



Implementing AAC in Practice

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Learning Objectives

By the end of this training session, you will be able to:

- Identify common barriers to successful AAC use
- Use practical strategies to embed AAC into everyday life and help make it motivating and meaningful for your clients
- Explain the Human Activity Assistive Technology Model (HAAT) model and other theoretical models that can guide clinical decision making



Agenda

- Common barriers to success
- Introduce the HAAT model
- Implementation strategies specific to the:
 - AAC user and others providing support
 - Activity
 - Technology
 - Environment



What is AAC?



- AAC describes devices or systems that help people to communicate if they have difficulty speaking. Incorporates signing, PECS, communication boards
- Focus of training course is on high tech but also applies to low tech
- Low tech is key and must be established as a back if high-tech fails



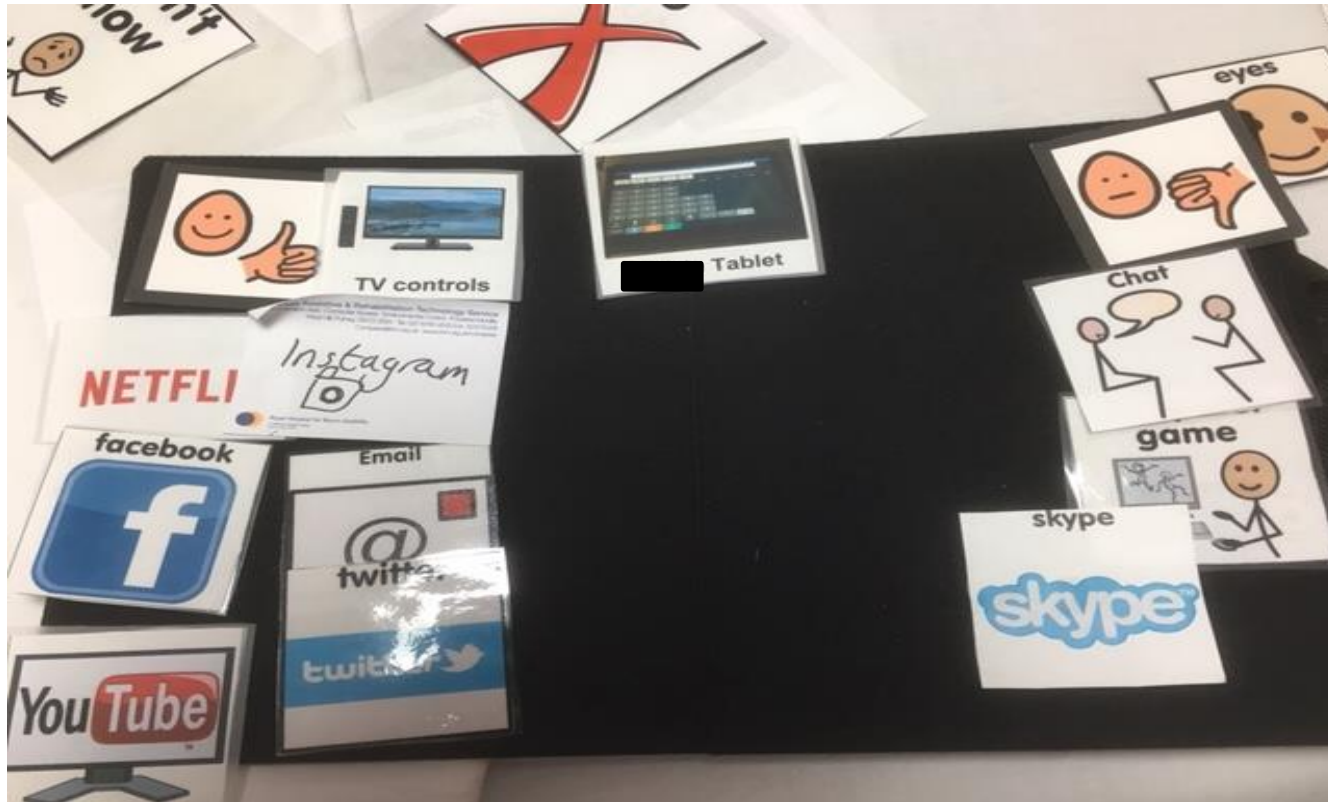
What are some of the barriers
to successful AAC use?



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Quick example - Talking Mats: What do I want to work on with the computer?

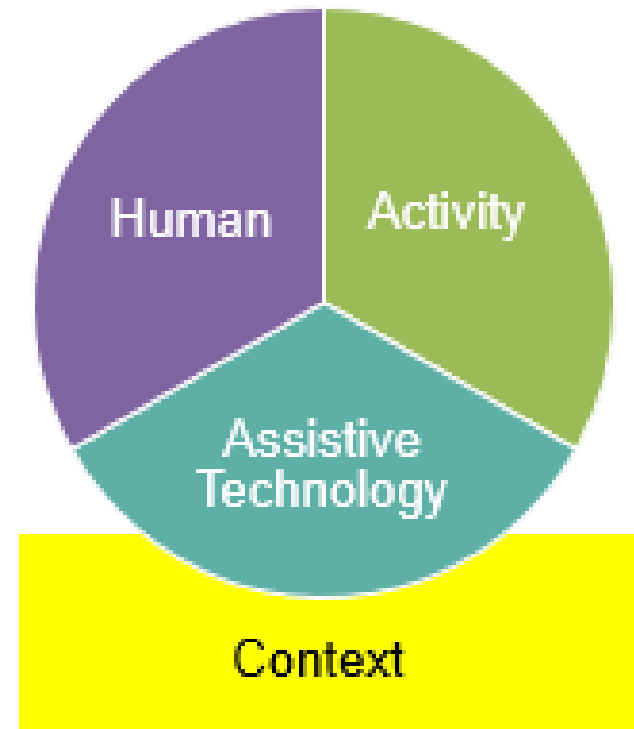


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Human Activity Assistive Technology Model (HAAT)

- Human: represents the skills and abilities of the person with a disability
- Activity: a set of tasks to be performed by the person with a disability
- Context: the setting or social, cultural and physical contexts that surround the environment in which the activity must be completed
- Assistive Technology: devices or strategies used to bridge the gap between the person's abilities and the demands of the environment



(Cook & Hussey, 2007)



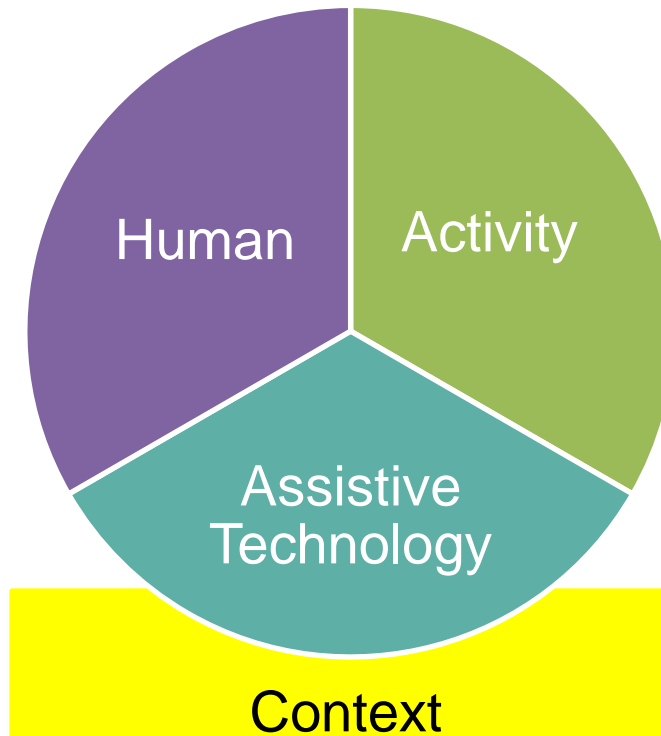
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Common Barriers to Success

- Reduced motivation, values & attitude towards AAC*
- Lack of confidence*
- Difficulties learning to use*
- Mismatch between person's needs and technology*
- Not involved in decision-making, no ownership*

- Technical problems
- Slow to operate e.g. generate a message*
- Ease of use*
- Mismatch between person's needs and technology



- Difficulties communicating across different activities & environments*
- Lack of opportunity
- Not part of routine

Context:

- Perceptions & attitudes of those supporting user*
- Knowledge & skills of those supporting user
- Lack of training - family, staff, professionals*
- Time constraints

(*Baxter et al, 2012)

Implementation Strategies: Human

- *“Technology use is not the end goal [...] Technology use has no inherent value in and of itself. It is communication that is the essence of human life”*
(Light & McNaught, 2013, p301)
- Support person to take a lead in decision-making e.g. active participation in goal setting



Learning Methods: Errorless Learning

- Preventing the person making a mistake while learning a new skill
- Evidence for use with people with memory impairments (Fisher et al, 2015)
- Positive reinforcement & feedback
- Repetition and practice
- Activity/task analysis: break down an activity into smaller units
- Grading through hierarchy of prompts



Example

Activity: Using Text Talker on an iPad to say, 'I'd like a drink, please' in quick phrases- direct access

Steps	Level of prompts	No. of prompts
Locate the home button		
Press the home button		
Locate Grid app		
Select Grid app to open		
Locate quick phrases		
Select quick phrases		
Locate 'eating and drinking'		
Select eating and drinking		
Locate 'I'd like a drink, please'		
Select 'I'd like a drink please'		

*This is not a full activity analysis

Learning Methods: Backward/Forward Chaining

- **Forward chaining:** *The learner* starts with the first step and you complete the rest. Once the person masters the first element, they perform the first and second etc. until the learner can complete all the steps.
- **Backward chaining:** *You* do the first steps and the learner completes the final step.



Implementation Strategies: The Activity

- Understand the client's routine and support provided
- Have AAC use written into care plan/EHCP/IEP
- Create communication opportunities including in different environments
- Activity analysis: break activity down to see how can grade or modify the activity. For example, may need to compensate.
- Delayed assistance
- Provide real and motivating reasons to communicate!



AAC Prompting Hierarchy

(From Positive AACtion - Rocky Bay 2010; Senner 2010; YAACK 1999)

1	Expectant Pause	Give the child time to respond or the opportunity to initiate communication.
2	Indirect Nonverbal Prompt	Use your body language to indicate to the child that something is expected (e.g. expectant facial expression, questioning hand motion with a shrug, etc).
3	Indirect Verbal Prompt	Use an open-ended question that tells the child that something is expected but nothing too specific (e.g. "Now what?", "What should we do next?").
4	Request a Response	If there is still no response, you can try to direct the child more specifically (e.g. "Tell me what you want." "You need to ask me.").
5	Gestural Cue	You can point to the symbol or leave/tap your finger there for several seconds to get the child started with his message.
6	Partial Verbal Prompt	If there is still no response, give them part of the expected response (e.g. "You went to the...").
7	Direct Model	If still no response, model on the student's device (e.g. "The bear is sad."). Pause and wait for the child to imitate or respond.
8	Physical Assistant	Provide hand-over-hand assistance to help the child to form the message using their device.

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Use the least intrusive cue that produces the accurate response

- Least-to-most prompting positively increases multi symbol message production (Finke et al, 2016)



Implementation Strategies

Modelling



- Use the AAC system to talk to the AAC user – value their method
- Modelling supports responsiveness and use of AAC for people with complex communication needs (Beck et al, 2009)
- Model as often as you can and point to symbols while you talk. For e.g. if they are watching a television programme and laughing, you could comment, “You like this”, while pointing to a ‘you like’ symbol
- It’s fine to make mistakes!
- Modelling for adults with progressive conditions?



Implementation Strategies: Modelling

The average 18-month-old has been exposed to 4,380 hours of oral language at a rate of 8 hours/day from birth. A child who has a communication system (AAC) and receives speech/language therapy 2 times/week for 20-30 minutes will reach the same amount of language exposure (in their AAC language) in 84 years.

Jane Korsten, SLP



Implementation Strategies: Assistive Technology

- **Predictive feature matching:** match between person and technology e.g. layout, cell size, colour contrast, specific cell functions, personalisation
- **Ease of use**
- **Technical support** available, repairs and swapping out devices
- **Planned Preventative Measure (PPM)**



Implementation Strategies:

Context

- Training to all those supporting user: repetition, seeing modelling in action, empower user to show others, using AAC in different environments and contexts
- Show staff how it makes communication smoother overall – what is in it for them?
- In care homes: consider involvement of activity coordinator and management
- Monitor and encourage use through record forms
- Clear clinical guidelines visible to others
- Compass training to speech therapists in our area



Implementation Strategies: Context – Change Management

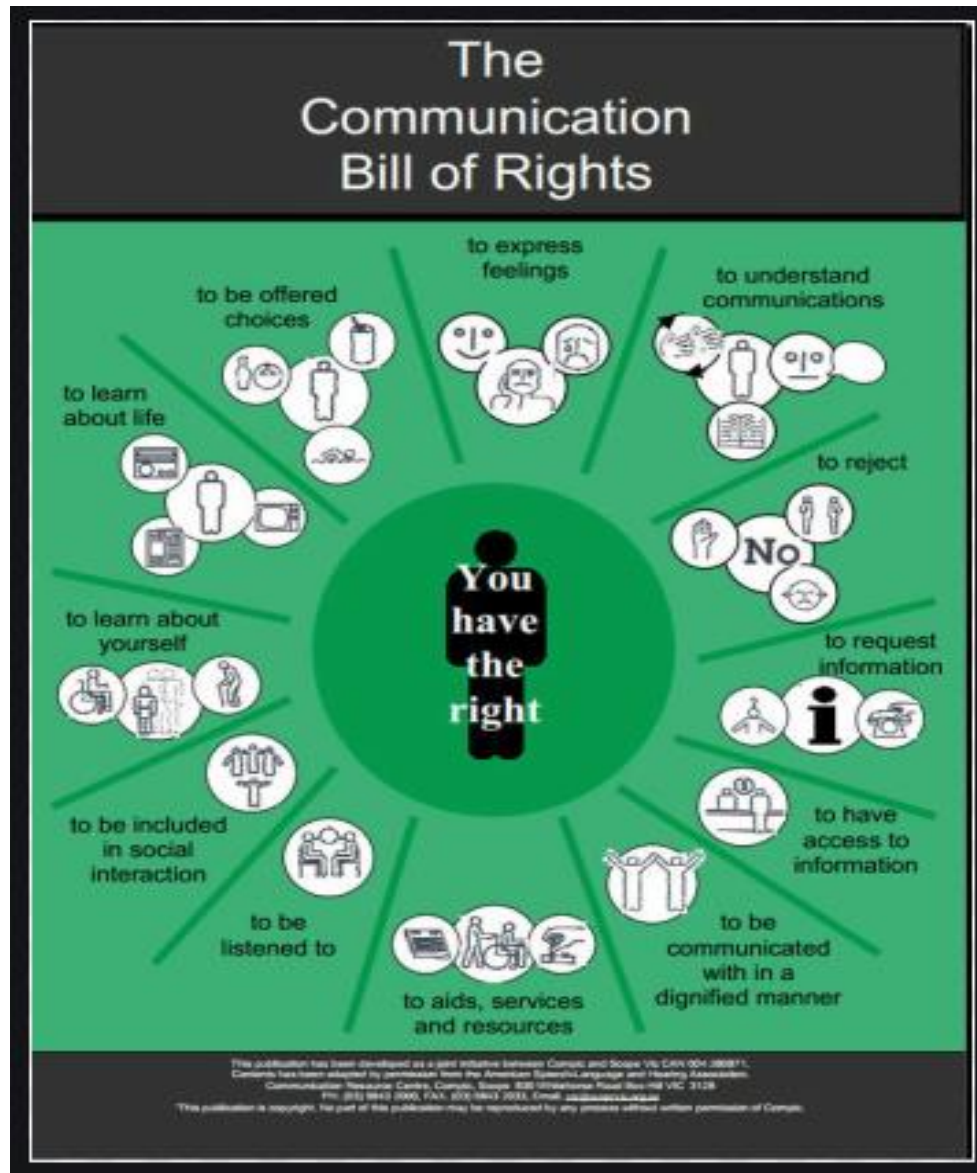
- Change is not always easy
- NHS England's Sustainable Improvement Team's Change Model (2018) provides a framework to enable effective and sustainable change to benefit patients, staff and communities
- For anyone, at any level and role, who wants to introduce a change
- Includes eight components: shared purpose; spread and adoption; improvement tools; project and performance management; measurement; system drivers; motivate and mobilise; leadership by all

<https://www.england.nhs.uk/wp-content/uploads/2018/04/change-model-guide-v5.pdf>



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(Brady et al, 2016)



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Implementation Tools: Record of Use

Record of use – Communication device

Date	What was the message?	Level of prompting (see attached sheet)	Other notes
23/09/19	<i>I want <u>Beyonce</u> More Rihanna</i>	<i>Gestural prompt</i>	<i>Motivated to use device</i>



Implementation Tools: Planner

AAC implementation planner

Child's name:

NHS no:

Name of AAC device:

Company contact for tech support:

Date device issued:

DoB:

Date:

Name of AAC software:

Hub contact:

AAC team contact details

Member	Name	Contact Tel:	Email address
SaLT			
OT			
Parent			
Teacher			
Key TA			



Roles and responsibilities

Job	Who will do it
Charge device	
<u>Troubleshoot technical issues</u> - E.g. Phone the tech support	
Send device back for repair	
Alert SaLT for any issues	
Programme and edit	
Ensure device is ready for use daily	
Ensure low tech is kept up to date	
Support child to use device daily	
Set goals	
Review goals	
Back up device	
Deliver training	
Clean device	



Implementation Tools: Support Passport

How to help me use my device

Be honest if you can't understand me and ask me to use my device e.g. "I'm sorry I don't understand – can you use your iPad?"

My iPad has lots of **single words** on it which can help you understand a **key word** about what I'm trying to tell you.

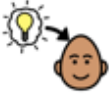





You can ask me **specific questions** to narrow down what I'm talking about e.g. "Where did this happen? You can use your iPad to tell me....who was there?...Sorry I don't understand – let's look on your iPad".

Help me to learn where all the words are by exploring the iPad with me in your natural conversation e.g. "For dinner...(point to the dinner button) I like to eat....pizza (point at the pizza button).

Remind me to charge my iPad regularly. Remind me to take it out on trips.



Implementation Tools: Goal Setting

I will...	You can help me by...	I am using my new skill...	How well did I do?
			
<p>use my iPad every day at mealtimes</p>	<ul style="list-style-type: none"> • showing me where words are on my iPad • also using my iPad to talk to me (modelling) • encouraging me to use it if you can't understand me 	<p>to tell people what I want to eat and drink</p>	
<p>use my iPad every day to give my opinion when asked</p>	<ul style="list-style-type: none"> • help me practice finding words e.g. "where is pork pie? Let's look for it together" • contacting Samia if you need any more support / new words • accepting my sign/gesture/facial expression if you know what it means 	<p>for social interaction with Robert, at my work placement and in the community</p>	





Thank you for listening!
Any Questions?

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<https://www.rhn.org.uk/what-makes-us-special/services/compass/>

References

Baxter, S., Enderby, P., Evans, P., & Judge, S. (2012). Barriers and facilitators to the use of high-technology augmentative and alternative communication devices: a systematic review and qualitative synthesis. *International Journal of Language & Communication Disorders*, 47, 115–129.

Beck, A. R., Stoner, J. B., & Dennis, M. L. (2009). An investigation of aided language stimulation: Does it increase AAC use with adults with developmental disabilities and complex communication needs? *Augmentative and alternative communication*, 25(1): 42-54.

Brady, N. C., Bruce, S., Goldman, A., Erickson, K., Mineo, B., Ogletree, B. T., Paul, D., Ronski, M., Sevcik, R., Siegel, E., Schoonover, J., Snell, M., Sylvester, L., & Wilkinson, K. (2016). Communication services and supports for individuals with severe disabilities: Guidance for assessment and intervention. *American Journal on Intellectual and Developmental Disabilities*, 121(2), 121–138

Cook, A. & S.M. Hussey (2008), 3rd ed., *Assistive Technologies: Principles and Practice*, St. Louis, Missouri: Mosby/Elsevier

References

Finke, E. H., Davis, J. M., Benedict, M., Goga, L., Kelly, J., Palumbo, L., Peart, T., & Waters, S. (2017). Effects of a least-to-most prompting procedure on multisymbol message production in children with autism spectrum disorder who use augmentative and alternative communication. *American Journal of Speech-Language Pathology*, 26(1), 81-98.

Fish, J.E., Manly, T., Kopelman, M.D. & R.G. Morris (2015) Errorless learning of prospective memory tasks: An experimental investigation in people with memory disorders, *Neuropsychological Rehabilitation*, 25:2, 159-188, DOI: [10.1080/09602011.2014.921204](https://doi.org/10.1080/09602011.2014.921204)

Light, J. (1989) Toward a definition of communicative competence for individuals using augmentative and alternative communication systems. *Augmentative and Alternative Communication* 5:137-144

Light, J. & D. McNaughton (2013) Putting People First: Re-Thinking the Role of Technology in Augmentative and Alternative Communication Intervention, *Augmentative and Alternative Communication*, 29:4, 299-309

References

Light, J. & McNaughton, D. (2014) Communicative Competence for Individuals who require Augmentative and Alternative Communication: A New Definition for a New Era of Communication *Augmentative and Alternative Communication* 30:1-18

Money, D. & Thurman, S. (1994). Talk about communication. *Bulletin of the College of Speech and Language Therapists*, 504:12–3

NHS England Sustainable Improvement Team (2018) *The Change Model Guide*. Available at: <https://www.england.nhs.uk/wp-content/uploads/2018/04/change-model-guide-v5.pdf> [Accessed 08/06/20]

Resource list

CODES framework – outcome measure and goal setting tool

<https://codesframework.wordpress.com/>

Social Networks: A communication Inventory for the Individuals with Complex Communication Needs and their Communication Partners

https://www.augcominc.com/social_networks.htm

Assistive Ware Core Word Classroom – free session plans and activity ideas

<https://www.assistiveware.com/blog/assistiveware-core-word-classroom>

Start Modeling from Assistive Ware website

<https://www.assistiveware.com/learn-aac/start-modeling>

AAC Language Lab – resources and activity ideas

<https://aaclanguagelab.com/>

Praactical AAC – blog with lots of useful ideas and links

<https://praacticalaac.org/>

Resource list

I-ASC model of decision making

<https://iasc.mmu.ac.uk/i-asc-explanatory-model-of-aac-decision-making/>

The Ace Centre resources and publications e.g. developing AAC policies in schools

<https://acecentre.org.uk/product-category/publications/>