatedly expend the effort it takes to learn to read.

**Communication with Symbols and Spelling:** Embedded within the entire scope of comprehensive instruction, students must have opportunities to communicate and learn to communicate more effectively. Symbols provide a pivotal bridge in giving students access to the words they may not yet be able to decode independently. Additionally, access to all 26 letters of the alphabet allows AAC users to be increasingly generative and spontaneous across communication contexts, so that even for words that may exist outside of their current AAC solution, they can begin to apply developing knowledge of letter-sound relationships in spontaneous and generative ways.

No AAC solution contains every word. Considering this, the more we support students in their practice of letter-by-letter spelling, the more likely we are to close the lexical gaps they face (Erickson, 2017).

### **A Comprehensive Solution: Reading Avenue**

The framework explained above does two important things: first, it allows parents, teachers, and clinicians to easily identify whether a student requires ongoing emergent literacy instruction or is likely to benefit from conventional instruction. Second, it defines the instructional experiences linked with emergent and conventional instruction. These two things provide important first steps in supporting the literacy and learning needs of students who use AAC. Unfortunately, awareness of these things is one thing; delivering on them is another.

Effective and meaningful literacy instruction requires a great deal of thought, research, and, more importantly, time. Today's parents, teachers, and therapists

are required to do more with the same number of hours and minutes in a day. The clinical team at Tobii Dynavox, in consultation with Karen Erickson, endeavored to address these challenges by creating Reading Avenue, an accessible, comprehensive literacy program delivered through Boardmaker Online. This program provides up to three years of instruction and assessment, as well as a library of 120 primers and pre-primer level books that are suitable for students beyond the early years. Daily lesson plans ensure the delivery of comprehensive instruction that precisely matches the developmental needs of learners across the continuum of emergent and beginning conventional literacy learning (via three levels of differentiation instruction). Throughout, Reading Avenue emphasizes fully-accessible instructional activities and onscreen, dynamic, symbol-supported communication. Finally, Reading Avenue includes automatic data collection so that adults can continually monitor progress and tailor instruction so that all learners can develop as readers and writers.

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## Communication Matters Journal Cover Photo Competition

We would love to receive a photograph of you using AAC to go on the cover of the November issue of the CM Journal!

For details of how to enter please see our Facebook post @communicationmattersuk

Good luck!

**#MyAACinLockdown**

# Creating Support Materials using AAC Emulation Software - Ideas Factory!

**EMILY GABRIELLE**

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 Email: emily@liberator.co.uk

## What is Emulation Software?

Windows-based, Liberator’s free emulation softwares allow you to replicate any of our vocabularies on your PC. There are 2 versions, which are both free and represent the different devices we offer. There is Chat Editor if you are using our Chat devices such as NOVACHats, Chat Fusions or LR7s (this software also allows you to emulate our iPad-based TouchChat vocabularies) or NuVoice/PASS for those of you who are using our Accent devices. Both can be downloaded to the same PC, and they allow you to import copies of vocabularies from users’ devices, so you can simply edit and become familiar with the vocabulary or programming all from the comfort of your PC.

## How Can we Use it to Make Resources?

The great thing about these softwares is you don’t have to use them just for editing! With bit of creativity, you can create some great resources to support language learning.

Useful tools within the softwares allow us to take the icons we use within the vocabulary and paste them into other documents. This means you can replicate the icon sequence needed to produce a word. Within NuVoice/PASS, you have tools such as ‘smartchart generator’, ‘writing with icons’ and ‘browse icons’. Within Chat Editor, you have the ‘capture’ tool. But in both, you also have your Windows tools – if you haven’t used it already, your Windows ‘snip’ tool is absolutely brilliant for taking a ‘snip’, or copying, part of the screen on your PC. So, essentially, you can snip any part of the vocabulary you wish and paste it into other documents.

## Ideas Time!

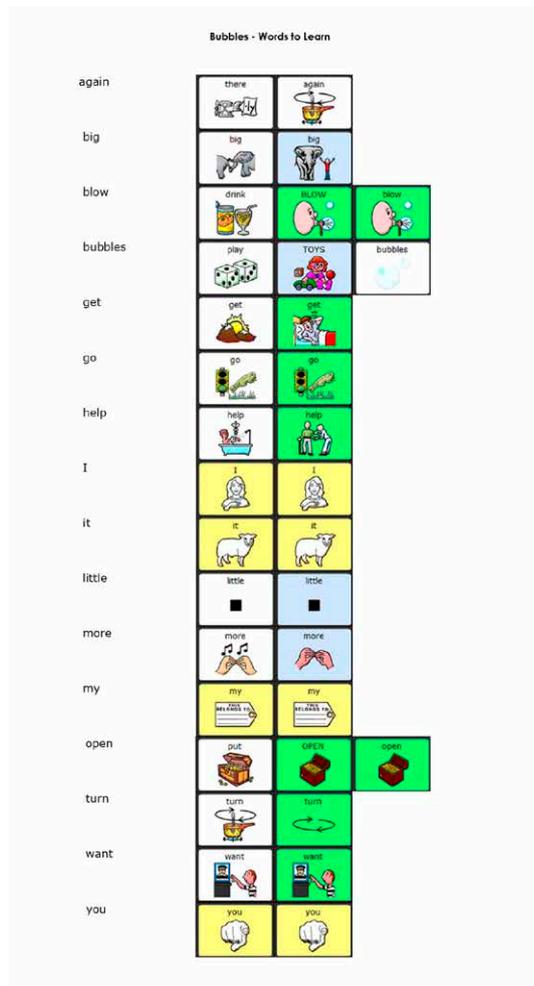
Let’s look at some simple ways you can use these tools to your advantage.

## Smartcharts

These are a great tool to learn the icon sequences required to say target words.

You can create word lists for specific activities, topics, stories or events.

They can be really useful for those supporting someone using a device, to help familiarise them with where words are and how we say them.



**Games and Peer Modelling**

Print out a snip of a vocabulary page for a boardgame and keep a paper copy in the box with the game. This gives you a great resource to use for modelling, a prompt to help us think which words to target in a session, or a handy low-tech support for anyone using a high-tech system.

**Social Scripts**

These can be a great resource to help someone 'rehearse' what they might say in certain social situations before trying it out live!

**Ice Cream Man**

Hello

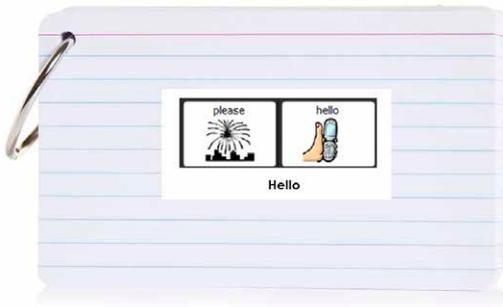
I want chocolate ice-cream please

Thank You

Goodbye

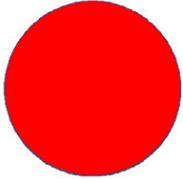
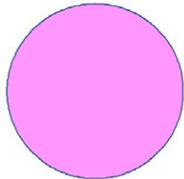
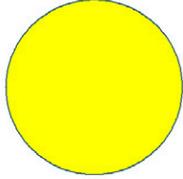
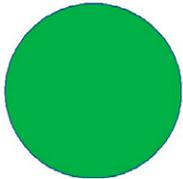
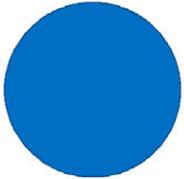
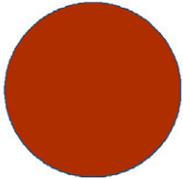
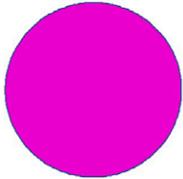
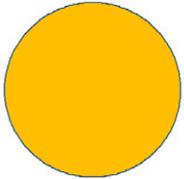
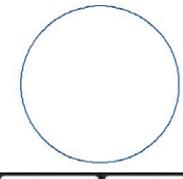
**Flashcards**

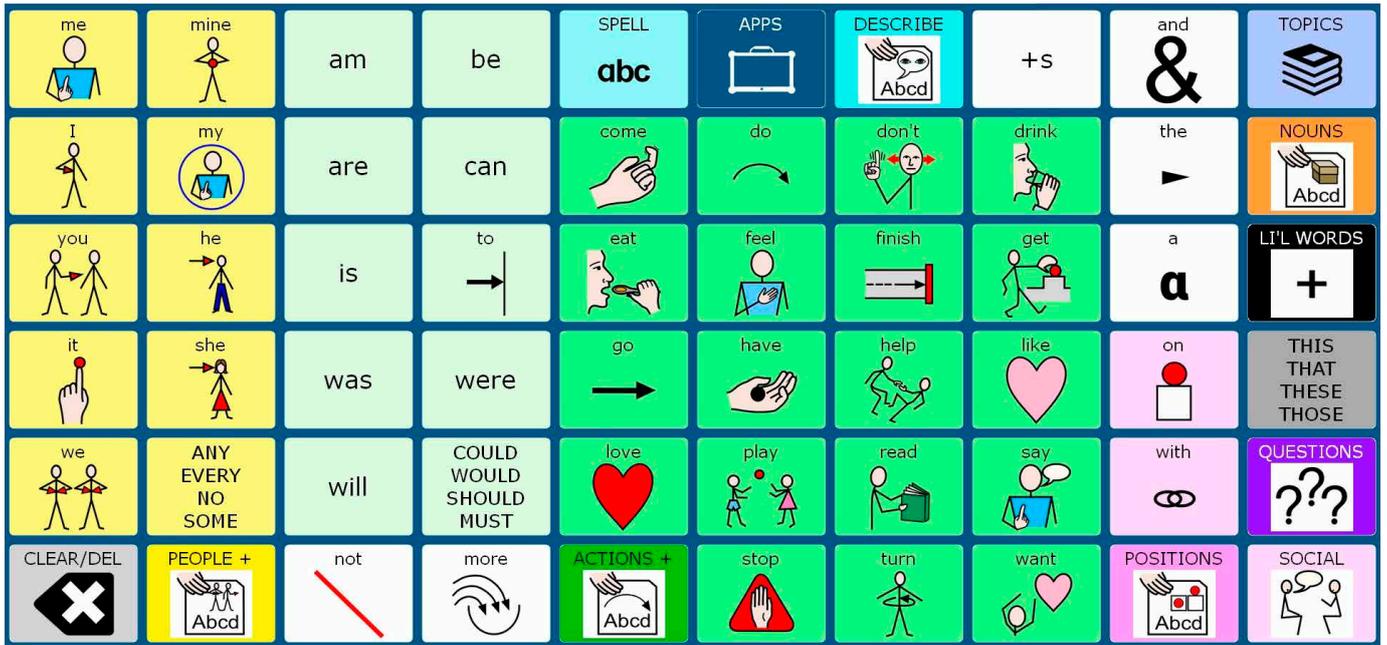
Flashcards can be used to practice key words, lines or so much more (they can be a great prompt for the above situations!)



**Bingo!**

A simple game for targeting vocabulary building, bingo can be a great go-to activity. Fortunately, using our software, you can easily take icon sequences and post them into documents to create personalised bingo boards! (Right.)

		
 colour	 red	 colour
 colour	 black	 colour
 colour	 pink	
		
 colour	 yellow	 colour
 colour	 green	 colour
 colour	 blue	
		
 colour	 brown	 colour
 colour	 purple	 colour
 colour	 orange	
		
	 colour	 white



**Low-Tech Backup**

One of the simplest yet most effective ways to use emulation software, you can quickly print copies of pages and create a simple low-tech backup for anyone who is using a high-tech device! (Above.)

**Modelling Boards**

The above approach can also be used to create modelling boards of any size, which can support language instruction; whether it's A4, poster size, wearable lanyards or playground boards, you can create anything in any size! (Right.)



**There really is no limit**

Anything you can customise with an image can be adapted to include AAC symbols taken from the emulation software, including:

- Drinks containers such as travel coffee mugs, water bottles and beakers.
- Clothing such as t-shirts, aprons and scarves!
- Linens such as beach towels, pillow-cases and blankets.

- Mouse mats.
  - Phone covers.
- And so much more!

**Why not have a go?**

The software is free to download so you have no upfront cost – the cost only comes when you decide to print resources. Do seek inspiration from others, and look for ideas on social media and Pinterest as there are always fabulous ideas being shared! Forget about being fancy and just

have a go at creating simple things you can easily print on A4 paper. They don't have to be the most beautiful, aligned, perfect resources – so long as they help in a session it doesn't matter! Finally - unleash your creativity and have fun!

You can download the software by visiting the 'support' section of our website.

**References**

<https://www.liberator.co.uk/support/product/software/emulation>

# Challenging Attitudes: Changing Communication ... the ATmentor Way

## FRANCESCA SEPHTON

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 Email: fran@attherapy.co.uk

LAITH RITCHIE, JODIE TURNER, GREGOR GILMOUR AND AFONSO RAMALHOSO  
 (ATmentors)

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

Staehely, 2000, AAC user

The ATmentor team at ATtherapy (an independent Speech and Language Therapy company) comprises seven passionate, highly competent AAC users who know at first-hand what it is like to learn to use a new method of communication, and they are acutely aware of the barriers users face and how to overcome them. They work as a team around their mentees who are learning to use AAC, and by

sharing their own stories they are able to challenge perceptions of AAC, embed positive attitudes, and highlight and describe effective practice and techniques.

Attitudes towards AAC may predispose the use (or lack of use) of AAC within social situations. Moreover, in some academic settings, attitudinal barriers to AAC continue to exist such as, "we don't do AAC" or, "we don't have the resources". As Williams (2000) suggested, too often attitude barriers result in reduced expectations and limited opportunities for participation. ATtherapy gathered some feedback from a staff team working with students who use AAC within a specialist education setting (see Figure 1). There appeared to be various reasons for lack of AAC use, including: fear of technology, low staffing, poor awareness of the

importance and role of AAC and difficulties understanding the length of the AAC journey and strategies needed to support learning.

The ATmentor team are passionate about challenging perceptions and practice, to instil positive attitudes towards AAC and improve AAC availability. It is paramount that all individuals, including those with the most complex needs, should have access to the fundamental human right of communication (Brady et al., 2016). As listed within the Communication Bill of Rights (NJC, 1992), everyone has the right to be offered choices, express feelings, understand communications, reject, request and have access to information, be communicated with in a dignified manner, have the right aids, services and resources, be listened to and be included in daily social interactions.

Positive attitudes can help replace barriers with supports, and biases with appropriate expectations. Leading complex institutions through the process of significant change, however, is a difficult task as, typically, academic institutions are resistant to change (Harris, Brewster & Sparrow, 2003). According to Rear Admiral Grace Murray Hopper, "the most dangerous phrase in the English language is 'we've always done it that way'". New, emerging AAC research and products are continually becoming available, opening doors to enable communication for ever more individuals with complex communication needs. Despite the known benefits of AAC systems, they are significantly underutilized by people with complex communication needs (Moorcroft, A.,

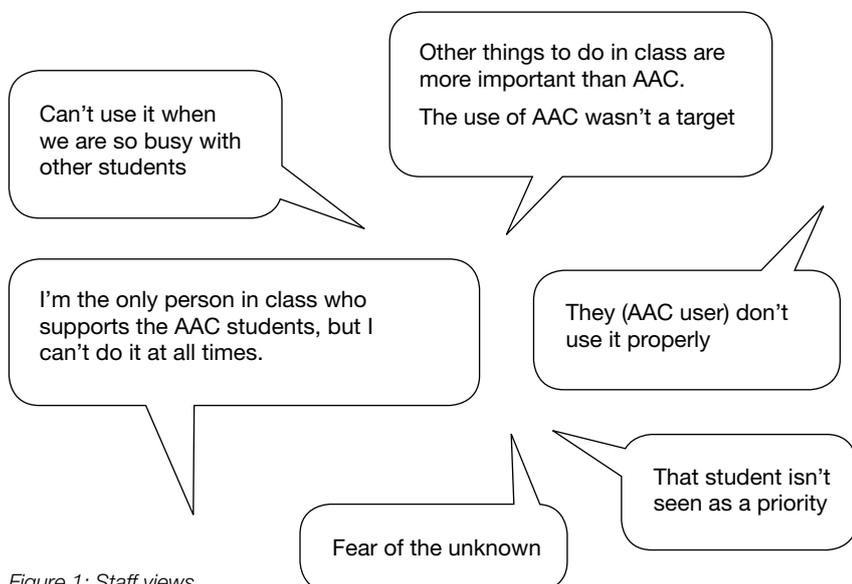


Figure 1: Staff views



Figure 2: Attitudinal barriers

Scarinci, N. & Meyer, C. 2018). Without access to effective communication, such individuals are consigned to live their lives with minimal means to express their wants/needs, develop social relationships, and exchange information with others (Blackstone, Williams & Wilkins, 2007).

Contact with individuals with disabilities is often cited as a means to change attitudes. The ATmentor team believed that if communication partners can hear and experience what their AAC users go through on a daily basis, then perhaps their sensitivity and awareness regarding the importance of AAC would increase. The team therefore developed training packages focused on explaining what AAC is, providing an insider perspective, detailing their AAC journey and outlining top tips for communication partners. In addition to this, qualitative tools were created and used to explore staff beliefs, attitudes and knowledge of AAC before and after training.

Gregor, Jodie, Afonso and Laith (ATmentors) have all experienced attitude barriers (see Figure 2). Gregor explained that he was once told by a Speech and Language Therapist that he would never be able to communicate and had very limited understanding, meaning he would be unable to access further education and employment. He stated, "I would love to see her today and show her that not only am I using a very high-tech device, but I also have a paid job helping others to do the same. I am in a mainstream college doing English GCSE. Not bad for someone who would never be able to do anything".

### The ATmentor Way

***"You must be the change you want to see in the world"***

**Mahatma Gandhi**

The team delivered their training across a range of academic settings (mainstream and specialist schools), care homes, the mentees' homes and community settings. Their target audience was staff, parents/carers and peers. Feedback forms were given post-training (see Figure 3). Pre- and post-measures to evaluate barriers to AAC were trialled.

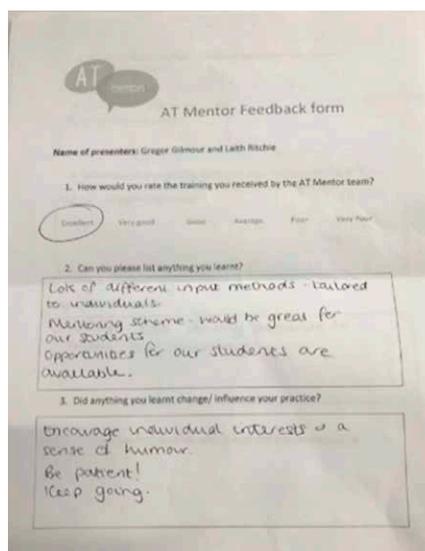


Figure 3: Feedback form

### Specialist School Training

The ATmentor team have observed poor AAC use when providing input into some schools. A number of individuals have AAC that can open a world of opportunities for

them, yet these have been locked away in a cupboard, are out of charge, left at home and in bags or lockers. Often, when AAC is made available, it is only during snack time for the purpose of making a request. The team feel strongly that this is not acceptable, as AAC is their voice and without this, the person is unable to participate in class. Laith and Gregor presented to 30 staff and the feedback received was excellent. The headteacher commented, "it appeared to have more of a positive impact on staff than previous training and they reported they found the training both moving and insightful". The feedback forms complemented this, as staff recognised the need to improve AAC availability and gained understanding into how hard it can be to learn to use AAC (see Figure 4).

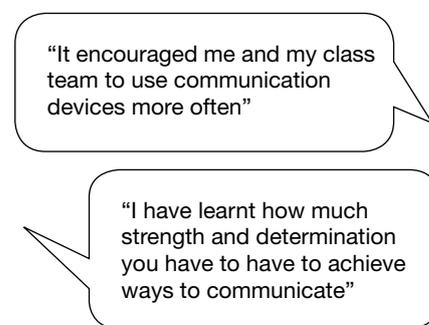


Figure 4: Feedback from specialist school training

Jodie delivered training at a specialist school for one of her mentees, Lily. The training aimed to raise the expectations of school staff as to what can be achieved using AAC. Jodie created a game called 'the Lost Voice Guy game', where she gave staff messages they needed to convey, e.g. "I need the toilet", using no speech or gestures! Jodie provided information about her AAC journey and what strategies staff used to help her to become a competent AAC user. The feedback (see Figure 5) showed that staff had an improved understanding of the communication partner role, and some new ideas of how to support Lily.



Jodie and Lily



Figure 5: Feedback from Specialist School Training

Afonso provided training for a group of peers and teaching assistants for his mentee, Matthew (see Figure 6). This training aimed to upskill staff and peers on AAC, specifically eye-gaze, as Matthew was the only person in this school that used this access method.

The feedback indicated that expectations were raised, the demands of using eye-gaze technology were better understood and more opportunities for communication were provided (see Figure 7).

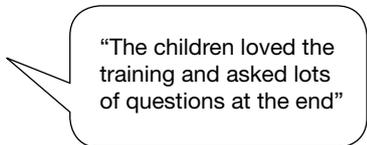
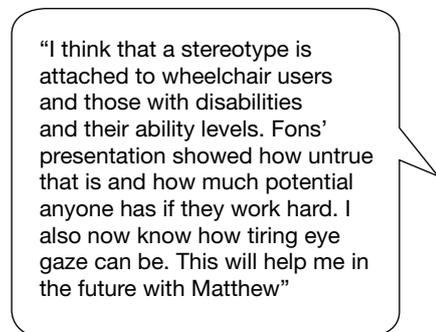


Figure 7: Feedback from Afonso's Training

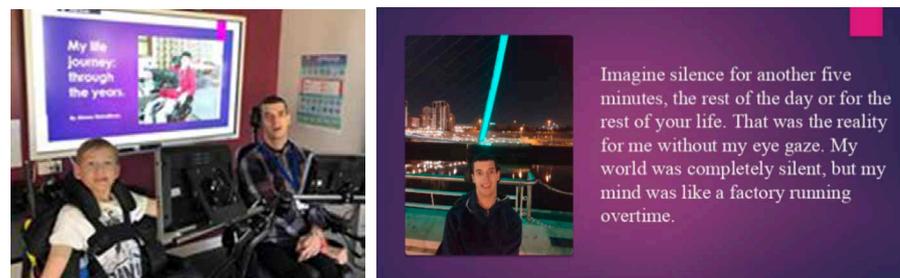


Figure 6: Screenshot from Afonso's presentation

### Mainstream School Training

Laith delivered training for one of his mentees, Phoebe, who was transitioning to a secondary mainstream school. Staff at this school had never had a student who used AAC. This training was delivered via Skype. Staff were given the Communication Aid/Device Attitudinal Questionnaire (CADAQ) before and after the training. This was amended slightly to include fewer statements to cover three dimensions: 1. affective or behavioural, 2. cognitive or belief and 3. communicative competence. The results showed that staff were less fearful of the technology following the training.



### Challenging Attitudes: Changing Communication

*"Having a presentation by a Mentor AAC expert is really enlightening and inspiring.*

*It changes perceptions and assumptions"*

An AAC user's parent, 2019

The feedback across settings demonstrated the significant impact of the ATmentor training in breaking down attitudinal barriers, improving practice and raising expectations. The team aim to increase the input of the ATmentor role within academic settings and deliver training across different platforms, including Skype and online training content. Future evaluation will review the

longer-term impact to ascertain whether positive AAC practice is still implemented 3, 6, and 12 months post-training. In order to ensure the ATmentor service is accessible to all, the team are exploring alternative routes to funding. If you would like any further information about the ATmentor service, please email: [info@attherapy.co.uk](mailto:info@attherapy.co.uk).



*Talk to me  
I'll talk to you  
And we'll both be human*

Jodie Turner, ATmentor

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# Literacy and AAC: From Key Word Communication to Sentences

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*Iveta Power has been teaching literacy at the Chailey Heritage Foundation for students with severe physical difficulties for the last 17 years.*

*Clare Bird, Speech and Language Therapist, has been supporting communication and literacy at the adjacent Chailey Clinical Services for 12 years.*

## Introduction

Teaching literacy to cognitively able students with severe physical difficulties and minimal speech output greatly increases their ability to express themselves, however the process can be challenging. Without correct speech output, the person is lacking an efficient phonological loop (Stackhouse & Wells, 1997). There is also evidence that programmes need to be highly personalised to take into account the student's learning profile and provide strategies that play to their strengths (Moulam B, 2013). The student's learning opportunities and attention are affected by health care needs. As at any school, literacy has long been part of the curriculum at Chailey Heritage Foundation and has been supported by Speech and Language Therapists at Chailey Clinical Services. Communication books mainly contain text-supported symbols, but also alphabet pages to encourage spelling and a range of high frequency sight words to enable sentence formation. With the development of high-tech Voice Output Communication Aids (VOCAs), communication programmes tended to be a copy of the student's low-tech system. It is only more recently that a student has

been able to transfer their literacy skills and knowledge of symbols onto high-tech AAC devices using software with grammar tools - in effect moving from expressing their ideas in key words to generating grammatically correct sentences. As bridging this gap is no easy task and we were working with students whose spelling is at an early stage, we jointly devised an activity in which they could create sentences made up of their own choice of text-supported symbols and their high-frequency sight words.

## Literacy Programmes and Joint Working

Iveta Power has used a wide range of literacy training methods, including using her knowledge of technology to design accessible literacy activities - always popular with students. She started with Clicker 4/5 (Crick Software) and Writing With Symbols, followed by SymWriter (Widget), The Grid 2 and Grid 3 (Smartbox). More recently, students have been able to benefit from ready-made programmes such as Reading Eggs. Iveta designed individualised Grid activities to support the students at an appropriate level, eg.:

- A grid was populated with a number of Consonant Vowel Consonant (CVC) words and the student was asked to identify a word after it was read out to them a number of times.
- The student was asked to identify one word in a grid to finish a sentence correctly, eg. *I came to school in the ... bus, taxi, car.*

- A grid was populated with a mixture of familiar symbols and sight words in random order. The target sentence was read out to the student a few times, who was then asked to point out the words in the right order to produce the sentence on the sentence bar.

Staff are also trained to provide repeated auditory feedback for words and sentences to make up for the fact that students cannot say these correctly themselves.

- The Speech and Language Therapist worked jointly with the teacher:
- To support phonological awareness training
- To advise on accessible writing activities - Caroline Musselwhite's work on Literacy for All has been influential in designing work sheets and grid-based activities on the computer.
- To instruct Teaching Assistants (TAs) in using the alphabet pages of the communication books to model spelling CVC words.
- To design activities which support specific classes of words, eg. action words. Students often don't choose an action word when they are expressing an idea, because at the level of 2-3 key word communication, nouns are essential but action words can often be guessed because of the context, eg. *mummy car beach, money weekend Brighton pier.*

## Meet the Students

Three of the students in Iveta's class have met the criteria for a high-tech VOCA provided by the regional specialist AAC service and have access to grammar-generating software (SuperCore 30). The students are aged between 8-10 years and have complex needs. There is a huge gap between their comprehension and their ability to express themselves. They are described as non-verbal, though all of them use speech in that they can make approximations of some speech sounds and short words which are understood in context. The three students have good functional vision and hearing, although their vision can be affected by muscular issues, eg. fluctuating tone.

## Aim of Activity

Our aim was to build on Iveta's success with combining familiar symbols and sight words so that students could express their own ideas in full sentences.

## Training and Resources

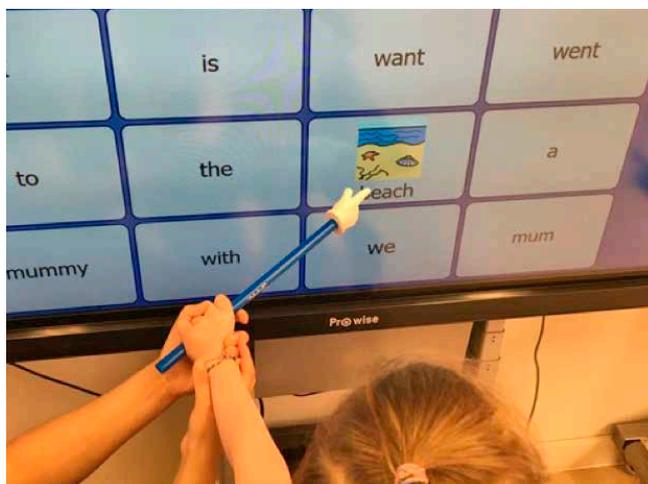
The activity required TA training on using the students' communication systems, knowledge of their literacy programmes and ability to create grids in Grid 3 software. Because of their physical difficulties, each student has a one-to-one TA. The class has a large plasma screen which all the students can access using eye pointing and a facilitated wand/pointer. They all tend to prefer this medium, probably because it uses gross rather than fine motor movements and provides more fun. However, students can also work on the activity on a computer using their best access method.

For two terms, the Speech and Language Therapist led a weekly morning SALT group for a class of 6 students. The first 30-40-minute session started off with phonological development warm-ups – matching initial sound of CVC word to letter, identifying CVC words which start with the same initial sound, identifying CVC words which rhyme etc. Then methods were used to elicit the

key words using the students' low-or high-tech communication system. Some students required more prompting to generate ideas than others, so a choice of worksheets and activities were always available – see Methods. The students then had a 20-30-minute break. The TAs then led the second 30-40-minute session, while the therapist worked individually with students in the class who required other specific input.

## Methods to elicit key words (text-supported symbols)

- Describe a photo or picture using 3-4 symbols from your book
- Worksheet with 5 categories to tell a silly or sensible story
- Topic work, eg. Find 3 symbols to do with 'space'
- Activity focusing on particular word classes, eg. actions
- Weekend news
- Free independent expression



Top left: Pupil A using communication software on his iPad. Top right: Pupil B using her VOCA with an adapted joystick. Above left: Pupil C using her communication book. Above right: Pupil C using a pointer with support to create Sentence 1.

## Choosing text-supported symbols

### TA-led session

The TAs worked independently on a one-to-one basis with the students. TAs chose words that were in the student's list of high-frequency sight words (eg. *at, the, I, on, or*) and added them to their chosen symbols to make a sentence. They then verbally presented it to the student, and together made changes until they were sure that the sentence expressed what the student wanted to say, eg. Student A, Topic 'Seaside': "*Pier seagull ice cream money weekend Brighton Pier*" → "*At the weekend I spent money on Brighton Pier*". If an action word was needed, eg. "*spent*", a text-supported symbol or just the written word, depending on the student's reading level, would be added.

Then, using Grid 3, the TAs created a grid on the plasma screen or on a computer with usually 8 but up to 12 cells, and entered items into the cells in a random order. With a grid of 12 cells, distractor items could also be added – see photo (above) '*Pupil C using a pointer with support*'.

The student's task was to order the symbols/words to produce the correct sentence in the sentence bar. If the student made mistakes, this information was collected before the student had another try. Generally, if symbols and sight words were familiar to them, students had a high success rate which made the activity very motivating for them.

Once printed out, one copy of the sentence/sentences was put in the students' literacy books and one copy sent to parents in the school diary. In this way, both the teacher and parents could share in their child's literacy and communication progress.

### Sentences generated by Pupil C

TA: *Tell me your weekend news*

Symbols chosen:



Sentence 1: I went (sentence starter), beach, mummy

Sentence 2: I went (sentence starter), car  
Staff chose these sight words to complete the sentences: to, the, with, in, my

Distractors: we, want, mum, is

### Outcomes

- Students have increased their knowledge of correct word order in sentences.
- Students have consolidated their knowledge of high-frequency sight words.
- Students are more aware that a sentence requires an action word.
- Students use the sentence starters in their own communication systems more often.
- Students are able to express their own communication in full sentences.
- Students can independently read the sentences.
- Students have consolidated skills (ie. combining symbols and text) which are transferable to their own high-tech VOCAs.
- Class staff are now able to independently lead the whole activity and enjoy the sessions.
- Parents enjoy weekly feedback from class about their child's communication and literacy progress.

### Conclusion

The outcomes show that the activity allows students to express their own ideas in full sentences, thus promoting both literacy skills and expressive language. The added value is the pleasure and excitement shown by the students when they can not only read the sentences independently but also listen to their ideas expressed in speech, whether generated by the computer, or when staff and parents read the sentences out loud.

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- Grid 3 (The Grid 2) software, Smartbox Assistive Technology, <https://thinksmartbox.com/>
- SymWriter, Widget Software, <https://www.widgit.com/>
- Reading Eggs, 3PLearning, <https://readingeggs.co.uk/>
- SuperCore 30 <https://thinksmartbox.com/>

## Appendix

### Examples of sentences created by the students

#### Student A:

Weekend news: *man bubbles* → *the man had bubbles*. (TA: Where was the man?) *Funfair* → *The man at the fun-fair had bubbles*

Topic - 'Water': *Jordan swimming* → *I like swimming with Jordan*

Topic - 'Seaside': *Pier seagull ice cream money weekend Brighton Pier* → *At the weekend I spent money on Brighton Pier*

#### Student B:

Describing a photo: *girl paper scissors* → *The girl is cutting paper with scissors*

Topic - 'Clothes': *like hat summer* → *I like wearing a hat in the Summer*

#### Student C:

Tell me 3 things about space: *earth blue sea* → *The earth looks blue because of the sea*

Tell me your weekend news: *I went* (sentence starter) *beach mummy* → *I went to the beach with Mummy*

*I went* (sentence starter) *car* → *I went in the car*

## Acknowledgement

Thanks to Ana Thomas, Technical Speech and Language Therapy Assistant, Chailey Clinical Services for helping with the technical information and references.

# Symbolising in PowerPoint: Communication Materials Without Specialist Software

**NEIL THOMPSON**

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*Adding picture symbols to words in PowerPoint, and a method of creating eye-gaze communication books which saves hours.*

## Symbolising

Using symbols is a great way for making anything with text more accessible and easier to use. What's often not so great is getting those symbols into your documents and then sharing them.

## The Problem

I have been working as a Speech and Language Therapist for over 20 years, and much of that has involved working with children and young people with complex communication needs.

Very important to this work is creating materials using symbols. This includes

making communication boards and books, adding symbols to sentences to make them easier to access, or creating materials to support the development of communication.

## File Formats

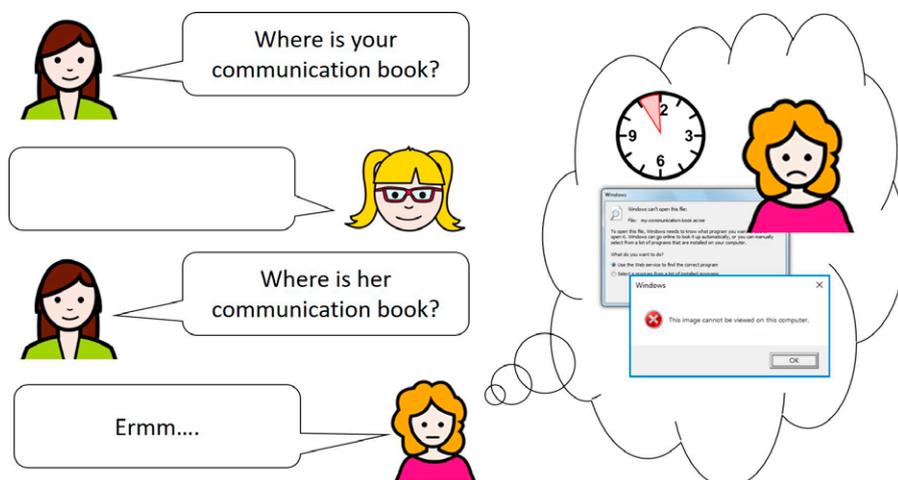
Over this period, I have seen a number of iterations of software for creating documents with symbols. Unfortunately, these iterations have meant that much of the material I created a while ago can no longer be opened at all, the software for opening it having long since disappeared. New versions of software from the same company that created the original programme won't open it, nor will symbolising software from other companies. Additionally, no shared standard for saving these types of documents exists, so

often you cannot open a document created with one programme using another.

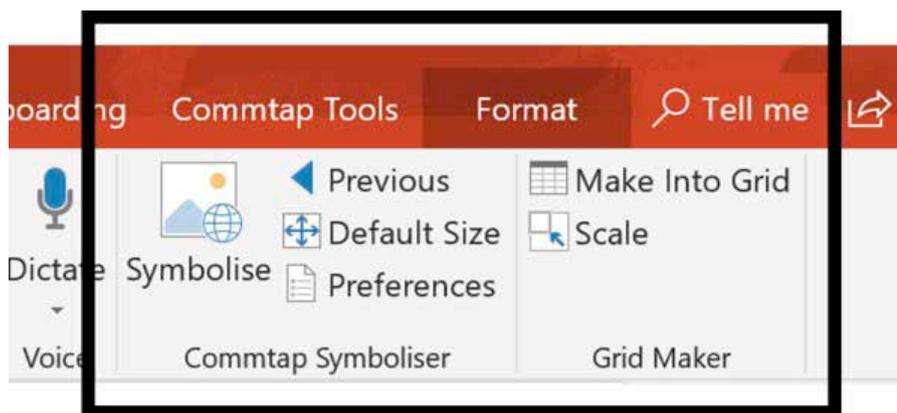
Contrast this to office software (for example Microsoft Office, and the free Libre Office): I can still open the very first Word and PowerPoint documents that I created more than 20 years ago with the latest versions of these programmes, and with other programmes. I can do this because there are open standards for this type of software. In fact currently there are two: "Office Open XML" – which is the name for the default file formats for all Microsoft Office programmes (for example docx, pptx) and the "Open Document" format – which is the default for Libre Office. Both Libre and Microsoft Office can read and edit both types of documents.

These formats are called "open" formats because anyone can look at the code that makes up a document and create software that can read and create documents in the same format.

The lack of any standard for documents created with symbolising programmes means that you can get tied into using one particular system, making it difficult to change if something better comes along. It also makes it hard or impossible to share your creations in a way that others can edit – unless they have access to the same software you do. You can of course always share in a pdf format – but these cannot generally be edited. If you want to start off a communication book for a school or for parents to modify as and when they need to (which in most cases they absolutely must for it to remain current and useful) you are out of luck if they don't have access to the right software.



*Creating and maintaining communication materials can be frustrating – particularly when you are working across services.*



Extra buttons in the PowerPoint ribbon after installing the Symboliser

## Getting Symbols into Lesson Materials

Many teachers use PowerPoint for their lessons. Adding symbols can be a pain. In special schools, teachers will most probably go through this pain – using screenshots to copy and paste from a symbols programme into PowerPoint. In a mainstream school where there are only a small number of children in a class who could really be helped with symbols, then it's much more unlikely that there will be symbols added to the lesson materials. For many teachers, under time pressure and whose first thought is unlikely to be symbols anyway, the difficulty getting the symbols into their lesson materials is just too much.

Teachers use PowerPoint because of the huge amount of flexibility it has. Symbolising software just doesn't have this kind of flexibility; it is good at what it does, but it's not good at doing what PowerPoint does. And, we can't expect it to be. A programme like PowerPoint has had a huge amount invested in it, and this dwarfs anything that could possibly be spent on developing symbols software.

## The Solution

There are already very powerful document creation programmes around (PowerPoint, Word, Libre Office). Anyone with a computer can open and edit documents made with one of these programmes – they can even use the free Libre Office suite if they can't afford Microsoft Office. These programmes do just about everything we would want for making the communication materials we need – except they don't do symbolising. The solution I came up with was to create software which adds the ability to symbolise in Office (PowerPoint at present). This is what the Commtap Symboliser

does - you get all the advantages of PowerPoint; you can symbolise; you can share your creations; and other people can edit them.

What many people might not know is that you can add code ("macros") to Microsoft Office to make it do more. This is particularly popular with Excel, where many businesses do this to make Excel do more things appropriate for their business. This can also be done in PowerPoint – you can even check it out yourself – see [commtap.org/vba](http://commtap.org/vba) for a simple example. The Commtap Symboliser uses this to add symbolising features.

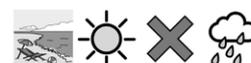
## Getting Symbols into your Document with the Commtap Symboliser

After the Commtap Symboliser is installed, you get some extra buttons in the PowerPoint ribbon. Type into a text box – it can be one or more words – then click on individual words (or you can select a few). Then click the new "Symbolise" button. Symbols will appear in the document (if they exist in your symbol set(s) for the words you selected). Repeatedly clicking on "symbolise" will step through any alternative symbols for the word(s).

You can set where you would like the symbols to appear in relation to the words. This can be above/below the whole text box, individual paragraphs or individual words. A "tidy text" button can be used to re-align the symbols if, say, you move the text box around or delete some of the symbols.

## Where do the symbols come from?

The symbols simply need to be in a folder on your computer – or they could be in



On the beach there will be lots of sun and no rain.

*Adding symbols to appear above a block of text.*

a shared folder if you are on a network. Adding symbols into the programme is a process of clicking on a button and browsing to that folder.

A small open-source symbol set (Mulberry – see [mulberrysymbols.org](http://mulberrysymbols.org)) comes with the Commtap Symboliser, however to get the full benefit of Symbolising you should get a larger symbol set. A good large free symbol set – which you can use for non-commercial purposes – is the Arasaac symbol set ([arasaac.org](http://arasaac.org)), which is also available to download from our free communication resources website ([commtap.org/ard](http://commtap.org/ard)). The version on [commtap.org](http://commtap.org) incorporates additional words over and above the original symbol set. Another large free symbol set is the high-contrast Sclera symbol set ([sclera.be](http://sclera.be)). There are other symbol sets which can be purchased.

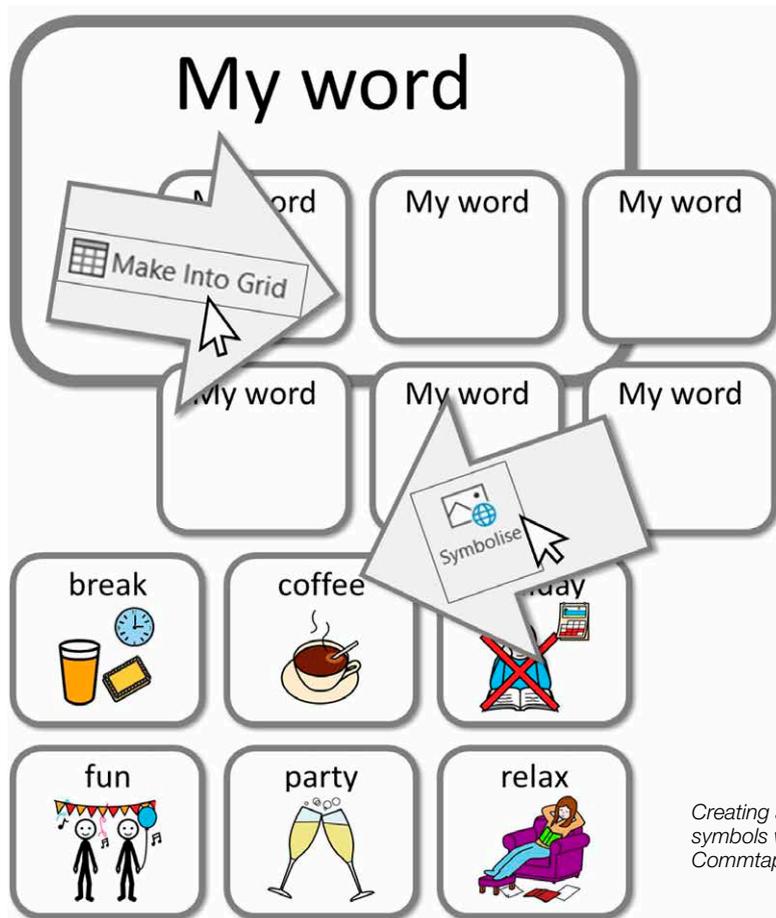
You can also create your own symbol/picture sets for use with the Symboliser, for example pictures of pupils in a class, pictures of places around a school. This can be useful if you want everyone to be using a consistent set of pictures for particular words or names.

In future versions of the Symboliser, we plan to have symbols stored online which the Symboliser can pick up. The key advantage to this is that when new symbols are added to these sets you will be able to use them with the Symboliser straight away and will not need to re-download a set of symbols.

## Making Symbol Grids

We have included a button for making grids. You can do this already with PowerPoint, but it is a bit fiddly, so this button simplifies the process. The idea is that you make one cell, taking up the space you want the entire grid to take up. You then select the cell and click on the "Make into Grid" button, where you can specify the number of rows and columns and the spacing between cells.

You can get a free 30-day trial of the Commtap Symboliser from [commtap.org/sym](http://commtap.org/sym).



communicator – you don't need to worry about the pages facing the other way. Then, once you have done that, click on a button and you get a new file with all the pages facing the listener in the correct positions and ready to print out double-sided.

It will automatically add page numbers and instructions for turning the pages for the listener – for when the communicator gazes to a word/symbol which means 'go to another page'. For example, "Family" → P8. To do this, you just give each page a title, and there is a simple way of adding text to indicate to the programme that when the communicator gazes at a particular symbol/text, it means 'go to the page with such and such a title'.

This programme saves hours in creating these types of books. It is available as a free download from [commtap.org/egc](http://commtap.org/egc).

### Summary

The Commtap Symboliser and Eye-Gaze Communication Book Maker are two examples of how existing office software can be enhanced to make it do more for people with difficulties communicating, and to make the lives of those producing communication materials easier.

### References

All the symbols shown in this article are from, or adapted from, Mulberry or Arasaac. Arasaac symbols may be used and/or modified for non-commercial purposes. Mulberry symbols may be used and/or modified for commercial and non-commercial purposes.

**Paulo, Sergio.** ARASAAC [www.arasaac.org](http://www.arasaac.org)

**Lee, Steve.** *Mulberry Symbols.* [mulberrysymbols.org](http://mulberrysymbols.org)

### Eye-Gaze Communication Books

If you have ever made an eye-gaze communication book or updated one, you will know that it is a time-consuming process that goes something like this:

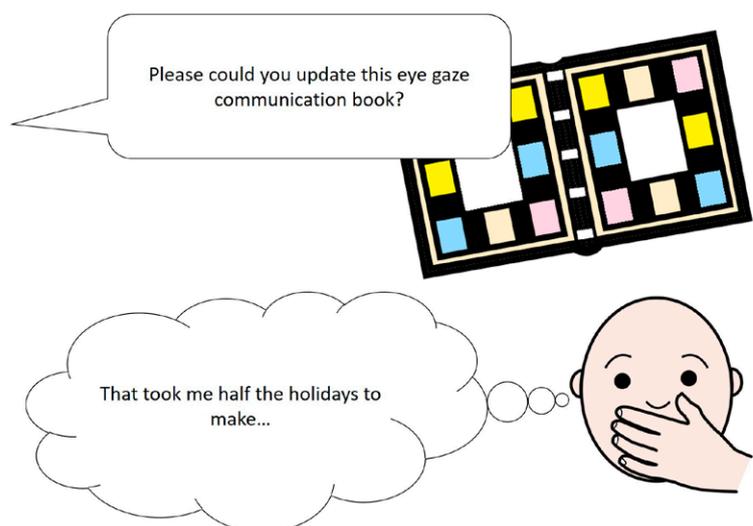
After planning the book and finding the symbols, make all of the pages facing forwards. Then, make all of the pages facing backwards. Bear in mind that the backwards-facing pages must be a mirror of the pages you already made. They should be on the next page and not on the reverse of the page they mirror. The first page facing forward is on the reverse of the second page facing back and the first page facing back is on the reverse of the last page facing forward. For each page, find all the words/symbols that should get the listener to turn to another page if gazed at and add instructions on the listener's side saying what pages to turn to. Print, cut out and laminate as required. To add another page, repeat from the beginning. Hopefully that was clear...

This whole process is a real barrier for making these kinds of books, which, like any other communication book, need to be maintained and adapted to the requirements of the person using it to communicate.

### The Commtap Eye-Gaze Communication Book Maker

This is a free PowerPoint "macro" document which takes the frustration out of making eye-gaze communication books. If the book isn't right the first time, it doesn't take ages to correct it, and it is much easier to adapt the book over time, too.

With this macro, you make all of the pages that are going to be facing the



# Meeting the Complex Communication Needs of Patients in Acute Care

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The inability to communicate in the acute care setting can be a terrifying experience and may also negatively impact patient care, recovery, and satisfaction. The need for bedside Augmentative and Alternative Communication (AAC) assessments and interventions in the acute care/intensive care settings, and throughout the entire continuum of a patient's care, has been recognized as an essential component for positive patient outcomes. The literature shows that compromised patient-provider communication (PPC) threatens patient satisfaction scores, length of hospital stay, active patient participation, discharge compliance, quality of care and personal well-being, and also contributes to preventable adverse medical events (Bartlett et al., 2008). Therefore, Speech-Language Pathologists, AAC specialists, and all healthcare staff have a unique role and responsibility to meet the needs of patients with communication vulnerabilities. Still, many hospitals may not have established action plans in place to support the needs of these patients.

### Communication Vulnerabilities

Patients in the acute care setting may experience abrupt changes in baseline communication abilities due to medical interventions (e.g. intubation or tracheostomy) and neurogenic difficulties (e.g. aphasia, dysarthria). Pre-existing communication vulnerabilities such as

health literacy (ability to understand and access health information) and sensory impairments (vision and hearing) may further compound or independently impact a patient's ability to participate

in their own care, decision making, and interactions (Blackstone et al., 2015).

When a patient's primary or native language is not the dominant language of the healthcare system, the ability to effectively deliver patient-centered care is often significantly challenged. A culturally and linguistically competent healthcare system can improve health outcomes and quality of care as well as contribute to the elimination of racial and ethnic health disparities. Many hospitals worldwide have identified this as a barrier to accessing the care they are able to offer, and therefore meet the communication needs of these patients with the provision of interpreters for face-to-face encounters and translation services for written instructions. It is essential for this standard of practice to be inclusive of all patients who have difficulty communicating.

### Communication Champions

Individual practitioners across various disciplines are beginning to meet the complex communication needs of patients in acute care hospitals. For example, this may be seen in the pediatric setting, with Child Life Specialists providing tablets and communication apps for children who have developmental speech/language delays, or in the intensive care unit (ICU) with bedside nurses providing alphabet boards to patients who are intubated.

Healthcare leadership and policy administrators may not be familiar with the literature illustrating the positive patient outcomes for those who need and are

provided with communication supports or, inversely, the adverse events associated with poor PPC. An individual practitioner may implement change starting with one patient and one unit/ward at a time. Change may be most effective when there is commitment from nurses, as they are typically patients' primary communication partners (Altschuler & Happ, 2019). Designating "Nurse Champions" to partner with affords increased opportunities for bedside training, carryover, and generalized practice.

Although there are practitioners who are leading the charge for putting PPC at the forefront in healthcare, many of these individuals continue to face challenges. In the United States, a survey was distributed to SLPs nationwide to understand current bedside AAC practices in acute care (Santiago, R., Altschuler, T., Howard, M., & Costello, J. 2018). The results revealed that SLPs reported that the most common barriers for implementation of PPC are: (a) resources (time, funding, access to tools, experienced staff), (b) knowledge (pre-service AAC education/training),

(c) practice (e.g. clinical priorities do not include communication access), (d) attitudes (e.g. medical care is easier without interference) and (e) environment (equipment storage, prevention of theft or lost items). However, even when individual practitioners overcame these barriers to meet the complex communication needs of patients, often only one clinician was serving one patient at a time, versus a systemwide policy and practice.

## Hospital Initiatives

There are many initiatives occurring in hospitals to implement organizational change for optimal patient care. Opportunities for the inclusion of PPC exist in committees for delirium prevention/treatment, early mobility, and palliative care.

## Delirium

Delirium, a condition that frequently accompanies critical illness, represents a significant public health problem with profound impact on patient outcomes, such as mortality, length of hospital stay, duration of mechanical ventilation, and increased hospital costs (Tate et al., 2013). It is widely accepted that prevention is key in delirium management and that it may be reversible if detected and treated early. Delirium may go undetected in those patients who are intubated or with a tracheostomy, as their ability to participate in cognitive screens is limited by their communication difficulties. Non-pharmacological interventions such as frequent re-orientation and the provision of sensory aids (hearing aids or glasses) are widely implemented for delirium prevention and treatment. The inclusion of PPC education and training for critical care staff as well as the provision of AAC may facilitate earlier diagnosis or, optimally, prevention.

## Early Mobility

Early mobility programs have received considerable attention over the past several years. Numerous studies have demonstrated that rehabilitation services provided to critically ill patients improve function, enhance quality of life after discharge, are cost-

efficient, and are safe (Corcoran et al, 2017). Physical Therapists (PT) and Occupational Therapists (OT) work with patients on mobility goals, from sitting at the edge of the bed to transferring to a bedside chair and ambulating down the hallway. This occurs while SLPs frequently await physician orders for swallow evaluation and treatment, once a patient is extubated or weaning from the ventilator. Including PPC as an intervention for early mobility enables patients to participate in their care, rather than perpetuating a more passive role in their interactions with staff and family/friends. At NYU Langone Medical Center in New York, NY, an inter-professional treatment model has been established in the Pediatric ICU with the use of co-treatment between PT, OT, and SLP while patients are engaging in early

mobility. The practice of scheduling treatment during sedation vacations optimizes functional potential and clusters care for fewer sleep disturbances (Altschuler et al., 2018).

## Palliative Care

Patient participation in decision-making for life-sustaining treatment or end-of-life care is challenged when PPC is not addressed. The burden of this process is often shifted to a healthcare proxy, who serves as a decisional surrogate while the communication-capable patient is not included in the discussion. The SLP has a vital role as a core member of the Palliative Care team to provide earlier communication intervention before a condition worsens. This affords ample time for patients to learn or make adjustments to an AAC system and participate in these discussions, as well as ultimately the decision-making. Beyond treatment planning, patients are empowered to engage in micro-decisions such as who they wish to have at their bedside, or to create a music playlist for a palliative extubation.

## Staff Education

Pre-service AAC education/training in the United States is increasing in graduate programs, yet there remains a critical need. SLPs enter the acute care and ICU settings with limited exposure to AAC as well as a culture of prioritization of dysphagia management. Staff education may begin departmentally with clinical discussions, case studies and in-services and expand to cover additional rehabilitation services (PT, OT) and other disciplines (nurses, physicians).

A web-based instructional package for ICU nurses, SPEACS-2 (Study of Patient-Nurse Effectiveness with Assisted Communication Strategies), originated at Ohio State University and is one example of formalized training: [https://nucleus.con.ohio-state.edu/media/speacs2/project\\_desc.htm](https://nucleus.con.ohio-state.edu/media/speacs2/project_desc.htm). In addition to an online educational module, hospitals may consider the inclusion of PPC in new hire orientations or as an annual training for any staff with direct patient contact.

## Referral System

### Order Sets

As healthcare systems continue to transition to electronic medical records, there are systems available to streamline the referral process for AAC/PPC. Some hospitals have order sets for specific diagnoses

or units, and an SLP consult is included. For example, at NYU Langone Medical Center, patients who require ECMO (extracorporeal membrane oxygenation) are included in an automatic order set for an SLP consult, to evaluate the patient's specific AAC needs. It is anticipated that they will require communication supports while on ECMO, as patients are often intubated during this treatment, which may range from 5-25 days. Other considerations for order sets include a stroke diagnosis (to capture those who may experience aphasia, apraxia, or dysarthria) and Pediatric ICU admissions (many of these patients have baseline communication difficulties and their personal AAC system is left at home).

## Rounds

Walking or bedside rounds occur almost daily in acute care and ICUs. These enable all members of the healthcare team to offer individual expertise and collaboration for optimal care. The presence and advocacy efforts of an AAC provider reinforces communication as a quality and safety concern for best patient care. Once an AAC system is in place, it is beneficial to schedule therapy sessions during rounds to offer "on the spot" training to providers at the bedside for individualized communication strategies.

## Tangible Resources

Non-vocal techniques such as mouthing words, using gestures, head-nodding in response to yes/no questions, and writing are often implemented by staff when patients experience difficulty communicating verbally. These strategies may limit interactions and are initiated by communication partners, versus empowering the patient to communicate more independently.

"Communication Toolkits" offer an array of communication supports, from low-tech (e.g. dry erase boards, alphabet boards) to high-tech (e.g. tablets with communication apps, multi message speech generating devices), for providers to access when an AAC clinician is not available for a full evaluation. Such toolkits do not replace the consult for AAC intervention yet foster a more interprofessional practice to address the communication needs of patients. It is advisable to train staff on all of the contents in the toolkit, as well as partner-assisted scanning strategies for when a patient is unable to use direct selection to access these supports. It is beneficial to develop a decision-tree

for staff to follow the flowchart and select the tool which best meets the patient's needs.

## Conclusion

Meeting the complex communication needs of patients in acute care requires a hospital-wide culture of communication. Although individual patients are being provided with AAC intervention, diffusely many more are often missed with the absence of a system-wide patient-provider communication program. It is critical to overcome institutional barriers and develop systems which target increasing staff education, referrals to AAC providers, and resources, for a successful AAC program.

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# What is Digjobb?

## HILDE FRESJARÅ

Senior Advisor

Fagsenteret for NAV Hjelpemidler og tilrettelegging

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*Siv-Anne Heggheim Nesse is 22 years old and lives in Oslo. She is an active girl who likes to write and tell stories. She also has her own blog. Siv-Anne has impaired motor skills and communicates with an eye-gaze board and eye-controlled computer. Siv-Anne is one of Digjobb's agents.*

Digjobb.no is an employment service for people with disabilities. Digjobb was established specifically for those who need compensatory aids to use a computer, due to impaired mobility or communication difficulties. Many use Augmentative and Alternative Communication (AAC), e.g. devices with synthetic speech controlled by eye-tracking or switches.

The Norwegian Association of the Blind (Blindforbundet), asked Digjobb to extend their offer to include visually

impaired people struggling to enter the labour market. This would be an opportunity to provide a broader service.

Digjobb started as a project run by ISAAC Norway and has been supported by the DAM Foundation (dam.no). The project will be taken over by Elevkanalen (the Student Channel) when the project period ends on January 1st 2020.

Examples of tasks performed by Digjobb's agents are:

- Testing accessibility of digital educational resources, games, websites, and apps with computer technology aids such as eye control, switch control, and screen readers.
- Develop educational and information material with image support (ASK symbols).

- Create music for use by developers using music technology.

Important themes for ISAAC Norway are friendship and participation among AAC-users. This is also something Digjobb finds important. Work gives people a chance to show their expertise and build networks with others.

Andreas, another of Digjobb's agents, says it like this:

*"I haven't changed as a person after I got a job, but other people have changed the way they act towards me. This is an important project because it helps people like me to show others who I am."*

At the website [www.digjobb.no](http://www.digjobb.no), you can meet Siv-Anne, Andreas and the other agents of Digjobb.

# A New Tool to Relate AAC to Communication Development

## Irene Leber's Poster Pack: 'Assessing and Supporting Communication'

**DIANA MOUNTAIN**

Speech & Language Therapist, Beaumont College - Ambito Education  
**Email:** dianamtn2@gmail.com

There are ways to support communication at any stage of development. It's never too early.

**This resource helps identify an individual's developmental communication needs, and gives ideas of what to do, how to do it, and even what words or activities to introduce.**

'Assessing and Supporting Communication', by Irene Leber, is published by Von Loeper International and is available in the UK from [www.specialneedstoys.com](http://www.specialneedstoys.com)

**Note what happens for a typically developing child such as Toby:**

*Toby is 6 months old and his Dad says brightly, "Toby!" then offers up his toy, asks, "Rabbit?" and waits for Toby to reach for it before handing it over.*

*When Toby was 2 months old, they didn't do that; They just showed him the toy (held about 30cms away), talked in natural reassuring tones about how this was 'rabbit' and rabbit would look after him before they tucked rabbit in beside him. They did not expect a response from Toby.*

*When he is 12 months old, they will expect him to choose: 'Do you want rabbit or a cuddle?'*

**How do parents/carers know how to adapt what they say and what they expect?**

Parents/carers intuitively adapt their communication to suit their child's development. They keep just one step ahead – expecting a more consistent response,

signal, gesture or word as their child grows. And they do this without thinking about it!

Our intuition is pretty good at adapting quickly to a young child's responses. After a couple of interactions, we can gauge whether we need to simplify our language or give more detail; whether we can only talk about the things the child is attending to, or whether we could bring in topics out of context; whether the child is following what we say or needs more clues such as gesture or a demonstration.

However, with someone who looks over about 4 or 5 years old, we can no longer rely on this intuition. Maybe this is because we expect 4-5 year-olds' language skills to be more or less fully developed, even though we expect them to still need to learn lots of words. If someone who looks older does not respond or does not use speech, we then tend to justify why this may be. For example, we may think *they don't want to respond*, or, *they don't have the speech control to respond*. This thinking often has carers of people with no speech reaching for the iPad to

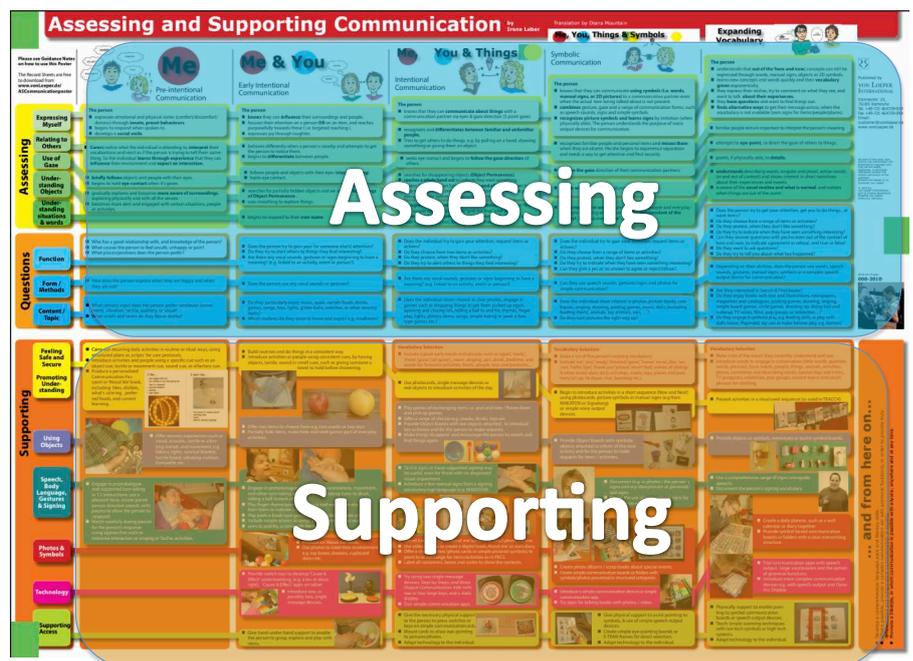


Fig. 1 Assessing – Supporting

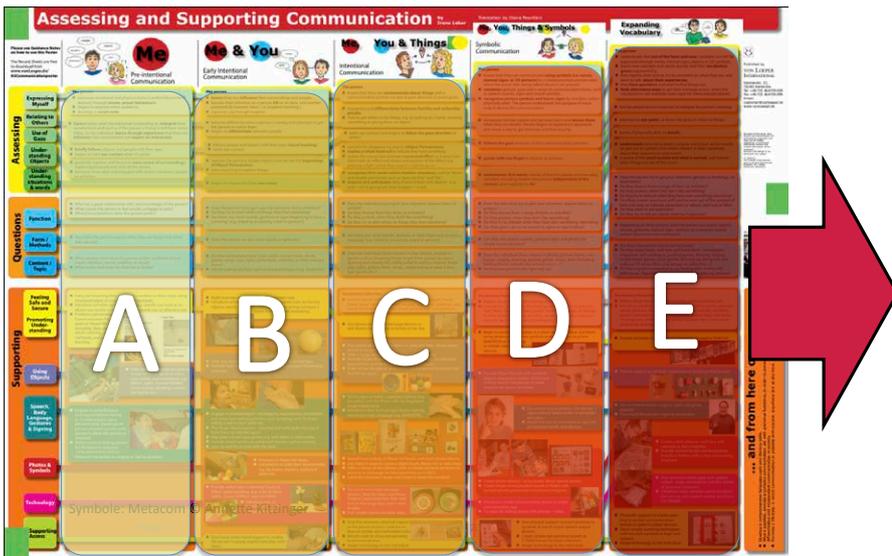


Fig. 2: Early Communication

solve both issues of motivation and lack of speech, but some individuals are not able to communicate using an iPad, due to their communication development. There is still plenty from the world of AAC that can benefit those in the early stages of communication development, and dozens of ideas are presented on this Poster, with guidance sheets and notes.

**The Poster gives us a user-friendly visual guide to identify which stage an individual's communication has reached, and provides a list of interventions to promote communication**

**development at each stage, hence the name: Assessing & Supporting Communication.** See Fig. 1.

The Poster covers typical development in the first 24 months, but does not give typical ages for each stage. It is applicable to supporting communication in both children and adults with learning disability. It is not designed for use with someone with an autism diagnosis as the development of communication in autism is atypical, so by its nature will not follow the developmental norms described here.

Communication development can be observed and described in stages linked with cognitive development. See fig. 2.

The stages are shown as columns on the Poster and labelled with the terms familiar to professionals: Pre-intentional, Early Intentional, Intentional, Symbolic, Expanding Vocabulary; however there are also labels to help the non-specialist understand how each stage impacts on the development of interactions, i.e. stages called:

**Me** - focus is on things that impact on own body, e.g. hunger, discomfort, tiredness, etc.

**Me & You** - a person is aware of other people and engages with others

**Me, You and Things** - a person is aware of others and that others see/hear the same things so we can share an experience and attention

**Me, You, Things and Symbols** - things can be represented by other things so gestures, toys, pictures, miniatures, and sounds/words, etc. can carry meaning

**Expanding Vocabulary** - words are beginning to be combined, and there's a need for more words

See Fig. 3.

**Assessing Communication Development**

The 'Assessing' section has descriptions of typical abilities at each stage, e.g. the person...

- expresses joy through laughter = **Me**
- knows they can influence their surroundings and people - focuses their attention on a person OR on an item, and reaches purposefully towards these (targeted reaching) = **Me & You**
- combines gesture, gaze and a range of communication forms such as speech sounds, signs and simple symbols = **Me, You, Things & Symbols**

These 'Abilities' are presented in green strands linked from left to right, describing what we can observe an individual doing at each stage using different aspects, i.e. *How they express themselves, Relate to others, Use gaze, Understand objects, and Understand situations and words.*

See Fig. 4.

This updated version includes a 'strand' about use of gaze which describes how, in early communication, we learn to hold

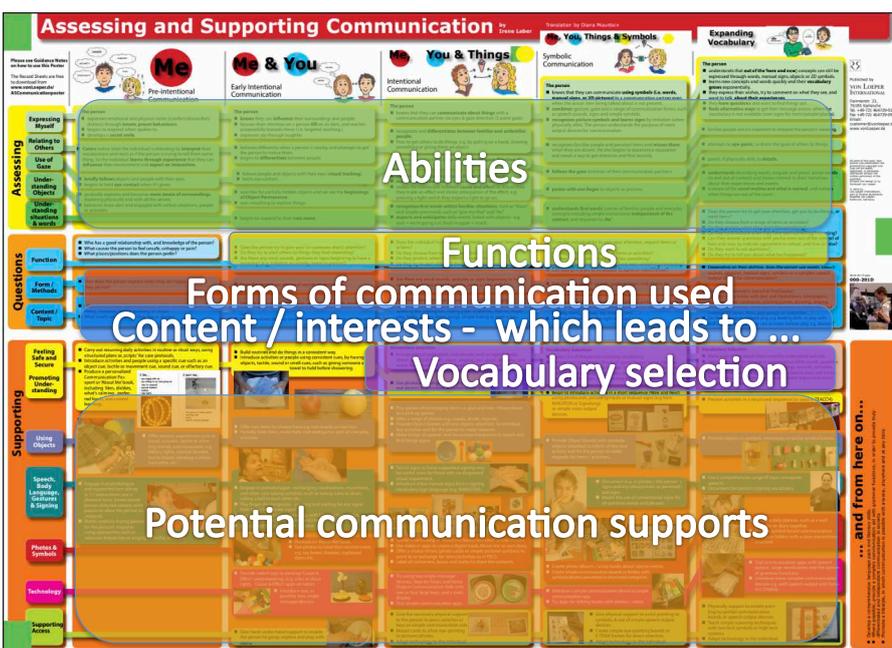


Fig. 3: The names of the stages are easy to understand: Me... Me & You... Me, You & Things... etc.

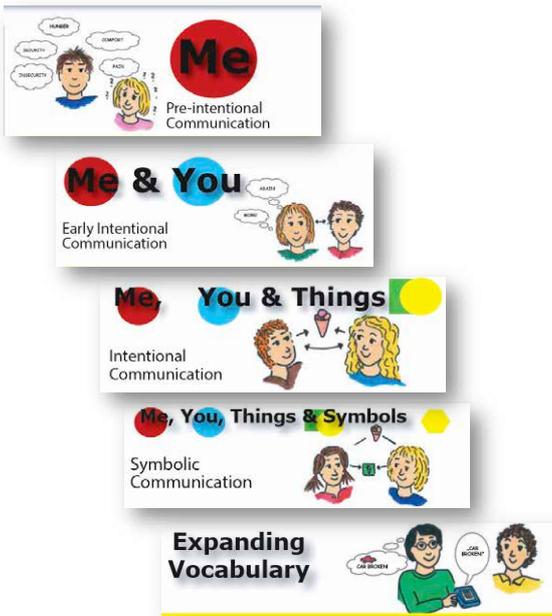
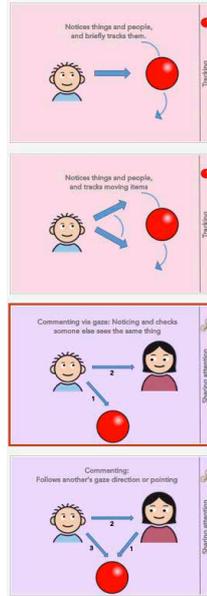


Fig. 4: Coloured strands of abilities - Further Questions (Communication Function, Form and Content)



■ briefly follows objects and people with their eyes.  
 ■ begins to hold eye-contact when it's given.



■ seeks eye contact and begins to follow the gaze direction of others.



Fig. 5 Development of Use of Gaze is described within 'Abilities' in the Asc Poster (symbols are from 'METACOM')

eye-contact and to track people/objects, before we learn to shift our eyes and to look from an object to a person and back again (Triadic or 3-point gaze). This last being a sign of intentional communication in typical development.

See Fig. 5.

There are blue strands of questions to ask about at each stage, focusing on three aspects of communication: Form, Function and Content (the 'how, why and what' of communication).

Questions are different at each stage, and include:

- How does the person express themselves when they are happy? (= Me)
- Do they protest or get upset if they don't like something? (= Me & You)
- Are any speech sounds, gestures or signs beginning to be used with meaning? (= Me, You & Things)
- Do they try to indicate when they have seen something interesting? (= Me, You, Things & Symbols)

- Do they try to tell you about what's happened? (Expanding Vocabulary)

Individuals do not fit neatly into one stage, so a 'best match' is needed, and there may be some skills that have already been mastered from a later stage or there may be some gaps from an earlier stage. All skills can be recorded on the record sheets to collate a growing body of evidence regarding that person's skills. Gaps may need further investigation to identify possible causes, and ensure opportunities are there to learn or demonstrate that skill.

Parents/carers can contribute to the recording of behaviours (looking, reaching, pointing etc.) that they see, and are able to keep the record sheets as evidence of their person's abilities for the future. See Fig. 6.

### Supporting Communication Development

Once the stage that best describes someone's communication skills has been identified, the lower section of the Poster has ideas for supporting communication.

This includes approaches to support understanding, speech, gesture, objects, photos, symbols and technology, and these are also arranged in more coloured strands.

The strands promote communication development at each stage and the ideas in one stage can be implemented in parallel.

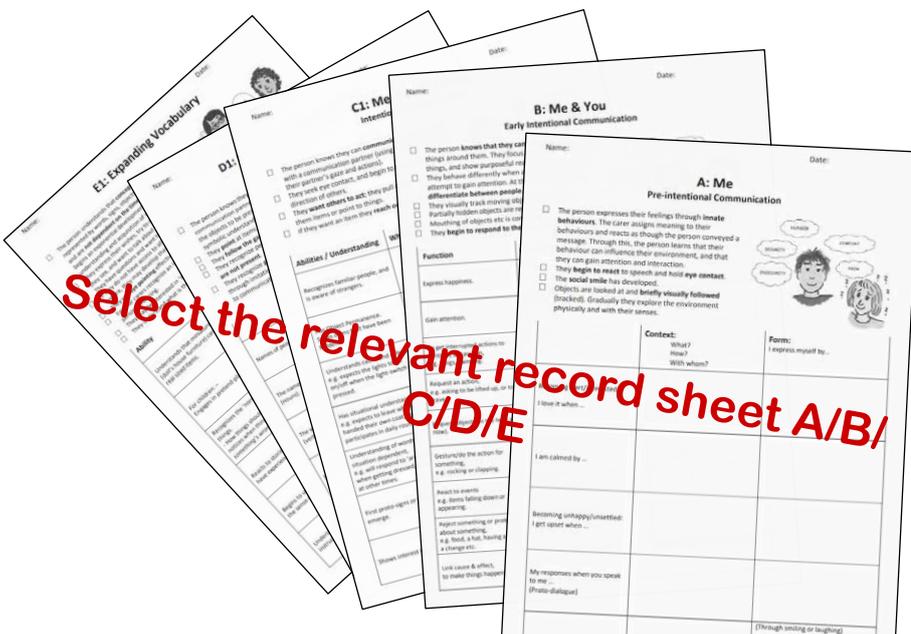


Fig. 6: Record Sheets are included

The Poster suggests first words to introduce once a person has 'Intentional Communication', and further words or word groups for a person with 'Symbolic Communication'; it also prompts us to include some grammar words, adjectives and questions words in 'Expanding Vocabulary', where vocabulary is growing more rapidly.

Overall, the Poster puts a huge amount of information onto one sheet: what to do, when to introduce what and what words to start with.

### Planning What To Do

Finally, the pack also includes an intervention planning tool: The Situation Circle Planning Tool.

This is ideal for joint planning within a team, to agree *who will do what? where? how?* etc.

It focuses on one situation, and sets out:

- what AAC approach will be used
- which words will be targeted, and whether these will be gestures, signs, photos or symbols (including which size, etc.)
- who will be involved, and for what purpose.

Several 'situations' can be planned, to encourage all members of the team including parents/carers to be involved in intervention.

See Fig. 7.

### Summary

'Assessing and Supporting Communication' offers a quick, useful guide to communication development and supporting strategies in one colourful display, using everyday language. The resource includes a way to record observations and plan, as a whole team around an individual, how best to develop their communication using a wide range of strategies.

**Vocabulary Selection**

- Include typical early words and phrases such as 'again', 'ready', 'there', 'gone' ('all-gone'), 'more', 'singing', 'eat', 'drink', 'bedtime', and words for favourite activities, foods, people, toys and positions...
- Use photocard, single message devices or real objects to introduce activities of the day.
- Play games of exchanging items i.e. give and take / throw down and pick-up games.
- Offer a range of choices e.g. snacks, drinks, toys etc.
- Provide Object Boards with real objects attached, to introduce key activities and for the person to make requests.
- Make things 'disappear' and encourage the person to search and find things again.
- Tactile signs or hand-supported signing may be useful, even for those with no diagnosed visual impairment.
- Introduce a few manual signs from a signing vocabulary/sign language (e.g. MANDATORY).
- Spend time looking at 'About me' books and small photo albums
- Use video in apps to create a digital book 'About me' or own diary.
- Offer a choice of two (photo cards or simple pictorial symbols) to point to or exchange for items/activities as in PECS.
- Label all containers, boxes and crates to show the contents.
- Try using two single-message devices, Step-by-Steps, and Voice Output Communication Aids with two or four large keys, and a static display.
- Trial simple communication apps.
- Give the necessary physical support to the person to press switches or keys on simple communication aids.
- Mount cards to allow eye-pointing to pictures/photos.
- Adapt technology to the individual.

**Everyday Interventions with the Situational-Circle**  
By Götze/Spiegelhalter/Leber

Person's Name: Achmed

Members of the Team: Irene, Rebekka, Heidi.

Date: Tuesday 3.12.19

Date of next meeting: \_\_\_\_\_

**What?**  
(Content/topic)

**There, gone (not there), Sandra, Peter, Max**

**How?**  
(Form /Method)

**Signing**

**The Situation**  
When & where?

**Circle time**

**With whom?**

**Heidi**

**What's the purpose?**  
(Function/reason)

- o social exchange
- o make a request
- o comment
- o refuse or reject
- o ask
- o answer
- o report/talk about events
- o express feelings / opinions
- o clarify

What is the task?	Who is going to do it?	By when?

Fig. 7 The Situation Planning Tool using ideas and vocabulary from the poster for intervention.

# Questioning Our Defaults

## Looking at Assistive Technology (AT) Features to Support AAC Use and Learning

**BETHANY DIENER, MS, CCC-SLP**

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**Tina Voizey, Teacher**

*“We always start with...” “Everyone needs...” “People with [diagnosis] always...”*

Defaults are defined as something usual or standard; a preselected option. While not always wrong or negative, our defaults may not take into account the unique skills, needs, and goals of each AAC user. They can lead to a ‘cookie cutter’ approach in AAC assessment and implementation which may not best address the needs of the individual client.

With this in mind, let’s consider three features available in low-tech and high-tech AAC. We will review common defaults related to them, as well as benefits and challenges, which we need to take into account as we assess and implement AAC use.

### Grid Size

Selection of an initial grid size in AAC is vital as it impacts accuracy and efficiency of access, as well as setting the stage for ongoing growth. We have two options in choosing an initial grid size:

Choose a grid size containing buttons which the individual can both see and accurately select. This means we could have a grid as small as 1 button to one containing 80+ buttons.

Choose a grid with a few large buttons despite the individual’s visual and physical skills.

Do you find yourself saying things like this? “We start everyone with 2x2 because it is easier no matter what their physical

**Table 1**

	Benefits:	Challenges:
<p><b>Smallest buttons the user can see and select</b></p> <p><i>Size can vary widely for different users.</i></p>	<ul style="list-style-type: none"> <li>Provides the most vocabulary for exploration and modelling.</li> <li>No need to relearn button location as size stays the same.</li> <li>Offers opportunity to use location-centred growth strategy (see Approaches to Growth below)</li> </ul>	<ul style="list-style-type: none"> <li>Presumed increase in cognitive and motor demands for user and/or partner.</li> </ul>
<p><b>Few buttons (e.g., 2x2) despite better user visual and physical skills</b></p>	<ul style="list-style-type: none"> <li>Presumed reduction in cognitive and motor demands for user and/or partner.</li> </ul>	<ul style="list-style-type: none"> <li>Requires relearning of button location as/when grid size grows</li> <li>Less opportunity for exploration.</li> <li>Less opportunity for modelling.</li> </ul>
<p>Questions to consider:</p> <ul style="list-style-type: none"> <li>What grid size/button size can the user accurately see and physically access?</li> <li>Will relearning vocabulary location be difficult for the user and/or partner?</li> </ul>		

skills are like.” “Everyone with [diagnosis] gets a 5x5 grid size.” The table above presents benefits, challenges, and questions to consider in making this decision.

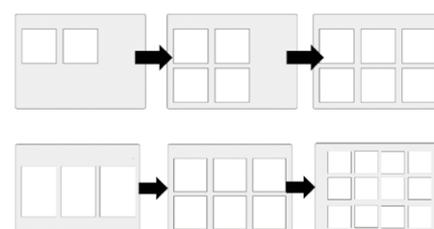
### Growth of Vocabulary on a Page/Screen

Once an initial grid size is selected, we have three options in approaching growth. The approaches to growth described below have been around in the AAC world for quite a while. In 2016, two of the approaches got new names thanks to research by Dukhovny and Zhou.

- Robust Approach:** start with a grid which the individual can physically and visually use accurately and

efficiently. Use it to communicate as you talk (model) and the individual will learn over time.

- Location-Centred Approach:** start with a grid which the individual can physically and visually use accurately and efficiently. Hide buttons, then show them gradually over time.



- **Size-Centred Approach:** start with a grid with buttons and add additional buttons over time. Each addition of buttons will change the size and location of previous buttons.

These approaches to growth have distinct benefits and challenges. They, together with the questions listed, will guide your decision-making in this area. See Table 2.

### Symbol Representation

Photos, line drawings and text, independently or in combination, are commonly used on AAC systems as a visual representation of the vocabulary available to the user. "We always use \_\_\_ line drawings with the words underneath." "We never put pictures on core words." These are two defaults existing around symbol representation. With the current and important focus on literacy in the AAC world today, we must thoughtfully consider our use of these representations with the benefits, challenges, and questions. See Table 3.

We have explored only three features of many available in AAC and about which we all might have our defaults. For the benefit of our clients, let's each take a step back and examine our own decision-making process around these features. For further assistance, take a look at this free **Augmentative-Alternative Communication/Assistive Technology Feature Consideration Tool**. <https://pathwayslms.blob.core.windows.net/pathwaysforcfl/AAC%20AT%20Feature%20Consideration%20Tool.pdf>

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**Table 2**

	Benefits:	Challenges:
<b>Robust Approach</b>	<ul style="list-style-type: none"> <li>• No relearning of location.</li> <li>• Opportunities for exploration.</li> <li>• More opportunities to model.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to overwhelm partner and/or user.</li> <li>• Requires skill and partner-based methods.</li> </ul>
<b>Location-Centred</b>	<ul style="list-style-type: none"> <li>• No relearning of location.</li> <li>• Opportunities for exploration.</li> <li>• More opportunities to model.</li> <li>• Typical adults learned faster and more accurately with this approach.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to overwhelm partner and/or user.</li> <li>• Requires skill and partner-based methods.</li> </ul>
<b>Size-Centred</b>	<ul style="list-style-type: none"> <li>• May accommodate changing motor and visual needs.</li> <li>• May reduce potential to overwhelm.</li> </ul>	<ul style="list-style-type: none"> <li>• Requires relearning of locations.</li> <li>• Less opportunity for exploration.</li> <li>• Less opportunity for modelling.</li> </ul>

Questions to consider:

- Can I start with a robust approach?
- If not, which approach will work best for the user?
- If not clear difference, what will work best for the partners?

**Table 3**

	Benefits:	Challenges:
<b>Photos and Line Drawings with Text Labels</b>	<ul style="list-style-type: none"> <li>• May help with location of desired button.</li> <li>• Can assist in building receptive language.</li> <li>• Personal photos take advantage of background knowledge.</li> <li>• Line drawings offer generic representation (e.g., all dogs vs. my dog).</li> </ul>	<ul style="list-style-type: none"> <li>• Abstract symbols have to be taught/learned (e.g., image of a smile for like).</li> <li>• Distract from focus on text, decreasing literacy learning.</li> </ul>
<b>Text Only</b>	<ul style="list-style-type: none"> <li>• Opportunity for literacy learning.</li> <li>• No need to first learn a photo or line drawing then also the text.</li> </ul>	<ul style="list-style-type: none"> <li>• Less concrete representation</li> <li>• May require longer to learn.</li> </ul>

Questions to consider:

- Do they know the symbols already?
- Will the symbol help them locate the message or do I need to teach the symbol as well?
- Do I need it in some places and not in others?



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