CHAT-Now Manual

Children's Aided language Tools

scope

Disability Means Possibility

The Picture Communication Symbols ©1981-2006 Mayer-Johnson LLC. All Rights reserved Worldwide. Used with permission.

Boardmaker® is a trademark of Mayer-Johnson LLC.

Mayer-Johnson LLC
P.O. Box 1579
Solana Beach, CA 92075
U.S.A.
Phone: +1 858-550-0084
Fax: +1 858-550-0449
email: mayerj@mayer-johnson.com
Web site: www.mayer-johnson.com

Acknowledgements

Please note: throughout this publication 'the child' will be referred to as 'he'.

Disclaimer: **CHAT-Now** contains information and resources to support communication and language development for young children with complex communication needs.
It is the responsibility of the user to ensure that any information and resources be selected and modified with due consideration given to the individual needs and abilities of each child.
The authors shall not be liable for any loss, damage or injury resulting from the information and resources presented in **CHAT-Now.**

CHAT-Now MANUAL

INTRODUCTION

CHAT-Now includes tools that enable busy professionals to begin early intervention using aided language with young children who have complex communication needs. The name reflects this purpose: *Ch*ildren's *A*ided *L*anguage *T*ools to **CHAT-Now**.

The resources included in **CHAT-Now** specifically aim to support the creation of an aided language learning environment for young children.

The Aim: Creating an aided language learning environment

The central role of an adequate language learning environment, to stimulate communication and language development, is well recognised. All language development theories assume that children are surrounded by models of others using the language they are learning in their daily environments.

Children typically experience a multitude of examples of others using the spoken language they are learning to communicate; however, children learning aided language often face a significant imbalance between the communication modes they observe others using (receptive input) and the aided language they are learning to use (expressive output).

Children learning aided symbols may rarely have the opportunity to experience how aided language can be used to communicate for a range of purposes in their daily lives. [*von Tetzchner & Grove (2003)*].
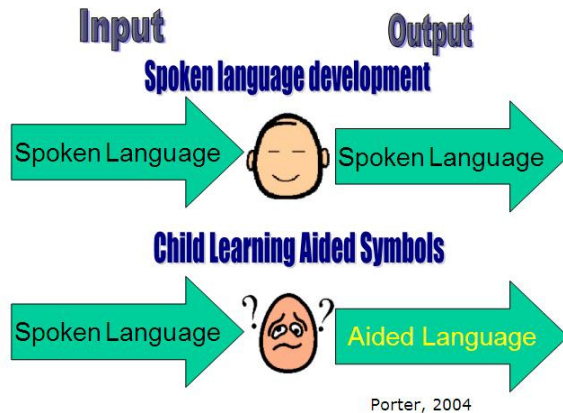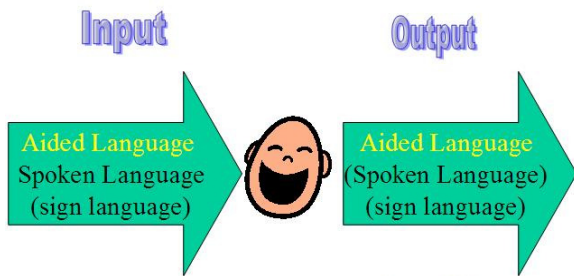
The aim is to create an aided language learning environment reflecting that which is available to children acquiring spoken language.

'A child who uses speech will independently select the words <u>she</u> wishes to use from the vast array of words she hear /sees used everyday.
A child who uses AAC will independently select the words <u>she</u> wishes to use from the vocabulary <u>other</u> people have chosen to model and, for aided symbols, made available for her to use.'

Porter and Kirkland (1995)

Whilst an environment of language users naturally exists for spoken language development, an aided language learning environment needs to be consciously created.

To create an aided language learning environment it is necessary to:

- ensure that the required aided symbol vocabulary is available at all times;
- use the aided symbols (with speech) to interact for genuine communicative purposes throughout the day;
- provide the child's partners with training which enables them to use the child's AAC systems in their daily lives.

The Challenge: Making aided language available in daily life

The task of creating aided language materials 'from scratch' to support the communication and language development of young children can be a daunting task for many professionals. Whilst the importance of early introduction of aided language to promote communication and language development is well documented [*von Tetzchner & Grove(2003)*], intervention can often be significantly delayed due to difficulties experienced in creating the necessary materials.

Barriers to the provision of sufficient aided language to support children's communication function and development include:

- Limited (funded) time to design and produce individual aided language displays from scratch.
- Limited knowledge required to select appropriate vocabulary for effective aided language displays.
- Limited experience of page layout and vocabulary organisation strategies for the most efficient, workable aids.

The consequences of these difficulties can be significant for young children with complex communication needs. The difficulties include:

- Long delays in starting aided language stimulation (the aim is to start   providing receptive input early).
- An inadequate range of vocabulary being provided, limiting the child's opportunities to learn and use aided language as a genuine mode of communication (as opposed to an activity that occurs only at certain times or to express a limited range of meanings).
- Limited vocabulary and/or inefficient vocabulary organisation reducing effective communication. For example, the aids do not support what the child and partners need to communicate. This may result in the child and his communication partners not seeing how the AAC system adds to the quality of their communication, thus leading to system abandonment.

The scenario of spending hours and hours trying to create the 'perfect aid' in order to begin intervention with an individual child, only to discover that it is not effectively supporting the child's communication or being used in the their daily environments, is disheartening and frustrating.

The creation and use of generic templates can help to alleviate these difficulties. The templates provide tools to begin using immediately, that can incorporate the vocabulary and aid design features required to meet individual requirements. It is helpful to remember

that aided systems are never perfect the first time. They become better as the creator learns more about the individual child's requirements over time.

Experience indicates that opportunities to interact using aided language displays are key to people learning how aided language is used for real communication. These experiences provide people with information to make effective communication aids. Whilst generic templates may not be 'exactly right' for the individual, using them to interact, and modifying them to meet individual needs along the way, assists people to learn to design their own displays.

A circular effect appears:

Assists people to make effective aided language displays → Using well – designed activity displays to interact with children in natural environments → Assists people to make effective aided language displays → Assists people to make effective aided language displays
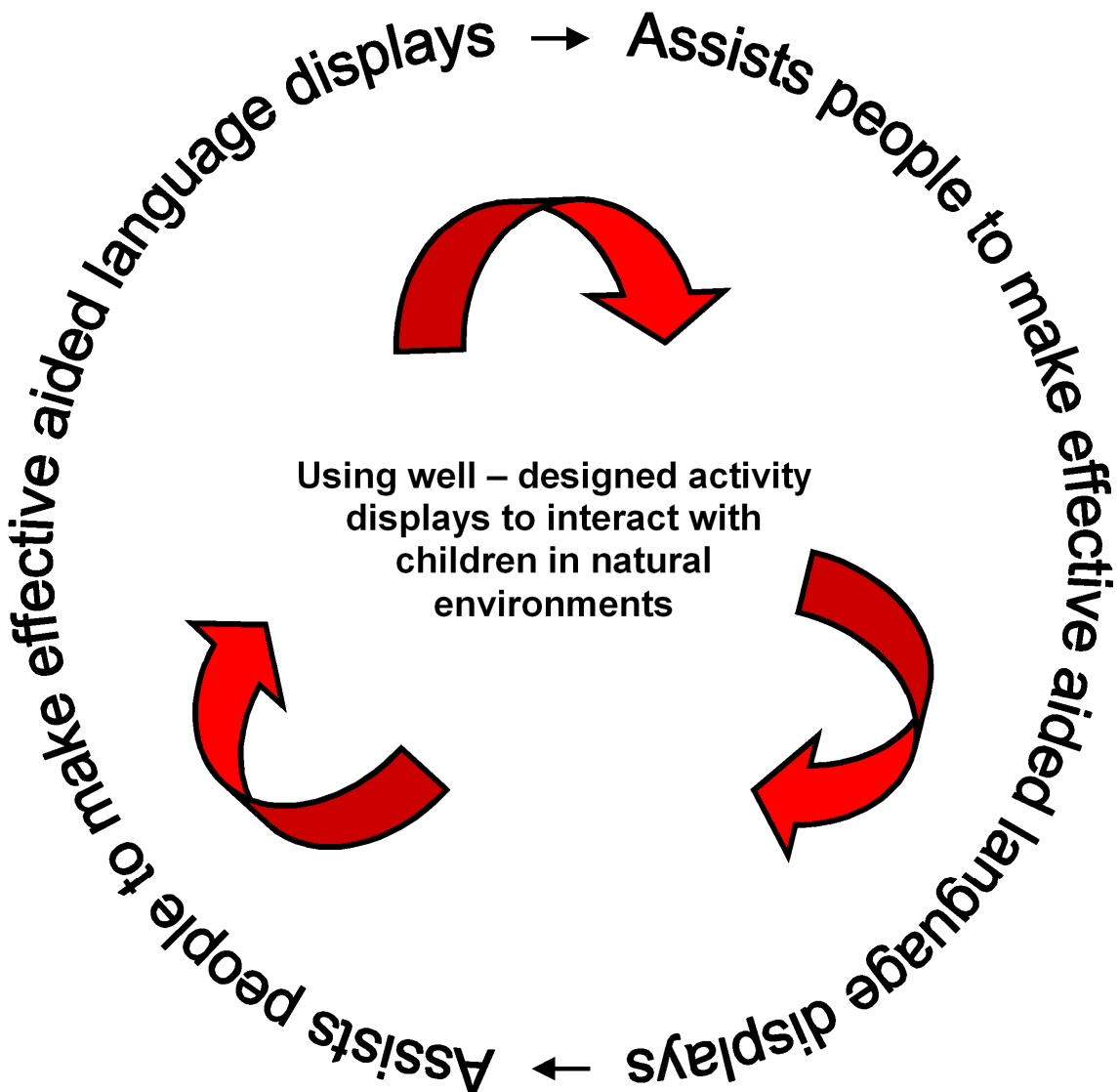
Templates included in *CHAT-Now*

CHAT-Now templates use the *Picture Communication Symbols (PCS)* symbol set which is included with the Boardmaker® program.

As **a starter kit for beginning AAC interventions,** it was important to consider the availability of compatible resources to extend children's communication and language beyond **CHAT – Now**. The PCS symbol set was selected because:

- it is currently an option with a number of dynamic display speech-generating devices;
- the same symbols have been selected for use with the *Pragmatic Organisation Dynamic Display (PODD) communication book* resource *(Porter, 2007).*

ACTIVITY DISPLAYS:

An activity display provides a concentrated vocabulary to be used to communicate during a specific routine or activity. Vocabulary is included on each display to enable expression of a range of communication intents and messages appropriate to the activity.

The activity display templates in **CHAT-Now** are organised into folders based on the most common location for that activity. There are 12 per page and 20 per page templates available for each activity display

HOME

Daily routine:
Bath time; bedtime; read a book; brush hair; comb hair; cook (watching/assisting someone cook); dress; listen to music; mealtime; nappy change; brush teeth; toilet; watch TV; wake up; wash hands/face.
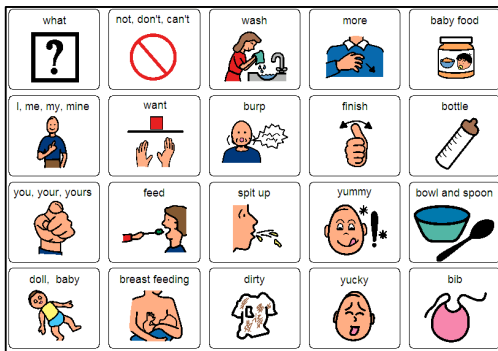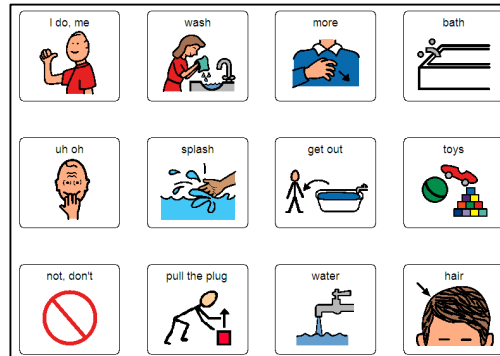
Play activities:
Ball; balloon; blocks; bubbles; doll play; bath doll; put doll to bed; dress doll; feed doll; feed doll bottle; change doll's nappy; draw; play musical instruments.
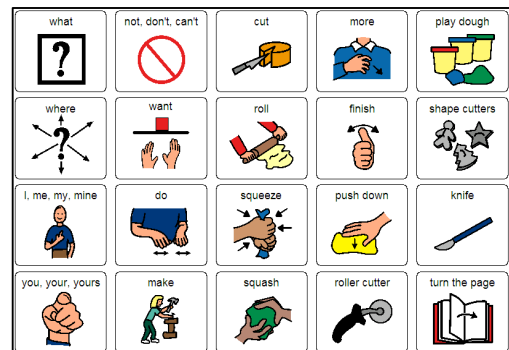
EARLY CHILDHOOD EDUCATIONAL SETTING:

Ball; blocks; book; car; draw; dress up; finger paint; game; home corner; listen to music; music play; outside; paint; paste; play dough; puzzle; sand; snack; toilet; wash; water play.

GENERAL INTERACTION DISPLAYS:

General interaction displays are used to enable communication between activities that have a specific display. The use of a general interaction displays assists people to develop the concept and habit that aided language is used to communicate all of the time (it is the child's method of communication, not just a teaching task or strategy to be used at specific times). The vocabulary included on the templates allows for the expression of a range of communication intents using very general vocabulary.
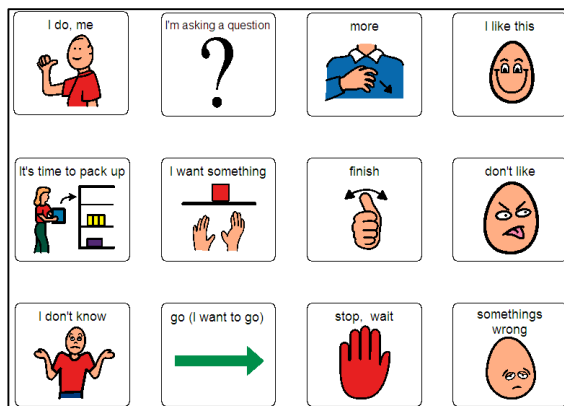
These templates were also designed to enable an easy transition to access an expanded vocabulary in a multi-level communication book using the *Pragmatic organisation dynamic display (PODD) communication books* resource *(Porter 2007).*
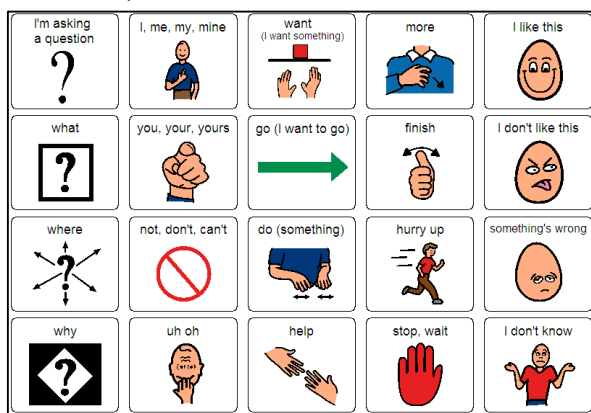
The general interaction display templates in **CHAT-Now** are organised into the home and early childhood education folders. There is also a template for a simple, multi-level general interaction display for use in early childhood education settings. Vocabulary in this multi-level display is arranged using strategies from the *Pragmatic Organisation Dynamic Display (PODD) (Porter, 2000, 2007).*

ACTIVITY CARDS:

Templates to create individual activity cards are also included for each activity referenced in **CHAT-Now**. The templates are printed, laminated and cut into individual cards. These symbol cards can be used in a variety of ways to:

- tell children which activity they are about to do;
- create a visual schedule;
- provide the child with choices.

BLANK TEMPLATE GRIDS TO SUIT DIFFERENT ACCESS METHODOLOGIES:

The following blank template grids are included to support the production of additional displays for other activities and/or the use of alternative access methodologies:

- 12 & 20 per page for direct pointing and pick up and give/show access
- 12 & 20 per page partner assisted scanning in columns
- 8 & 10 per page eye-gaze

Refer to the sections: *Alternative Access Methodologies* and *Making additional activity displays* in this manual for more specific information on the use of these grids.

AIDED LANGUAGE STIMULATION

Aided language stimulation is basically the implementation of typical language stimulation strategies using aided symbols (pictographs, graphic symbols). These are the same strategies observed to stimulate spoken language development with young children. The strategies include:

- Modelling
- Expanding
- Observing for communicative meaning
- Responding to the child's message
- Scaffolding - any strategy (cue or prompt) the partner uses to support the child to communicate his message. The partner actively seeks to understand what the child is attempting to communicate and supports him to communicate his message.
- Frequent opportunities to observe language used to communicate
- Frequent opportunities to practice using language to communicate

A number of different terms have been used to refer to language stimulation using aided symbols. The terms include:

- Aided language stimulation *Goossens', Crain & Elder (1992)*
- System for Augmenting Language *Romski & Sevcik (1992)*
- Natural Aided Language *Cafiero (1998)*

Why aided language stimulation?

During the 1980's, a number of studies identified that aided AAC systems were frequently being used in more limited ways than anticipated. Studies reported the following trends in aided AAC system use:

- AAC systems were used less frequently than might be expected.
- AAC systems were used to express a restricted range of communication functions.
- AAC systems were used primarily in response to communication partner requests or directions (i.e. when a partner asked a direct question or told the child to, "Use your board to tell me.")
- Children using AAC tended to forfeit 'optional' turns: children did not initiate communication when there was a pause and an opportunity for them to make a comment, introduce a topic, etc, occurred.
- Communication partners tended to dominate the conversational control.
- Initiations were frequently misinterpreted or overlooked by communication partners.
- In classroom settings, children using AAC tended to interact more with adults than with their peers.

  [see *Light, Collier & Parnes (1985a, b & c), Kraat (1987), Beukelman & Mirenda (1998); Goossens', Crain & Elder (1992)* for an overview of these results].

On the other hand, studies there were also examples of people with complex communication needs using AAC systems flexibly and effectively: demonstrating the possibilities of aided systems to enhance an individual's communication.

Goossens', Crain & Elder (1992) suggested that limited use of aided AAC systems may be due to both system design issues and the techniques used to train the child to use AAC systems.

1. **System design issues:**

    -   Insufficient vocabulary available to allow communication for a range of functions or frequent and multiple turns during daily life and play activities.
    -   The child may only have sufficient vocabulary to request (choose) the activity, but no vocabulary to interact, during the activity, to express other functions.

2. **The way we train communicative use of AAC systems:**

    -   Training in the use of aided symbols outside of the situations in which the child is expected to use the system.
    -   Teaching in paradigms that promote responding, as opposed to those that stimulate initiation (e.g. stimulus – response paradigms with correct/incorrect targets as opposed to the use of strategies supporting the child's learning to initiate and express their own message).
    -   Teaching symbol recognition in isolation from genuine communication or for only a limited range of functional purposes. (Children are therefore required to independently translate how they experience speech used in their environment into an aided symbol mode in order to expressively use the aided symbols, for a range of functional purposes, in their daily environments).
    -   Testing for recognition and/or expressive use of symbols prior to providing the child with a foundation of opportunities (receptive input) to learn how these symbols can be used to communicate. This can be compared to testing an individual for recognition of a foreign language that they have never heard spoken!

There is growing recognition that:

> *"**Children learn to communicate in the way they experience their system of communication used.**"*
>
> Beukelman

The drive to communicate with others is an important factor in language development. Language generally develops as children strive to work out the meanings of other people's messages and communicate in a way that helps others to understand their messages, during daily interactions.

Communication is a very complex function during which social/pragmatic components change depending on: the partner; the situation; the activity and the message. Learning to communicate in one situation does not necessarily provide a child with all of the skills necessary to communicate in another situation that has different pragmatic features. For example, initiating communication to complain using aided symbols in a pre-school group requires different knowledge, judgment and skills to those learned during a one to one play activity with a speech pathologist.

Aided language stimulation attempts to recreate the conditions known to stimulate spoken and sign language development for children using aided symbols.

Children learning language require multiple opportunities to:

- see their system of communication used interactively by other people to communicate a range of real messages, in a range of real situations (models);

- practise communicating a range of real messages, in a range of real situations – with appropriate scaffolds as required to successfully communicate their messages;

- receive natural feedback as to the effectiveness of their communication;

- have their messages expanded by other people, using the various modes of communication they will be able to use to communicate more effectively.

Aided language stimulation techniques

This section provides a general overview of aided language stimulation techniques. Detailed descriptions of how to use these techniques are included in the reproducible handouts: *Using aided language stimulation at home* and *Using aided language stimulation in early childhood settings* (see appendices 1 & 2). These handouts include practical ideas to assist key communication partners to learn to use aided language stimulation in daily environments.

Receptive input using aided symbols (modelling)

The first focus of intervention is other people using aided symbols during ongoing interactions with the child. Initially there is no requirement for, or expectation of, the child to expressively use the symbols. All children require models of the language they are learning, to be used by others to communicate for genuine purposes. Receptive input with aided symbols may also be used to support comprehension for children who experience difficulty understanding spoken language.

There are **no pre-requisite skills** required before commencing aided language stimulation, since the initial focus is on others using the aided symbols.

This provides:

- the child with opportunities to learn, over time, how aided symbols are used to communicate;
- parents and professionals with opportunities to observe the child's response to this mode of communication and discover, over time, the strategies which will enable him to communicate more effectively.

The primary aim is for the child to develop an understanding of how aided symbols can be used to communicate for genuine purposes in his natural environments. For instance, how aided language can help him to get his message across. This involves more than learning the meaning of individual symbols. It involves learning: **What** to say; **When** to say it; **Where** it can be said; **Who** it can be said to; **How** it can be said.

The child requires models of aided language used to express a range of messages; used at a variety of times, in different situations. The aim is to demonstrate that aided language provides another possibility to express the messages that are typically spoken in his daily life. Learning also involves the child developing an understanding of why he should use aided

language: because it helps him in another, more efficient way, to say things he otherwise could not successfully communicate.

How do you model and expand using aided symbols?

- Aided symbols for key words are shown to the child as people speak to him.
  Pictographs for the underlined words are shown as the whole sentence is spoken:
  "It's <u>time</u> to <u>go</u> to <u>bed</u>. Do you <u>want</u> your <u>teddy</u>?"

- Encourage people to use aided language to communicate whatever they would usually say during the activity:
  - As they talk about what is happening, what they are doing and what the child is seeing and doing.
  - To say what they think the child may be saying with his body, facial expression and vocalisations.
  - To expand the child's spoken and aided language sentences.

- A helping doll or another child can specifically model what the child could say during a given activity. This provides the child with a more direct model of what happens when a child communicates a message using aided language.

There are a number of different methods that can be used to show the child symbols. The child's current capabilities will influence the method used to provide receptive input:

- Direct **pointing** with a finger. This method requires the child to be able to follow a point onto a complex display. Care needs to be taken to ensure that the finger/hand does not cover the target symbol.

- Using a **small torch**. This method requires the child to direct his visual attention to the highlighted symbol (to direct attention to the highlighted symbol rather than the other symbols on the display).

- **Pick up and show.** Individual symbol cards are picked up from the whole display and shown to the child, one at a time. These cards may be attached to the general interaction/activity display using Velcro or Blutac. This strategy can be useful with children who have difficulty visually following a point and/or managing the visual complexity of the whole display (e.g. children with cortical vision impairment, visual distractibility, visual figure-ground difficulties). This method may be distracting for some children (the noise of velcro) and can make it more difficult for children with physical and sensory challenges to directly point to the display (cannot slide across the surface - cards scrunch up, etc).

- **The child's access methodology/selection technique.** When learning to use an alternative technique to expressively access an aided language display, such as eye-gaze or partner-assisted scanning, it is beneficial for the child to see models of other people also using this technique to communicate. Using their access technique at least some of the time provides children with specific models of **how they can use the aided language display** to communicate. It is helpful to verbally describe what you are doing to access the display: e.g. *"I'm looking at …"*

Children do not have to be directly watching in order to benefit from the models. Whilst directed visual attention assists children to discriminate and learn the meanings of each symbol, peripheral views of others using aided language provides the child with opportunities to experience how aided language can be used to interact - what he can say in a given situation. The requirement that children carefully look at each symbol, with frequent verbal reminders to "look," can actually interrupt the flow of the interaction. Symbols/the display

can be moved into the child's visual field to reduce the number of interfering verbal cues to look elsewhere.

Providing opportunities for the child to communicate

The amount of receptive input, and time period required before a child begins to expressively use the aided symbols, varies greatly depending on a range of factors. Some children will begin to expressively use the aided symbols immediately they have been provided with a few models of their use. Other children may require many months (a year) of receptive input prior to developing sufficient 'understanding' of the aided language for expressive use. It is not possible to predict the amount of receptive input an individual child will require prior to commencing expressive use of aided language. Opportunities to expressively use aided language are provided from the beginning, for all children. **There is no obligation (implied expectation or requirement) for the child to take up those opportunities at that stage.**

General opportunities to encourage a child to initiate expressive use of aided language include:

- **Positioning the aided language display** where the child can look at or reach towards it.

- **Pausing** in the interaction, perhaps looking expectantly at the child:

  o If the child does not take up the opportunity to interact, the partner can fill his turn, using the aided language display to model a message he may have said at that point in the interaction.

- **Using language that encourages the child to initiate communication**:

  o All answers to questions are responses, not initiations.

  o If always asked questions, the child will always be responding and may have few opportunities to learn to initiate communication.

  o Re-word questions as statements to provide the child with opportunities to learn to initiate communication.

  o Avoid direct instruction to 'point to the board'. People may suggest using the display to solve a communication problem: "I don't understand what you're saying. Maybe you could use your board to tell me."

- **Ensure the opportunities are meaningful and make sense to the child:**

  o It makes little communication sense to have to point to symbols on a display to tell something the other person already knows. For example, saying: "I know you want more, but you have to show me the symbol," makes little communication sense.

  o Ensure that all opportunities reinforce the concept that aided language, "Helps me communicate my messages," in that it solves a real communication problem.

Observing, responding and scaffolding communication

All children gradually learn the skills they require to produce independent, intelligible language in adult forms. The partner's role in co-constructing and actively interpreting the meaning of a child's first (poorly articulated, over generalised, single) words is well accepted in typical development. Adults also assume an active role in discovering meaning, co-

constructing messages and shaping communication behaviours with children who are learning aided language.

- **Initially the adult responds to any attempt the child makes to access the display.** The adult actively observes for any possible attempts to communicate and responds to these as communication.

- **The adult actively seeks to understand the child's message**. The adult uses contextual cues and interprets probable messages.

- **The adult expands the child's message**. The adult uses speech and the aided language display to say what they think the child is communicating.

- **The adult provides the child with natural feedback** as to the intelligibility of their message:
  > *"Your hand is on ......"*
  > *"You're saying ...."*
  > *"Your hand is between ....and....."*
  > *"You're looking at...."*

- **Over time the adult gradually requires more intelligible movements** before responding (as in typical articulation development for speech).

- **Children are not required to prove that their messages were correct or intentional at the earliest stage of expressive language development.** Avoid frequent request for repetition, checks such as, "Did you mean that?" and assessment tasks with right/wrong answers.

Specific prompts and cues

For some children, receptive input and general opportunities to communicate are all that is required to stimulate their spontaneous **expressive use** of the aided symbols. Other children require additional cues and prompts to stimulate self initiated expression using aided language displays.

When selecting prompts and cues, it is important to consider how the prompt will influence the child eventually learning to use aided language to communicate his own messages.

Porter (2007) suggests the following considerations for the selection of appropriate prompts and cues. These include:

- **Check that the cue is 'pragmatically sound':**

  For example:

  It does not make sense to a child if the same person who asks a question then prompts the answer. The child may ask himself, *"Why do I need to communicate if you already know what I will say?"*

- **Do the prompts and cues maintain the integrity of the discourse?:**

  Verbal cues add another turn in the discourse and can alter the pattern of the original speech/act pair. For example, when a verbal cue is used to stimulate a comment in the following interaction the speech/act pair changes from:

  > *Partner: "I made a sausage." (statement)*
  > *Child: "It's great." (**acknowledgement**/**comment**)*

  > *To*

  > *Partner: "I made a sausage." (statement)*
  > *Prompter: "**What do you think of the sausage?" (query)***
  > *Child: "It's great." (**answer**)*

  You will notice that even though the last statement, "It's great," appears the same on the surface, its function has changed from a comment to an answer. Such an interaction may appear as though it is stimulating the child to learn how to comment but, in reality, the child is only learning to answer questions.

- **Do the prompts and cues 'set the stage for communication' - provide opportunities for initiation rather than demand a response?**

- **Do the prompts and cues stimulate the child:**

  o   to recognise and use naturally occurring cues? (context & pause)

  o   to communicate though their own efforts?

  o   to know what to say, who to say it to, when to say it, and how to say.

Prompts and cues suggested by *Goossens', Crain & Elder (1992)* and *Porter and Kirkland (1995)* **to support the development of self-initiated use of aided symbols include:**

- **Expectant pause.** An expectant pause is an exaggerated time delay accompanied by encouraging facial expression, eye-contact, eye-gaze, and body postures suggesting: "It's your turn now." An expectant pause suggests: "Hey, you could/should say something now," without verbal interference. Looking from the child to the aided language display can imply the additional suggestion of how the child could take up this turn.

- **Verbal cues** can be used to 'set the stage' for communication or assist the child to discover ways to communicate his message:

  o   **Indirect verbal cues** highlight the context for communication without directly suggesting what the child could say. The indirect verbal cue is generally followed by an expectant pause. For example, saying: "I have some bubbles (expectant pause)," suggests that the child may want to ask you to do something with the bubbles.

  o   **Direct verbal cues** contain a clue as to what the child may want to say. For example: "I have some bubbles. I like blowing bubbles (expectant pause)," suggests that the child could tell you to blow some bubbles.

  o   **Verbal referencing** is used to support a child's problem solving and production of movements to communicate. This cue is more frequently used to support

children, who have sensory motor challenges, to problem solve how they might communicate their message. The verbal reference outlines the process for communicating the message. For example, the following verbal reference may be used to assist a child to intelligibly use eye-gaze: "*I look around (at all the symbols), I look at (partner), I look at the one I want. Ready, LOOK NOW.*"

- o **Accomplice suggestion.** A person who is not the communication partner may suggest ideas of possible messages or a way that the child could more intelligibly communicate to another person.

- **Shadow light cues.** A small torch or penlight can be used to cue a child into using his aided communication symbols without using verbal or physical prompts.

  - o **Search light cue.** A light is shone in a zig-zag fashion over all of the display. It is a prompt to 'say something' without defining what that something might be.

  - o **Momentary light cue.** The light is shone onto a symbol for a brief two-second period. This is like suggesting: "Hey, you could say this," without interrupting the flow of the interaction.

  - o **Constant or fixed light cue.** When there is an identified/targeted message, the light is constantly shone or repeatedly flashed onto a targeted symbol. This suggests: "You should be saying this now" without interrupting the flow of the interaction.

- **Partner assisted auditory plus visual scanning.** This strategy allows children to use the aided language displays to communicate their messages prior to learning the meanings of the symbol. If the child has indicated a desire to say something, but is uncertain of where to locate the required vocabulary, the label for each symbol is spoken as the symbol is visually shown to the child (pointed to with light or finger, picked up and shown to the child). The child either indicates the one they want to say immediately it is said or he waits until all items have been scanned before indicating his message.

- **Another person models the response.** If the child does not take up an opportunity for his turn to express a specific targeted message, another person, or helping doll, can model that message. This ensures that created communication opportunities do not become unsuccessful with unfilled pauses, and provides a model to develop the child's knowledge of what he could say next time, in this situation.

- **Physical prompts (providing opportunity to shape).** Co-active movements and physical prompts can be used to provide a child with an opportunity to experience a 'successful' communication as the partner assigns meaning and responds appropriately to the message:

  - o The aim is to provide the child with successful experiences to stimulate his understanding and desire to attempt to repeat the behaviour in order to more independently communicate the message.

  - o Physical prompts should always be directed towards movements that the child is capable of producing independently.

  - o This is a very intrusive prompt. It is generally only used when children have little idea of the communication process and other prompts have not been strong enough to stimulate the production of the communicative behaviour.

o The aim is always to move as quickly as possible to less intrusive prompts, encouraging independent production of messages.

Least to most prompting hierarchy

It is helpful to view prompts in a hierarchy: from least intrusive to most intrusive. Using this hierarchy, adults only provide the level of prompt the child needs to successfully communicate in a given context [*Goossens', Crain & Elder (1992); Department of Education (2001); Porter & Kirkland, (1995)*].

Least intrusive

- time delay, contextual cue (the general opportunity to communicate)*
- expectant pause*
- indirect verbal cue *+
- search light cue *+
- direct verbal cue *+
- partner assisted auditory plus visual scanning *+
- momentary light cue +
- fixed light cue +
- another models response +
- verbal referencing + (?*)
- accomplice suggestion +
- physical prompt (providing opportunity to shape) +

Most intrusive

Partner * or accomplice + prompt?

Some cues are provided by the child's communication partner (the person they are interacting with at the time), but other cues are more effectively provided by another person, a secondary facilitator [*Goossens' et al (1992)],* the child's accomplice [Porter & Kirkland (1995)].

This secondary person supports the child to communicate to the primary communication partner at a more complex level than they are able to achieve alone. The aim is to provide the child with successful experiences using AAC which they then use as a basis for learning more independent communication. An accomplice allows for the use of certain prompts and cues without compromising the integrity/sense of communication exchange with the primary partner.

ACCESS METHODOLOGIES

A child requires a way of indicating symbols for expressive use of aided language. These are known as selection techniques or access methodologies. The most common selection techniques used by young children to indicate items on light-tech displays include:

Direct Selection:

- **Direct pointing** with hand, finger or pointer to items on a flat display. The child's range of movement and ability to target different areas will influence the number and spacing of symbols and the size of the display.

- **Pick up and give/show** individual symbol cards that have been attached to the aided language display:

  o Directly giving symbols to a partner can assist children who have difficulty understanding the communicative intent of pointing.

  o Requires sufficient physical skills to grasp, pick up and give/show a card.

  o Can be more difficult for children who have physical challenges to target specific symbols as they cannot slide their hand across the surface.

  o The additional sensory properties of cards attached to the display may be distracting for children who have sensory processing disorder (increases sensory seeking, fiddling with the materials)

  o Additional time is required to pick up and replace the symbols. This process can interfere with maintaining attention to the interaction.

- **Eye-pointing** (eye-gaze) directly to items on an eye-gaze display.

- **Partner-assisted scanning.** The partner points to/shows and/or speaks the names of items on the aided language display. The child responds to the scan with either two movements: 'yes' or 'no' to accept or reject each item; or one 'yes' movement to accept the item he wants (with no response to other items).

  o **Visual scanning**. The partner indicates the symbols without verbally labelling the symbols. The partner may ask: "Is it this one?" as they point to the symbol or show the child individual symbol cards. The child relies on his visual recognition of the symbols.

  o **Auditory scanning**. The partner reads out loud the labels for each symbol. The child relies on his understanding of the spoken words.

  o **Visual plus auditory scanning.** The partner both shows/points to and reads out loud the labels for each symbol. The child may rely on his understanding of the spoken labels or visually recognise the symbols. This strategy can be useful to support the child's early expressive use of aided language as he can utilise his current understanding of spoken language to communicate, whilst the strategy provides opportunities for him to learn to visually recognise symbols for future use.

The aided language displays in this starter kit were primarily designed for communication partners to provide receptive input.

The layout of these displays may also suit expressive communication using the following access methodologies:

- Direct pointing with the communication partner's whole hand or finger
- Pick up and give/show
- Partner assisted scanning

Alternative spacing of symbols on the display is preferable for children who use eye-gaze. Two example grids for eye-gaze are included in **CHAT-Now**. The *Making additional activity displays* section of this manual provides additional information required to design displays to suit different access methodologies.

At the earliest stages of intervention, the child does not need to be able to clearly access displays predominantly designed for partners to provide receptive input. When children have significant sensory motor challenges, it may actually take some time to work out the most effective method for them to access aided language displays (hand pointing, eye-gaze, partner-assisted scanning). The child's earliest attempts to use these generic displays (trying to reach and touch; looking towards symbols; excitement or a 'Yes' response when a symbol is suggested) can be a useful guide to suggest a possible access methodology.

Teaching movements for communication and access methodologies is necessary for most children who have significant sensory motor challenges. Consult with the child's physiotherapist and/or occupational therapist to develop programs to teach/support appropriate positions and movements for communication.

It is useful to include activities to practice movements for communication with verbal cues.

For example:

- Learning the sequence of movements for eye-gaze:

    o *I look around*
    o *I look at my partner*
    o *I look at the one I want to say NOW!*

- Practicing movements to indicate YES and NO:

    o *Head down and up - to say YES*
    o *I turn my head to one side. I turn my head to the other side - to say NO.*

MAKING VOCABULARY AVAILABLE

Engineering the environment

Aided communication requires other people in the child's environment to ensure that sufficient aided vocabulary is available for:

- other people to model the use of aided symbols to communicate and expand the child's message;
- the child to use to express himself.

Aided language displays need to be designed with:

- Sufficient vocabulary to interact:

  - for a full range of communication functions ;
  - to combine symbols into sentences;
  - in a range of activities.

- Similarities between individual systems (it is then easier for children to talk to each other and easier for partners interacting with multiple children).

- Scope for development - a system for today and tomorrow:

  - Some room for growth. A system should not be too big, but allow opportunities for others to expand for language development (we would never restrict the spoken language heard by toddlers to only the words they can say!)

  - Selection techniques that are not too physically taxing or limiting, so that they promote meaningful communication.

CHAT-Now includes a range of generic aided language displays to support you to begin to engineering the child's environment.

Making additional activity displays

The generic displays in **CHAT-Now** assist parents and professionals to begin engineering the child's environment to provide receptive input. You may also need to make your own displays:

- To provide receptive input during other activities not included in **CHAT-Now.**
- To suit the child's selection technique for expressive communication.

1. Brainstorm vocabulary

- Make sure that you have sufficient vocabulary to communicate:

  - a range of messages – different types of words;
  - a range of pragmatic functions used in that activity;
  - things the communication partner will want to say as well as things the child may want to (learn to) say.

- To select vocabulary it can be useful to:

  o write down the words that you are naturally using (modelling) in spoken language as you undertake the activity;
  o use a vocabulary organisation worksheet to help record and sort the words you use, to ensure a range of vocabulary is included on the activity display. *(see appendix 3)*

Wh-Questions Exclamation: Uh Oh! Wow!	People Subject nouns / pronouns	Verbs	Descriptions (prepositions & adjectives)	Object nouns

2. Decide on the general parameters of the display

The number, size, spacing and layout of symbols on the display needs to suit the child's visual, sensory motor and language requirements. The layout is also influenced by whether the display is being designed primarily for the partner to provide receptive input and/or for the child to use expressively.

- Displays designed for receptive input need to include a sufficient number of symbols for the partner to genuinely interact during the activity. Fewer than nine symbols can make it extremely difficult to provide frequent interactive models of language use, even in the simplest activity.

  o Use the pull off and show method of modelling to provide partners with a store of more vocabulary to interact, whilst keeping the number of symbols the child has to process to one at a time.

- Displays designed for expressive use by the child (in addition to providing receptive input) need to accommodate the child's **access methodology**.

Considerations for designing layouts to suit different **access methodologies.**

- **Direct pointing** with hand or finger:

  o What is the child's range of movement? How far can he reach? This influences the size of the display and where you place the display in relation to the child. For example: in front of the child; directly in the middle/towards one side; lying flat on the table/on an angle board.

  o Which areas of the display can the child directly target? How many different areas can he target? This influences the number and position of symbols on the display.

  o It is easier to understand pointing to smaller symbols, widely spaced, than larger symbols, closely spaced. This is especially true when different areas of the hand may touch more than one closely spaced symbol.

Widely spaced - easier to read
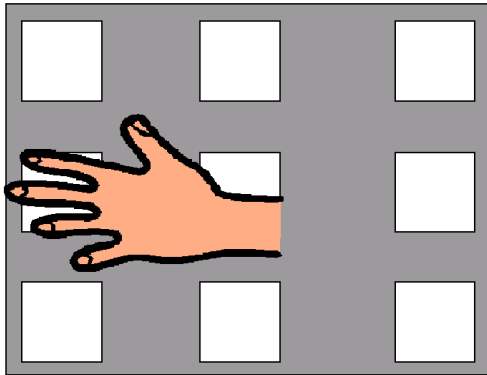
Closely spaced - more difficult to read
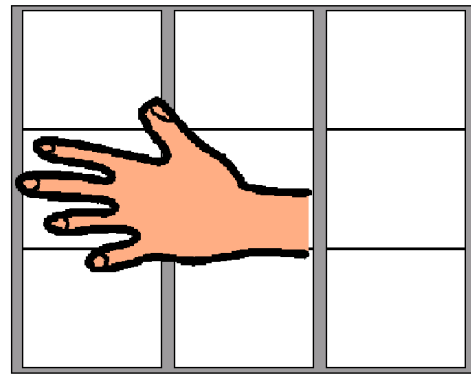
- **Pick up and give/show:**

  o Consider the child's range of movement and targeting to enable direct access.

  o Incorporate strategies to enable people to return each symbol to its assigned space on the display grid. Possible strategies include:

    ▪ printing two copies of the display: one to cut up into cards; the other to guide the position of each card;
    ▪ writing the name of the symbol on the underlying grid;
    ▪ giving each card a numbered space on a grid.

- **Eye-gaze:**

  o Symbols are spaced around the edges of the display for easier viewing in relation to where the child is looking.

  o A hole in the middle of the display allows the partner a clearer view of the direction of the child's eyes when sitting face to face with him.

  o A mirror behind the display can be used to view the child's eyes when the partner is sitting next to or behind him.
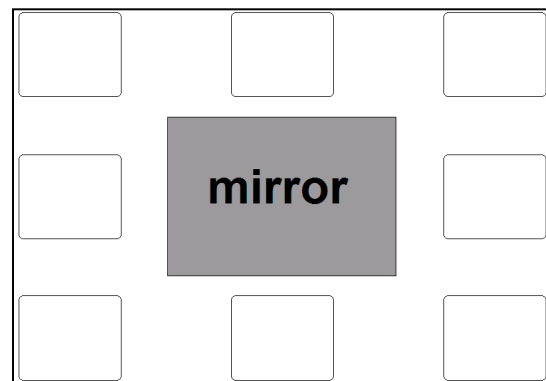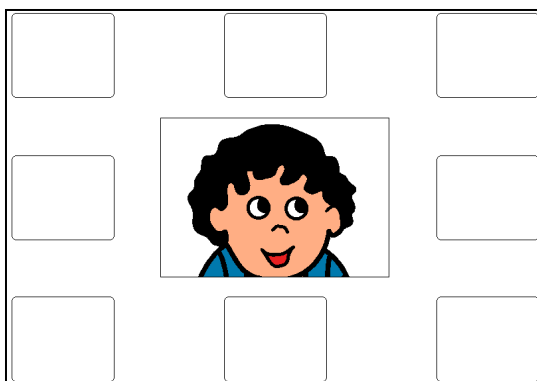
- **Partner-assisted scanning:**

  o Displays made for direct access or pick up and give/show access may also be used with partner-assisted scanning, showing one symbol at a time.

  o Pointing to each symbol, with a finger or light to scan, using direct access displays.

  o Showing the child individual symbol cards to scan, using pick up and give/show displays.

  o Showing one symbol at a time is known as linear scanning.

  o If a child is able to scan a few items at a time, it is more efficient and quicker to use column-row scanning:

    ▪ The column is pointed to, highlighted with a torch or picked up off the display. The child is asked: "Is it in this column?" Once the column is identified, each item in that column (from top to bottom) is pointed to/shown and the child is asked: "Is it this one?"

    ▪ Add lines to the display to delineate columns to scan, using a finger or light point.

    ▪ Cut a second copy of a display into columns to pick up and show. You can also fold the column or cover the other symbols with your hand to scan the individual symbols in a particular column.
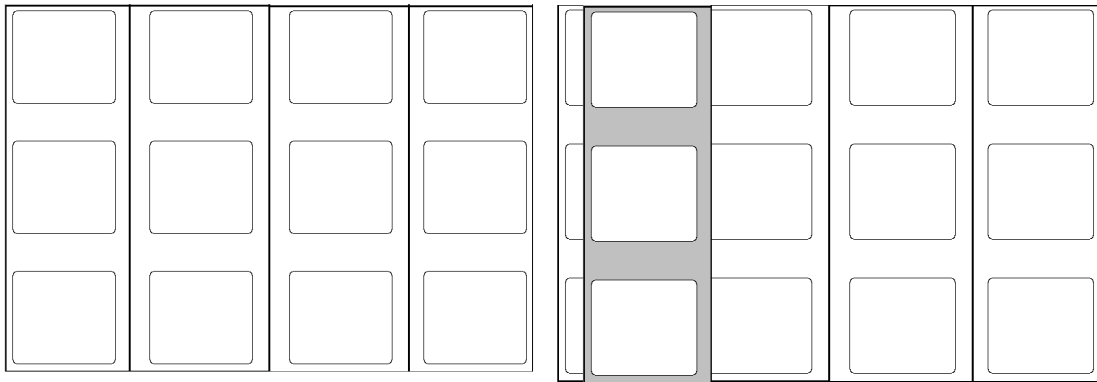
- **Blank template grids included in CHAT-now:**

  o 12 & 20 per page for direct access
  o 12 & 20 per page partner assisted scanning in columns
  o 8 & 10 per page eye-gaze

3. Position vocabulary items on the display

- **Position vocabulary in the same/a similar location** on every display. A consistent location for symbols:

  o reduces the need to scan a display, symbol by symbol, to locate a word;

- develops motor patterns for more automatic access to a display. The child does not have to think about location – similar to learning the location of letters on a keyboard.

- **Position vocabulary to facilitate the production of sentences.** You may like to use a modified Fitzgerald key format to facilitate the ease of building sentences from left to right across the page. For example:

Questions pronouns	Verbs	Descriptors	Prepositions	Nouns

- **Use the location of symbols on the *CHAT*-Now templates:**

  o You may choose to modify an existing activity display with similar vocabulary, rather than start with a completely blank grid.

- **Modifications to suit the child's access methodology:**

  o **Direct access and pick up and show/give.** If there is a significant difference in the child's ability to intelligibly and efficiently target different areas of the display, you may choose to put high frequency vocabulary in the easiest to access locations.

    ▪ Any reduction to the ease/efficiency of producing sentences needs to be considered when making these changes.

  o **Eye-gaze.** You may choose to position 'word pairs' in opposite locations. For example: 'more' on the left side and 'finished' on the right side.

    ▪ Any reduction to the ease/efficiency of producing sentences needs to be considered when making these changes.

  o **Partner-assisted scanning.** The order of the scan makes some items quicker to access than others, based on the number of scans and responses the child needs to make before reaching the vocabulary item he wants to say.

    ▪ In the following examples 1 is the quickest position and 12 is slowest position:

Linear Scanning

1	4	7	10
2	5	8	11
3	6	9	12

Column – Row Scanning

1	2	3	4
2	3	4	5
3	4	5	6

INTRODUCING AIDED LANGUAGE TO FAMILIES

Augmentative and Alternative Communication (AAC) is often a new, and foreign, concept for families who have young children with complex communication needs. **Most family members have never met anyone who uses AAC and consequently have a limited concept as to how these methods of communication can be used to enhance their life and that of their child.**

Parents may interpret the suggestion to use AAC as a pessimistic professional prognosis that their child will never speak. Most people have never considered the multiple modes of communication we all use.

It is vital that the child's family, and other support people, are actively engaged with the child's communication program. A child learning to successfully use AAC in his daily life, to meet his communication requirements, will depend, to a large extent, on the attitude towards, and use of, his AAC systems by all key communication partners. Children require partners who ensure that their AAC systems are available, who model the use of these systems and generally interact in a manner that values the child's method of communication, supporting his communication and responding to his messages.

The degree of commitment required from key people, to support the child's use of aided language in daily life, should not be underestimated. Considerable time and effort is required from partners in order that they learn to communicate using the aided language displays. They must remember to make the aided symbols available, to use aided symbols as they talk and take additional time to provide opportunities for the child to communicate. This level of commitment is usually dependent on an understanding of each child's unmet communication needs and how AAC can support that child to communicate more effectively now, and in the future.

When families, who are active users of aided language in their child's daily environments, were asked what assisted their learning of, and commitment to, AAC for their child and family [*McPhee & Porter (1996); Porter (200); Porter(2004)*]] they reported:

- **Opportunities to observe other people communicate using AAC**:

    o Observing skilled professionals using aided language in a range of situations provided models of how they could use AAC to communicate.
    o Seeing children who were 'a step ahead' provided motivation – they could see possibilities for how AAC could assist their child to communicate more successfully.
    o For families whose children were likely to always need to use AAC supports to communicate, meeting older children and adults who used AAC to communicate provided models of competent use of AAC – knowledge of where current strategies could lead and how people can communicate using AAC.

- **Video examples of children using AAC** to communicate were useful to provide an understanding of how AAC could be used for genuine communication, when real life models were not available.

- **Video of children developing communication using AAC (over a few years):**

    o Including examples of children developing speech whilst using AAC in the early years.

- **Sufficient vocabulary to communicate genuine messages in their daily life.**

  o The AAC system needs to add to the success of their child's communication - enabling him to communicate messages he cannot already successfully communicate in other ways.

- **Supported use of AAC**. A more competent user supports the partners to use aided language to interact with the child. For example: a competent user provides cues to help the family to find symbols and remember to use the aided language display; suggests things to say; reads their child's early attempts to communicate using aided language.

- **Information about AAC**

  o Individual discussions with an AAC specialist. The specialist needs to answer questions and concerns. They may need to go over, come back to, and clarify information at different times.

  o Group education sessions with other parents are valuable.

  o Written material was reported to be beneficial.

  o Information needs to cover the 'why' AAC is important to their child as well as *what to do* and *how*.

In addition to their own questions and concerns, families often need to address the questions, concerns and opinions expressed by other family members, friends and professionals:

"*My friend's child didn't talk till he was three and he is fine now.*"

"*I heard him make sounds. You should just encourage his speech.*"

"*I read about this great program, on the internet that will make him talk.*"

"*Do you really think she can use that? It looks very complicated.*"

Parents need sufficient information to be able to address these concerns and feel secure that they have made the right decision for their child.

Frequently asked questions

The following information is included to assist professionals to answer some of the frequently asked questions and concerns expressed by families and other support people of children using AAC.

These answers are based on clinical experience related to the type of information and explanations that have assisted families and other support people to actively 'come on board' with AAC interventions.

FAQ 1 What is Augmentative and Alternative Communication?

Focus on the enabling aspects of AAC: what using AAC can enable the child to do.

Augmentative and Alternative Communication (AAC) refers to a range of communication modes and strategies used to augment spoken language, or as an alternative to speech. AAC includes the use of unaided symbols such as signs and gestures and aided symbols such as real objects ,photographs, pictographs, written words and/or the alphabet - presented on a communication aid.

| Objects | Photographs | Signing | Pictographs |

AAC may be used to:

- assist children to understand our messages;
- provide a way for a child to express an extended range of messages, to a broader variety of people, than he can intelligibly communicate using speech and natural gestures alone.

This includes children:

- whose speech is slow to develop;
- whose speech is difficult for all people to understand;
- who have significant difficulties learning to speak.

Talk about different options for aided language symbols and communication aids – explain the system you have suggested for their child and why you have selected this system. Talk about plans to expand aided language with other types of communication aids. It is helpful for families to know what their child is using, and why, when they are asked questions and are told/hear about different symbol systems.

Different types of aided symbols

Aided language refers to the use of symbols that require the use of some type of communication aid. Different types of aided symbols include: three dimensional symbols, tangible symbols, photographs, pictographs (picture symbols), and written words.

A range of sets of pictograph symbols are available, including Compic®, *Picture Communication Symbols® (PCS)*, DynaSyms® and Rebus®. This resource uses the *Picture Communication Symbols (PCS)* with the Boardmaker® software program.

Different types of communication aids

Aided symbols may be presented on different types of aids including: communication cards, boards, books and speech generating devices. A communication aid may be designed for a specific purpose. Such aids include:

- A choice making board to make choices.
- A schedule or timetable display to assist a child to understand daily routines.
- An activity display which includes a range of vocabulary to communicate during a specific activity.
- A story specific display to assist a child to participate in story reading.
- A general (personal) communication aid, usually including a wider range of vocabulary to communicate about a broad range of topics.

The **CHAT-Now** resource includes:

- **A range of activity displays** for common daily routines and play activities at home and/or in early childhood educational settings. These activity displays focus on providing aided symbol vocabulary for important key words needed to interact during that one activity.

- **Individual symbol cards for each activity,** to enable the production of choice making, and schedule communication cards/aids.

- **General interaction displays** to allow for basic communication at all times when a specific activity display is not available. The general interaction displays can also function as a useful introduction to a more expanded personal communication system such as the *PODD communication book (Porter 2007)*.

FAQ 3	How will the use of Augmentative and Alternative Communication (AAC) affect my child's speech development?

Many families are naturally concerned that the use of AAC will in some way limit their young child's speech development or 'make them lazy' in their attempts to learn to speak. Sharing the results of research and clinical experience is a good place to start; however, experience suggests that telling people that it will not inhibit speech is not enough. People tend to need explanations as to why and how AAC does not inhibit speech development. They need an explanation of multi-modal communication.

Share the research

Many years of experience and research has shown that **AAC does not inhibit the development of speech and can actually enhance speech and/or language development**.

Sliverman (1980) concluded that:

• augmentative systems were not found to inhibit development of vocal language;
• studies suggest AAC may enhance speech and/or language development.

After a systematic review of existing research evidence *Schlosser (2003)* stated that:

> *"It seems safe to conclude that AAC intervention does not hinder speech development. In fact, based on studies with suggestive evidence, the majority of participants showed improvements in natural speech." (pages 90-95)*

Explain multi-modal communication – how we all use AAC

Realising that we all use AAC can assist our understanding of why AAC does not inhibit speech development:

• We all use multiple communication modes (speech, gestures, pointing, facial expression, written words), choosing the most effective mode available to get our message across given the situation, the partner and the message.

• We frequently use speech because it is often the most efficient way of communicating our message.

Whenever there is some internal or external constraint on our ability to effectively get our message across using our spoken language, we all naturally shift to using another mode of communication. (Porter 2007)

External constraints include anything in the environment that limits the effectiveness of using spoken language to communicate.

For example, we may choose to use an AAC mode of communication:

• in a noisy environment: in a noisy hotel you may choose to point to the door to tell someone that you are going outside;

• when the other person does not understand your spoken language: when travelling in a country whose language you don't speak, you may need to use lots of different

methods to communicate such as gesture, pointing to things, pointing to places in a travel guide;

- when communicating to someone who is not present: written documents, emails.

Internal constraints include any factor that limits the individual's ability to effectively use spoken language to communicate.

Examples of internal constraints include:

- When an illness such as laryngitis temporarily prevents talking, you may write messages, point to things or gesture to communicate.

- When your mouth is full of food and someone asks you a question you may nod or shake your head or gesture, in some way, to answer or you may point to your mouth to indicate they will have to wait for an answer.

- Young children who have not yet developed sufficient skills to use speech to communicate all of their messages will gesture, act out their message, show you things or point to a picture in a book.

- Complex communication needs may limit a child's ability to use speech to meet all of their varied communication requirements.

When an external or internal constraint limits the effectiveness of using spoken language alone to communicate, **the choice is to either use another method to communicate your message or not communicate at all.**

The following activity can be used to assist others to consider the importance of being able to communicate all of our messages. That being able to communicate our messages is more important than how we say them.

> *SUGGESTED ACTIVITY:*
> *Tell the person that they can choose one of the following methods to communicate during the coming week. They can choose either 30 spoken words or a pen and paper to write any message they choose.*
>
> *You may even suggest that you can give them a communication (speech-generating) device which will allow them to type in any message they want to say and then the devices speaks the message out loud.*
>
> Most people immediately choose the pen and paper or the speech-generating device. If a person chooses the 30 spoken words, asking them to actually choose their 30 words, and remember that these are the only messages they will be able to communicate over the next week, usually assists them to understand the real limitations of their choice.
>
> After providing the option of choosing 30 words, **always remind people that fortunately we do not have to make this choice for children with complex communication needs as they can use whichever words they can speak and use AAC to communicate the other messages.**

Explain how we all choose the most efficient way available to communicate our messages. Because intelligible speech is frequently the most effective method (quickest, people can talk and use hands at same time, is understood by most people) children will choose to use speech, when speech is possible, to get their message across.

Demonstrate how using AAC can actually assist their child's speech attempts to be more intelligible, by providing a context.

> *SUGGESTED ACTIVITY:*
> Produce an unintelligible speech approximation for a word and ask them to tell you what you said. Then point to the symbol for this word as you say the speech approximation again.

Emphasise how important successful message transmission is to the child's continued motivation to attempt to communicate/speak. Explain how knowing what the child is attempting to say can provide also opportunities to assist the child to produce a more intelligible speech production.

Frequently heard statement:

FAQ 4	*But I understand everything he/she is saying! So does my child really need to use AAC?*

This statement, and the implied question, has two components:

1. "What is he saying?" Is the child:

    - communicating for a full range of functions?

    - using specific language?

        o Range of words? / Sentence structure?

    - talking about things out of context? (when the partner has no contextual cues from the environment or a known topic)

    - communicating about a range of topics?

    - introducing his own topics?

2. "Who is he talking to?"

    - Independent communication with a range of partners?

    - Are key partners being relied on to act as interpreters?

Most communication partners find it easier to identify instances where communication breaks down than to identify limitations in what the child is attempting to communicate.

- Discuss the range of functions, messages and topics that children of this age/stage of development generally want to communicate.

- Using key communication partners as informants, review the range of functions, messages and topics the child currently communicates. You may want to use resources such as 'The Pragmatics Profile of Everyday Communication Skills in Children' (Dewart and Summers 1995) to structure your questioning.

- Identify the gaps in communication with key communication partners: are there developmentally appropriate functions; are some messages and topics not currently observed in the child's communication.

- Discuss how children learn not to attempt to communicate messages or introduce topics that they know won't be understood by other people.

- For children who are currently communicating using gestural modes, identify the types of functions and messages that require language. For example, the child:

   o can successfully ask for things in the environment using pointing, but needs language to ask questions or tell a story.

   o can complain by crying, but needs language to identify the specific problem (or the partner needs to guess).

It is also helpful to discuss how familiarity with a child influences a communication partner's understanding and perceived intelligibility of his speech.

- Familiar with the child's speech patterns – unusual articulation approximations for common words.

- Know about the child's life, the messages they are likely to want to communicate:

   o If you know the child frequently gets earaches, it is easiest to guess that is what wrong when they rub their head.

   o If a child says, "I dod a dell," you will be able to guess that they are saying, "I got a shell," if you know that they went to the beach the day before and found a shell.

- Discuss how this familiarity limits the number of people who can successfully communicate with the child and can make the child insecure when communicating directly with new people (they may rely on one or two people to translate for them).

It is important that the AAC supports then addresses these unmet communication requirements: to extend the range of partners they can communicate with and/or the range of messages they can communicate.

Children whose speech is intelligible when their partner knows the context, often require more complex personal communication systems to meet these unmet communication needs (to introduce their own topics, relate messages out of context, use different words). Activity displays are designed to be used within specific contexts.

FAQ 5 — **Does this mean you don't think he will ever talk? Will you still work on his speech?**

Many parents are naturally concerned that the suggestion to use AAC means that professionals have given up on speech development and/or will no longer work on their child's vocal and speech development.

Interventions targeting the maximal development of vocal and speech capabilities should form part of all young children's communication program. The long-term aims of a child's speech program may vary from the development of voluntary vocalisation to attract attention, to the development of intelligible speech sufficient to meet all of their communication requirements (e.g. they no longer need to use AAC).

Discuss the child's program to develop vocalisation/speech

Include:

- Explanation of the child's difficulties developing spoken language.

- 'Best guesses' as to likely development of speech, intelligibility. Emphasise that it is difficult to make accurate prognoses due to individual differences in speech development and response to intervention.

- Description of the proposed program to develop the child's speech/vocal abilities.

Observing their child's efforts to produce vocalisation/speech sounds during intervention tasks, often assists parents to further understand their child's difficulties and need for AAC (they realise that it is not just a case of slightly slower development, but that speech is not naturally going to suddenly develop for their child).

Combining the AAC interventions with the speech interventions (using aided symbols to support intelligibility of attempts to produce spoken words) further assists families to understand how AAC may support speech development.

FAQ 6 — **If my child can learn to talk, do we really need to use AAC?**

Explain why it is vital that we use AAC and do not just wait for speech to develop.

It is vital that children have effective methods to communicate early in life:

- for a broad range of functions and meanings;

- to develop all of their skills from the perspective of an active, independent contributor in interactions, rather than a passive observer or responder;

- Because parents do not want to wait until the child is …… age to get to know his personality, share his ideas or be able to ask him questions.

The ability to use language (in any mode) is important for:

- the development of personality and self–regulation of behaviour;

- conceptual and language development;

  o development of literacy.

Discuss how complex communication needs can affect the child's development:

- Repeated experiences of failure in communicating his own messages and unequal participation in interactions may lead to:

  o Frustration at being misunderstood – the child may use behaviour to express himself.

  o Inability of the child to express his own thoughts.

  o Issues in personality development:

    ▪ learned helplessness
    ▪ passivity
    ▪ co-dependency
    ▪ lack of initiation

  o Development of a negative self image that he is not someone who communicates during interactions:

    ▪ "I don't have anything to say."
    ▪ "Other people talk and I listen and answer questions."

- Limited/reduced early experiences using language (range of words, topics, syntax, narrative) can affect language and cognitive development, social inclusion and later, academic performance:

  o Social ramifications of learning to use 'behaviour' to communicate – all young children need to learn to 'use their words' to express feelings, complain, protest and so on.

  o Reduced opportunities to clarify understanding of language based concepts.

  o Less active participation in own learning (e.g. questioning).

  o Less active participation in emergent literacy activities.

  o Less experience and ability to use language for literacy learning.

AAC provides a child, who is having difficulty using speech alone to express his messages, with additional possibilities to communicate with others.

FAQ 7	**What is aided language stimulation? – Why should I talk to my child using aided symbols when he can understand speech?**

Explain the concepts behind aided language stimulation – emphasising why it is important for others to model the use of AAC. This information is also covered in the reproducible handouts in appendices 1& 2.

- Aided language stimulation is a **teaching method** to assist children to learn how to communicate using aided symbols.

- All children require models of this different way of communicating – even those who have a good understanding of speech. It is difficult for the child to independently translate how he hears others use speech into using aided symbols to communicate the same messages.

- Children learn to communicate in the way they experience their system of communication being used.

Make links to what people know about learning spoken languages:

- Just as we learn spoken languages best when exposed to many models of other people using that language to communicate, so children learn aided language best when they have frequent models of other people using their aided symbols to communicate.

- The drive to communicate with others is important in language development. Language generally develops as children strive to work out the meanings of other people's messages and communicate in a way that helps others understand their messages during daily interactions.

- Aided language stimulation attempts to recreate the conditions known to stimulate spoken and sign language development for children using aided symbols.

Explain how strategies known to stimulate spoken language development are used with aided symbols.

Provide examples from typical development for each point. You may find it useful to also use resources on strategies to promote communication and language development from available parent training programs (e.g. Hanen Programs).

- **People provide children with many models of the language** used to communicate genuine messages in daily life. This generally happens just as people go about their daily life – without even thinking that they are teaching language.

- **People provide opportunities for the child to communicate during interactions:**

  o They expect that children can and will communicate their own messages.

  o They pause for the child to take his turn in an interaction (this happens from birth).

  o A rich range of experiences provides the child with something to talk about and people to communicate with.

- There is a need to ensure that children who have complex communication needs have access to vocabulary they are able to learn to use.

- **People actively observe, respond to and support young children's attempts to communicate:**

    o Initially people respond to any behaviour that may communicate meaning. Over time, adults gradually require clearer, more intelligible, more specific messages before they respond.

    o Adults support the child's communication: actively problem solving what the child may be trying to say, assisting them to work out how they could say the message and suggesting strategies. In the early stages of language development, messages are often jointly constructed with the adult heavily supporting the child's communication. As the child's language abilities increase, they become more independent communicators.

    o Using words to expand the child's message using modes of communication they can learn to use.

Discuss how the diagnosis of a disability, communication difficulties and/or unclear movements can alter how people naturally interact with children. For example, communication partners may:

- develop reduced expectations that everything the child does is meaningful communication;

- become cautious of over-interpreting behaviours as communication;

- reduce their responses to behaviours that may communicate meaning;

- take responsibility for meeting the child's needs (not requiring communication).

FAQ 8	How do I use aided language stimulation?

Refer to the information in the reproducible handouts: *Using aided language at home* **and** *Using aided language in Early Childhood Education Settings.* **Also remember to provide lots of models and supported practice for partners using aided language stimulation.**

FAQ 9	But someone said …….. Is my child capable of learning aided language?

"The attitudes and expectations of people in the environment may to some extent influence all children's language development, but they may be critical for children who use alternative forms because these children depend on the means and opportunities provided by professionals."

von Tetzchner & Grove(2003) p.15

Families may be faced with questions about the appropriateness of using pictographic aided language displays with their (developmentally) young child. This can be very discouraging for families, especially during the early stages of providing receptive input and interpreting a child's first attempts to expressively use aided language. They require sufficient information to assist them to understand and evaluate these different opinions.

It is important to explain that aided language acquisition is a relatively new area of study. We currently have no norms for typical aided language acquisition. Some of the complexities involved with developing 'typical norms' for aided language acquisition include:

- A diverse population with varying physical, sensory, social-emotional, and cognitive abilities.

- Aided language learning opportunities vary, development is influenced by:

  o The child's life experiences.

  o The system design:

    ▪ Type of symbols used
    ▪ Available vocabulary
    ▪ Ease of combining words – using morphology

  o Teaching – learning strategies used.

  o Opportunities to experience aided language used as a meaningful communication system.

Our current knowledge of aided language aquisistion has probably been influenced as much by the learning opportunitites we have provided in the past, as the capabilities of young children to acquire aided language.

It can be useful to explain how beliefs about aided language aquisiton have been influenced by the following 'catch 22' suggested by *Porter (2004)*

1. Aided language does not naturally exist in the environment:

   - The child cannot spontaneously uptake something that is not there.
   - Professionals intervene - provide aided language based on their expectations of what's possible.
   - Different behaviours and movement patterns of children may further influence the input naturally provided by others.

2. The child can only demonstrate an ability to use what has been set up for use:

   - Uptake may be influenced by a variety of factors.

3. Others can only be influenced by the child's use of what has been set up to use.

Explain the history of aided language use with young children:

- There is a relatively short history of people using pictograph aided language displays to provide receptive input to very young children.

- Previous AAC intervention practices usually required children to demonstrate pre-requisite skills before pictographs or aided symbols were introduced (testing for skills they had limited opportunity to learn).

- *Cress & Marvin (2003)* **and** *Romski & Sevcik (2005)* discuss some of the beliefs and myths that have influenced the introduction and use of AAC with young children.

Romski & Sevcik (2005) present arguments refuting these 6 myths:

MYTH 1	AAC is a 'last resort' in speech-language acquisition

MYTH 2	AAC hinders or stops further speech development

MYTH 3	Children must have a certain set of skills to be able to benefit from AAC

MYTH 4	Speech-generating AAC devices are only for children with intact cognition

MYTH 5	Children have to be a certain age to be able to benefit from AAC

MYTH 6	There is a representational hierarchy of symbols from objects to written words (traditional orthography)

- **Many of these beliefs and pre-requisite skills came into question when children who were provided with opportunities to learn aided language (like a spoken language) began to expressively use pictographs at a much younger age/developmental stage than was previously thought possible.**

Myth 6: the *representational heirarchy for aided symbols* myth often needs to be explained in relation to the use of pictograph displays to provide aided language stimulation. This heirarchy orders aided symbols from the most iconic (guessable, easy to recognise the meaning of) to the least iconic aided symbol. Using *representational heirarchy for aided symbols* as a basis, children were required to demonstrate expressive use or the ability to indentify/match objects, then photos, prior to the use of pictographs. The primary problem with this approach is that the **iconicity of symbols is not an important factor in early language acquisition**:

- We know that very young children learn to comprehend and use spoken language at a very young age. Spoken language is not at all iconic (similar in abstraction to the written word).

- Iconicity has been found to have little influence in the acquisition of sign language.

It is also important to note that this aided symbol heirarchy only reflects iconicity for representational nouns. Object symbols and photographs to represent verbs, adjectives, prepositions and question words can be very abstract. This has at times lead to aided vocabulary being restricted to the nouns which are easier (more iconic) to represent with an object or a photograph. It is vital that children are also provided with aided language vocabulary to learn how to communicate other, typically acquired early, 'first words 'vocabulary: e.g. GO, COME, STOP, NO, HELP, MORE.

APPENDICES

Appendix 1:

Using Aided Language Stimulation at home

What is aided language stimulation?

Aided language stimulation:

- is a method to teach children how to communicate using aided symbols, such as pictographs;

- is based on the understanding that children learn to communicate in the way they experience their system of communication used;

- attempts to recreate the conditions known to stimulate spoken and sign language development for children using aided symbols.

Just as we learn spoken languages best when exposed to many models of other people using that language to communicate, so children learn aided language best when they have frequent models of other people using their aided symbols to communicate. The drive to communicate with others is important in language development. **Language generally develops as children strive to work out the meanings of other people's messages and communicate in a way that helps others understand their messages during daily interactions.**

Strategies known to stimulate language development include:

- Models of the language used by others to communicate real messages in daily life.

- Providing opportunities for the child to communicate during interactions:

  o Expecting that the child can and will communicate his own messages.

  o Pausing for the child to take his turn in an interaction.

  o Providing a rich range of experiences to give the child something to talk about and people to communicate with.

  o Ensuring that children have access to sufficient vocabulary in modes of communication (pictographs on a communication display) they are able to learn to use.

- Observing, responding to and supporting the child's attempts to communicate.

  o Initially adults respond to any behaviour that may communicate meaning. Over time, adults gradually require clearer, more intelligible, more specific messages before they respond.

- Adults support the child's communication: actively problem solving what the child may be trying to say, assisting him to work out how he could say the message and suggesting strategies.
- In the early stages of language development, messages are often jointly constructed with the adult heavily supporting the child's communication.
- As the child's language abilities increase he become a more independent communicator.

- Using words to expand the child's message using modes of communication he can learn to use. For example:

  - The child looks up at you – you interpret and respond to this message using the aided language display to say '<u>more</u>'
  - The child points to the aided language display to say '<u>more</u>'– you interpret and respond to this message using the aided language display to say, "You <u>want</u> <u>more</u> <u>cuddles</u>."

Why use aided language stimulation?

Aided language stimulation provides children with models of how aided symbols can be used to communicate.

A child does not have to demonstrate any pre-requisite skills before commencing aided language stimulation as the initial focus is on others using the aided symbols to provide **receptive input.** This provides the child with opportunities to learn, over time, how aided symbols are used to communicate. It also provides parents and professionals with opportunities to observe the child's response to this mode of communication and discover, over time, the strategies that will enable the child to communicate more effectively.

How do I use aided language stimulation?

Basically, aided language stimulation involves talking to your child using the symbols on a communication aid. As you speak a sentence, you also show your child the aided symbols for key words in your sentence.

For example, using the bedtime display, you show your child the pictographs for the underlined words as you say:

> "It's <u>time</u> to <u>go</u> to <u>bed</u>. Do you <u>want</u> your <u>teddy</u>?"

A range of strategies can be used to show your child the aided symbols, depending on what helps them to attend to your communication and the method they will eventually be able to use. You can:

- point to the symbols with your finger;

- use a small torch to highlight the symbols;

- pull off and show individual symbol cards which had been attached to the display.

Children who have physical difficulty using their hands to point may use alternative methods to select items on a display (partner assisted scanning, eye-gaze). Partners may also use the alternative access technique a child is learning in order to specifically model how he can indicate symbols on the display.

For practical purposes, given the realities of home life, you may use different techniques to show your child the symbols at different times. For example: point with your finger when the small torch has been misplaced; only use a slower alternative access technique when time allows. Whilst it may not be the ideal technique, your child will still be receiving models of what and when he can communicate using his communication system.

Children do not always have to be directly watching you model to gain useful information. Children need to learn more than just the meanings of each symbol in order to learn how to use aided language to communicate. They also need models of what they can say using aided symbols, when they can say it, how to initiate communication in different situations and so forth.

The aim is to model for your child how he might use aided language displays to communicate. Your child will learn to use the aided language displays for the messages, and at the times, you have modelled. For example, if the aided symbol displays are only used for specific play times, the child may only learn to communicate during those play times. If the aided displays are used to communicate messages throughout the day to say a range of messages, then your child will learn how to initiate communication to say a range of messages at many different times throughout the day.

Sometimes you will need to change the activity display you are using as the activity shifts from one to another.

For example, using the **bedtime display,** you may say (and show the aided symbol for the underlined words):

> "Come on, it's <u>time</u> to go to <u>bed</u>. Do you <u>want</u> a <u>book</u>? (child smiles) Yes, we'll read a <u>book</u> then <u>go</u> to <u>bed</u>."

On the book shelf is the **book display**. You then use this display as you say:

> "You <u>choose</u> a <u>book</u>." (You show the child a few books and he indicates his choice)
> "Oh I <u>like</u> that <u>book.</u>"

As you read the book, you can use the **book display** to say a range of messages. When you have finished reading that book, you may then go back to the **bedtime display** to tell him it is <u>time</u> to go to <u>bed</u> now: "Get into (<u>go</u>) to <u>bed</u> and I'll <u>sing</u> you a <u>song.</u>"

How do I start?

1. Engineer the house for aided language stimulation:

Make it easy to use the aided language displays by placing the activity displays where they are most likely to be needed. For example a bath time display on the a wall in the bathroom; a mealtime display where your child eats; a nappy change display on the change table and perhaps another copy in the nappy bag; the block play display in the box of blocks.

> *"Oh no, the display I need to use to talk about bath time is in the kitchen!"*
>
> Realistically it's highly unlikely that someone will get their child back out of the bath to go and retrieve the bath time display out of a box of displays in the kitchen.

Leaving activity displays where you are most likely to need them not only makes it easier to use the pictographs in everyday life, but seeing the display when you start the activity can help remind you to use AAC.

You may want to place multiple copies of the general interaction display in different areas of the house so that you can use it for all of the times which don't have a specific activity display. You may also like to put a copy of the general interaction display in a bag to carry with you to other places.

2. Use the aided language displays to talk:

Try to use the aided language displays as often as possible as you talk to your child, or to other people in front of your child. It will probably feel a little awkward at first as you are learning many new skills: working out what you can say using the available symbols; which of the words in the sentence you have aided symbols for; combining talking with showing the symbols for keywords, as you interact with your child. Like many new skills, it is a matter of practice until the skill becomes a habit and you find yourself automatically showing aided symbols as you talk, without consciously thinking about it.

Hints

- Remember that you will find yourself pointing just to 'key words' as you say a whole sentence. For example: *"Go to sleep now."*

    o The 'little words' in a sentence are not usually included on initial activity displays, especially when there are only 12 items on the display. Thinking about what the key meaningful words are in a sentence can minimise the frustration of spending time looking for little words that are not on the display.

- Familiarise yourself with the vocabulary on each display before using it with your child:

    o Look at where different symbols are on the display. Notice that symbols are placed so that sentences can be built by moving from left to right across the page.

Question words People words Exclamation: Uh Oh! Wow!	Verbs	Descriptions (prepositions & adjectives)	Object nouns

    o Notice that commonly used symbols are usually in the same location on different displays.

    o Try to learn the symbols used for common words. It is quicker to locate the colour and shape of symbols on a page than to read each written word.

- Pictograph symbols can be associated with a number of words or phrases with a similar meaning. For example:

    o you may say *more, again*, or *another* as you show the pictograph for <u>more</u>.

- o The pictograph for <u>I do</u>, <u>me</u> may be used to mean:

  - *my turn*
  - *I did it*
  - *I want to do it*
  - *me*
  - *mine*

- o The one verb symbol is used for all tenses. For example the <u>go</u> symbol is used for:

  - *go*
  - *went*
  - *going*
  - *gone*
  - *goes*

- Plan what you could say using this activity display before using it to interact with your child:

  - o Initially you may want to choose a few words that you frequently say during the activity and try to use these as often as you can. We often repeat ourselves when interacting with young children. Try to think of how many different sentences you can say during an activity to use these symbols.

  - o Add extra words, as you gain confidence talking and showing the aided symbols, as you interact with your child.

  - o Eventually challenge yourself to try to use all of the symbols on the display during the one activity.

- Talk about what is happening, what you are doing and what the child is seeing and doing. Basically you are saying whatever you would usually say during the activity.

- Also use the display to say what you think your child may be saying with their body, facial expression and vocalisations:

  - o For example: your child looks and smiles at you at a favourite part of a video. You interpret this to mean that he likes this part, so you point to the pictographs on the **TV display** as you say: *"You <u>like this</u> <u>video</u>. It's very funny.."*

- **The general interaction display can be used at all times when you do not have a display that is specific to the activity:**

  - o Using the general interaction display helps your child to learn that communication can happen all of the time. The context (what is going on at the time) and the spoken sentence are often used to support the meaning of single words used on this display.

    For example, saying: *"Do you want some <u>more</u> tickles?"* just after your child laughs when you tickle him.

  - o When using the general interaction display, you will find that you can frequently only introduce what you are about to say.

For example:

- ▪ *"I don't like this, it's very noisy."*
- ▪ *"I want a cuddle."*
- ▪ *"Let's go to the park."*
- ▪ *"Something's wrong. I think you look a bit sick."*
- ▪ *"I am asking a question. Where has your shoe gone?"*

- Using the general interaction display in this way introduces important concepts that can assist your child to learn how to use communication books with lots of vocabulary organised onto multiple pages (such as the *Pragmatic Organisation of Dynamic Display (PODD) communication books)*.

- Keep it fun and interactive. Remember that the purpose of using language is to communicate and interact with others.

3. Encouraging your child to use the activity displays.

Just as children hear speech for at least a year before they start speaking, children learning to use aided symbols to communicate will need to see them used by others before they can be expected to use them to express their own messages.

It can take some time for children to work out how they might communicate using aided language. It can be difficult to predict when an individual child will take up these opportunities to communicate using the aided symbols:

- Aim to create opportunities for your child to use the aided symbols with no obligation that he has to take up those opportunities.

- Try not to stress your child's expressive use of the aided symbols.

- Avoid setting up 'test situations', looking for a right or wrong answer.

Aided language stimulation strategies to support your child's learning to initiate communication to express his own messages include:

- Models of aided language used by others to communicate real messages in daily life:

  o A doll or another child using the aided language display can assist some children to understand that they too could use the display to communicate. This is particularly true if the doll/other child models a message that gets a desirable response.

- Providing opportunities for the child to communicate during interactions:

  o Ensure that the display is in a position which your child can reach/see.
  o Leave some pauses in the interaction, perhaps looking expectantly at your child. If your child does not take up the opportunity to respond, you can fill his turn, using the aided language display to model a message he might have said at that point in the interaction.
  o Use language that encourages your child to learn to initiate communication.
    o All answers to questions are responses, not initiations. If always asked questions, the child is always responding and may have few opportunities to learn to initiate communication.

o Try to re-word questions as statements to provide your child with opportunities to learn to initiate communication. For example, instead of asking your child:

"Do you want me to BLOW more bubbles?"

You could hold up the bubbles and say:

*"I've got the bubbles,"* and then pause, providing your child with the opportunity to say:

"<u>more</u>" or "<u>blow</u>" or "<u>bubbles</u>".

o Avoid direct instruction to, *"point to the board."* You may suggest using the display to solve a communication problem. For example: *"I don't understand what you're saying. Maybe you could use your board to tell me."*

- Ensure that the opportunities you create are meaningful and make sense to your child. It makes little communication sense to have to point to symbols on a display to tell something the other person already knows. For example, saying: *"I know you want more, but you have to show me the symbol,"* makes little sense to a child. It may also teach a child that pointing to symbols is just something you do to please others, rather than a strategy that can help him to communicate his own messages.

- Observing, responding to and supporting the child's attempts to communicate:

  o If your child reaches out and/or looks at something on the display, respond to this as a meaningful message, even if you are not sure if he really meant to point, or if his pointing was not very clear:

    - If he did mean to point to the message, you will have reinforced his early attempts to communicate.
    - If it was an accident, your response will provide your child with an opportunity to learn about communicating: *"Oh that's what happens when I do that!"*

- Say out loud what you see the child do and expand on this using the aided symbols, For example: *"You're looking towards <u>help</u>. You're telling me you <u>want</u> some <u>help</u>."*

  o Try to avoid lots of 'checking questions', such as: *"Are you saying ...."* as this can detract from the interaction for your child.

Partner assisted scanning can assist a child, who can understand the spoken words, to communicate a message prior to knowing all of the pictographs.

To use partner assisted scanning:
- Point to each pictograph (in the order shown in this diagram) as you read the word out loud.
- Your child may then either point to the pictograph, or indicate *"yes"* when you say the word they want to say.

1	4	7	10
2	5	8	11
3	6	9	12

Some children may need to use alternative methods, apart from direct pointing, to indicate symbols. These are known as alternative access or selection techniques. This may require your AAC service provider to produce alternative activity displays to accommodate the alternative access technique, such as symbols being spaced around the edge of the paper so it is easier to see which symbol a child is looking at, especially for children who are using eye-gaze.

Your AAC service provider may also suggest additional cues and prompts to suit your child's specific learning requirements.

What if we need different words?

The displays in this resource were designed using general vocabulary that may be useful with many children. It is likely that you will find that some of the words you frequently use with your child are missing from the display and you may find words you rarely use.

- The displays can be customised to suit your child and family needs, using the Boardmaker® software program.

- Keep a note of the changes you need to give to your speech pathologist/the person who will make changes to the displays.

- You may write directly on an uncovered paper display or use sticky notes or a notepad for laminated displays.

You may also want additional displays to be made for specific activities that were not included in this resource.

- Talk to your speech pathologist/AAC service provider about arrangements to have additional displays made for your child.

- It will be helpful to those making these displays if you write down some of the words and sentences you use, and messages you think your child may like to use, during these activities.

- It is often helpful to collect these vocabulary ideas on a piece of paper as you do the activity with your child.

- Remember to think about all of the different types of:

  o words that are needed to interact: nouns, verbs, descriptions, question words;

  o messages that are expressed during the activity: questions, comments, descriptions, requests for objects, actions and assistance, instructions, complaints, opinions.

Appendix 2:

Using Aided Language Stimulation in Early Childhood Educational Settings

What is aided language stimulation?

Aided language stimulation is a teaching method designed to enable children to learn how to communicate using aided symbols. Aided language stimulation is based on the understanding that children learn to communicate in the way they experience their system of communication used. Just as we learn spoken languages best when exposed to many models of other people using that language to communicate, so children learn aided language best when they have frequent models of other people using their aided symbols to communicate.

Aided language stimulation attempts to recreate the conditions known to stimulate spoken and sign language development for children using aided symbols. These strategies include:

- Models of the language used by others to communicate real messages in daily life.

- Providing opportunities for the child to communicate during interactions:

  o Expecting that the child can and will communicate his own messages.

  o Pausing for the child to take his turn in an interaction.

  o Providing a rich range of experiences gives the child something to talk about and people to communicate with.

  o Ensuring that children who have complex communication needs have access to vocabulary they are able to learn to use.

- Observing, responding to and supporting the child's attempts to communicate:

  o Initially respond to any behaviour that may communicate meaning. Over time adults gradually require clearer, more intelligible, more specific messages before they respond.

  o Adults support the child's communication: actively problem solving what the child may be trying to say and assisting him to work out how he could say the message and suggesting strategies. In the early stages of language development, messages are often co-constructed with the adult heavily supporting the child's communication. As the child's language abilities increase, he becomes a more independent communicator.

  o Using words to expand the child's message using modes of communication he can learn to use.

Why use aided language stimulation in my early childhood group?

Aided language stimulation provides children with models of how aided symbols can be used to communicate. A child does not have to demonstrate any pre-requisite skills before commencing aided language stimulation as the initial focus is on others using the aided symbols to provide **receptive input.** This provides the child with opportunities to learn, over

time, how aided symbols are used to communicate. It also provides parents and professionals with opportunities to observe the child's response to this mode of communication and discover, over time, the strategies which will enable him to communicate more effectively.

In addition to providing children, who have complex communication needs, with models of how aided language can be used to communicate, the use of activity displays in your early childhood setting can also:

- assist some children to understand our messages. Using aided symbols (and or sign) can assist children who have difficulties understanding spoken language. Apart from using a different modality that does not rely on auditory processing, aided symbols allow additional processing time;

- assist children who have expressive language delays. Some children experience difficulty in generating ideas as to what they could say and tend to communicate (using speech, sign and/or aided symbols) only a limited range of messages, using a restricted range of words.

  The vocabulary on the aided language displays can assist these children to use different words to express different messages. Aided language displays with more vocabulary can also assist some children to produce multi-word sentences;

- assist children learning English as a second language.

How do I use aided language stimulation?

Basically, aided language stimulation involves talking using the symbols on a communication aid. As you speak a sentence, you also show the aided symbols for key words in your sentence.

For example, using the 20 per page **ball display** you may say (and show the aided symbol for the underlined words):

> "_Throw_ the _ball_ to _me_. _Oh no, where_ did the _ball go? I'll_ _get_ it. _Watch me, I'm going_ to _kick_ the _ball_ to _you_. Are _you_ ready to _catch_ the _ball._ Yeah, _you caught_ the _ball._"

A range of strategies can be used to indicate the aided symbols, depending on what helps each child to attend to your communication and the method they will eventually be able to use. You can:

- point to the symbols with your finger;

- use a small torch to highlight the symbols;

- pull off and show individual symbol cards which have been attached to the display using Velcro or Blutac;

- sometimes use the alternative access technique (partner assisted scanning, eye-gaze) a child is learning in order to specifically model how he can indicate symbols on the display.

For practical purposes you may use different techniques to indicate the symbols at different times. For example: point with your finger when the small torch has been misplaced; only use a slower alternative access technique when time allows. Whilst it may not be the ideal

technique, the child will still be receiving models of what he can say and when he can communicate, using his communication system.

Children do not always have to be directly watching you model to gain useful information. Children need to learn more than just the meanings of each symbol in order to learn how to use aided language to communicate:

- Children need models of: what they can say using aided symbols; when they can say it and how to initiate communication in different situations.

- Other people using aided symbols in the child's early childhood setting reinforces that this way of communicating is valued. The message that using aided symbols to communicate is acceptable, even 'cool', is reinforced when the displays are available for all of the children to use.

These activity displays should be seen as belonging to the group. Children who have complex communication needs may also have their own communication systems: communication books; communication devices. Personal aids have vocabulary to enable the child to communicate a range of messages in all environments.

What do I need to do?

1. Engineer the environment for aided language stimulation

Make it easy to use the aided language displays by placing the activity displays where they are most likely to be needed. You might:

- attach a display to the wall where the activity takes place. For example a *toilet display* on the wall next to the toilet; a *home corner* displays on a wall in the home corner

- leave a display in the area where the activity takes place. For example a *book reading display* on the bookshelf; a *puzzle display* on the shelf with the puzzles; *painting display* on the easel.

- store the display with the associated equipment so it is ready to be put out when you set up the activity. For example a *drawing display* with the drawing tools; a *block display* with the blocks; a *mealtime display* with the cups.

This preparation ensures that the displays are readily available whenever the activity occurs and this reduces the frustration and time spent retrieving displays when they are stored in a separate location. Seeing the display already in location when you start the activity can also help remind you to use AAC.

A **general interaction display** is used at all times when a specific activity display is not available. **CHAT-Now** includes the option to use a single or multi-level general interaction display. The multi-level display provides more specific activity and location vocabulary to request/instruct children.

- The general interaction display will be most useful for children who have complex communication needs but do not have their own personal communication system.

- You may want to place multiple copies of the general interaction display in different areas so that you can use it for all the activities that don't have a specific activity display.

- Personal communication systems should always be within easy reach of the child, moving with them from place to place.

2.Use the aided language displays to talk

Try to use the aided language displays as often as possible as you talk to the child or to other people in front of the child:

- It will probably feel a little awkward at first as you are learning many new skills, such as: working out what you can say using the available symbols; which of the words in the sentence you have aided symbols for; combining talking with showing the symbols for keywords.

  Like many new skills, it is a matter of practice until the skill becomes a habit and you find yourself automatically showing aided symbols as you talk, without consciously thinking about it.

Hints

- Remember that you will find yourself pointing just to 'key words' as you say a whole sentence: "*Do* you want help *to* put *the* block on *the* tower?" The 'little words' in a sentence are not usually included on initial activity displays, especially when there are only 12 items on the display. Thinking about what the key meaningful words are in a sentence can minimise the frustration of spending time looking for little words that are not on the display.

- Familiarise yourself with the vocabulary on each display before using it with the children:

  o Look at where different symbols are on the display. Notice that symbols are placed so that sentences can be built by moving from left to right across the page.

Question words People words Exclamation: Uh Oh! Wow!	Verbs	Descriptions (prepositions & adjectives)	Object nouns

  o Notice that commonly used symbols are usually in the same location on different displays

  o Try to learn the symbols used for common words. It is quicker to locate the colour and shape of symbols on a page than to read each written word.

- Pictograph symbols can be associated with a number of words or phrases with a similar meaning. For example:

  o you may say *more, again*, or *another* as you show the pictograph for *more*.

  o The pictograph for *I do, me* may be used to mean:

    ▪ *my turn*
    ▪ *I did it*
    ▪ *I want to do it*
    ▪ *me*
    ▪ *mine*

  o The one verb symbol is used for all tenses. For example the <u>go</u> symbol is used for:

    ▪ *go*
    ▪ *went*
    ▪ *going*
    ▪ *gone*
    ▪ *goes*

- Plan what you could say using this activity display before using it to interact:

  o Initially you may want to choose a few words that you frequently say during the activity and try to use these as often as you can. We often repeat ourselves when interacting with young children. Try to think of how many different sentences you can say during an activity to use these symbols.

  o Add extra words, as you gain confidence talking and showing the aided symbols, as you interact with the children.

  o Eventually challenge yourself to try to use all of the symbols on the display during the one activity.

- Talk about what is happening, what you are doing and what the child is seeing and doing. Basically you are saying whatever you would usually say during the activity.

- Also use the display to say what you think the child may be saying with his body, facial expression and vocalisations:

  o For example: a child looks and smiles at you after you have made a house out of blocks. Use the *block display* as you say, *"You think this is a <u>great</u> <u>house</u>. It's very <u>cool.</u>"*

- **The general interaction display can be used at all times when you do not have a display that is specific to the activity display that is specific to the activity:**

  o Using the general interaction display helps children to learn that communication can happen all of the time. The context (what is going on at the time) and the spoken sentence are often used to support the meaning of single words used on this display.

o When using the general interaction display, you will find that you can frequently only introduce what you are about to say.

For example;

- *"I don't like this, it's very noisy."*
- *" I want a cuddle."*
- *"Let's go to the park."*
- *"Something's wrong. I think you look a bit sick."*
- *"I am asking a question. Where has your shoe gone?"*

- Using the general interaction display in this way introduces important concepts that can assist children to learn how to use communication books with lots of vocabulary organised onto multiple pages (such as the *Pragmatic Organisation of Dynamic Display (PODD) communication books (Porter 2007)*.

- Keep it fun and interactive. Remember that the purpose of using language is to communicate and interact with others.

3. Encouraging children to use the activity displays

Just as children hear speech for at least a year before they start speaking, children learning to use aided symbols to communicate will need to see them used by others before they can be expected to use them to express their own messages.

It can take some time for children to work out how they might communicate using aided language:

- Try not to stress the child's expressive use of the aided symbols and avoid setting up 'test situations', looking for a right or wrong answer.

- Aim to create opportunities for the child to use the aided symbols with no obligation that he has to take up those opportunities. It can be difficult to predict when an individual child will take up the opportunities to communicate using the aided symbols.

Aided language stimulation strategies, to support children's learning to initiate communication to express their own messages include:

- models of aided language being used by others to communicate real messages in daily life;

- a doll or another child using the aided language display to assist some children to understand that they too could use the display to communicate. This is particularly true if the doll/other child models a message that gets a desirable response.

- Providing opportunities for the child to communicate during interactions:

  o Ensure that the display is in a position which the child can reach/see.

  o Leave some pauses in the interaction, perhaps looking expectantly at the child. If the child does not take up the opportunity to respond, you can fill his turn, using the aided language display to model a message he may have said at that point in the interaction.

- Use language that encourages the child to learn to initiate communication:

  o All answers to questions are responses, not initiations. If always asked questions, the child is always responding and may have few opportunities to learn to initiate communication.

  o Try to re-word questions as statements to provide the child with opportunities to learn to initiate communication. For example, instead of asking the child:

      "Do you want me to BLOW more bubbles?"

      You could hold up the bubbles and say:

      "I've got the bubbles," and then pause, providing your child with the opportunity to say:

      "<u>more</u>*" or "*<u>blow</u>*" or "*<u>bubbles</u>*".*

  o Avoid direct instruction to, *"point to the board."* You may suggest using the display to solve a communication problem. For example: *"I don't understand what you're saying. Maybe you could use your board to tell me."*

- Ensure that the opportunities you create are meaningful and make sense to your child. It makes little communication sense to have to point to symbols on a display to tell something the other person already knows. For example, saying: *"I know you want more, but you have to show me the symbol,"* makes little sense to a child. It may also teach a child that pointing to symbols is just something you do to please others, rather than a strategy that can help him to communicate his own messages.

- Observing, responding to and supporting the child's attempts to communicate.

  o If the child reaches out and/or looks at something on the display, respond to this as a meaningful message, even if you are not sure if he really meant to point to the object, or if his pointing was not very clear:

    ▪ If he did mean to point to the message, you will have reinforced his early attempts to communicate.

    ▪ If it was an accident, your response will provide the child with an opportunity to learn about communicating: *"Oh that's what happens when I do that!"*

- Say out loud what you see the child do and expand this using the aided symbols, For example, *"you're looking towards* <u>help</u>*", You're telling me you* <u>want</u> *some* <u>help</u>*."*

- Try to avoid lots of 'checking questions", such as, *"Are you saying ...."* as this can detract from the interaction for the child.

Partner assisted scanning can assist a child, who can understand the spoken words, to communicate a message prior to knowing all of the pictographs.

To use partner assisted scanning:
- Point to each pictograph (in the order shown in this diagram) as you read the word out loud.
- The child may then either point to the pictograph, or indicate "yes" when you say the word they want to say.

1	4	7	10
2	5	8	11
3	6	9	12

Some children may need to use alternative methods, apart from direct pointing, to indicate symbols. These are known as alternative access or selection techniques. This may require your AAC service provider to produce alternative activity displays to accommodate the alternative access technique, such as symbols being spaced around the edge of the paper so it is easier to see which symbol a child is looking at, especially for children who are using eye-gaze.

Your AAC service provider may also suggest additional cues and prompts to suit the child's specific learning requirements.

What if we need different words?

The displays in this resource were designed using general vocabulary that may be useful with many children. It is likely that you will find that some of the words you frequently use are missing from the display and you may find words you rarely use.

- The displays can be customised to suit your early childhood setting, using the Boardmaker® software program.

- Keep a note of the changes you need to give to your speech pathologist/the person who will make changes to the displays.

- You may write directly on an uncovered paper display or use sticky notes or a notepad for laminated displays.

You may also want additional displays to be made for specific activities that were not included in this resource.

- Talk to your speech pathologist/AAC service provider about arrangements to have additional displays made for your childhood educational setting.

- It will be helpful to those making these displays if you write down some of the words and sentences you use, and messages you think your child may like to use, during these activities.

- It is often helpful to collect these vocabulary ideas on a piece of paper as you do the activity with the children. The things said by other children are a valuable resource of ideas for vocabulary to include on aided language displays.

- Remember to think about all of the different types of:

  o words that are needed to interact: nouns, verbs, descriptions, question words;
  o messages that are expressed during the activity: questions, comments, descriptions, requests for objects, actions and assistance, instructions, complaints, opinions.

Appendix 3:

Vocabulary Organisation Sheet

WH- questions Exclamations: Uh Oh! Wow!	People names Subject nouns / pronouns	Verbs	Descriptions (prepositions & adjectives)	Object nouns

Appendix 4:

How to use CHAT-Now Templates

1. Familarise yourself with the content in the **CHAT- Now** manual. This information is essential for effective use of the **CHAT- Now** tools to support young children's communication and language development.

2. View the templates in the *Templates* folder on the CD.

   - You will need Boardmaker® Version 5 for this step.

   - If you are having trouble opening the files, it may be because you have an earlier version of Boardmaker®. Visit the Mayer Johnson website: www.Mayer-Johnson.com and upgrade your version of Boardmaker®.

3. Select appropriate templates to suit the needs of the child and/or early childhood educational setting:

   - Home and/or early childhood education displays.

   - 12 or 20 per page (the increased vocabulary options with 20 per page generally make it easier for partners to talk using the display, but the symbols on this display may be too small or too busy for some children).

   - Select activity displays. It is recommended that you select more rather than fewer displays to start:

Frequent practice assists people to feel more comfortable to use the displays.
   - o It is difficult to tell which activity people will find most conducive to the use of aided language stimulation (parents often comment that they were surprised at which displays they used the most).

   - Select appropriate general interaction display(s):

   - o Select both home and early childhood educational setting displays with the required number per page.

   - Including multiple displays for a range of activities and a general interaction display supports the learning of important concepts and habits:

   - o 'Communication happens all of the time'
   - o Ensure that the child's aided system is always available for communication at any time.

   - Select appropriate activity cards for home and/or early childhood educational settings.

4. Copy the selected templates onto your computer hard drive.

   - You may like to create a folder with the child/facility's name in the *My Boards* folder in *My Documents* on your hard drive.

   - Locate the selected template files on the CD.

- Select and copy the files for the chosen templates into the child/facility's folder.

- Remove the *read only* attribute on the child/facility's folder.

Right click on the folder with the mouse
Select properties
- o Deselect *read only* (left click on box next to read only in attributes section)
- o Select *apply*
- o Select *OK* to " Apply changes to this folder, subfolders and files"
- o Select *OK*

5. Make a draft copy of the selected displays:

- You may want to make some very obvious changes in consultation with key communication partners; however, **try not to get stuck trying to make the displays perfect at this stage**:

Aided language systems are never perfect and never finished! They get more 'right' for the person over time, with revisions based on feedback during real life use.
Most people find it very difficult to accurately predict what they will need to say in a given situation and benefit from some experience trying to use an aided language display to discover which words they need to change.

- Print out the required displays in draft or greyscale.

6. Use the activity displays in the child's daily environments:

- Read the information handouts on using aided language stimulation and share them with the appropriate people in the child's daily environments.

- Encourage people to suggest vocabulary changes. Use a pen to cross out, change and add words directly onto the draft display (or you may use sticky notes if you have laminated these generic displays for multiple uses).

7. Produce the child's customised aided language displays:

- Based on the feedback from the trial use, you can now make changes to the selected aided language displays.

- Print out in standard quality and laminate/cover with contact.

- If using the pick up and give/show method to indicate symbols, print and cover two copies of each display. Cut one copy into individual symbol cards and attach these to the top of the corresponding symbol on the intact copy of the display. (The double copy of symbols ensures that the cards are replaced in routine locations, assisting the child and partners to locate vocabulary more efficiently to communicate messages).

- Make additional activity displays as required. People may request displays for activities that are not included in the **CHAT – Now** templates. The section: *Making Activity Displays* outlines considerations for making activity displays from scratch.

8. Use the customised activity displays in the child's daily environments:

- Share information on the use of aided language stimulation with additional people in the child's daily environments, as required.

- Continue to add/change vocabulary and activity displays as required.

References

Beukelman, D.R. & Mirenda, P. (1998*) Augmentative and alternative communication. Management of severe communication disorders in children and adults. 2nd Edition.* Baltimore: Paul H. Brookes Publishing Co.

Cafiero, J (1998) *Communication Power for individuals with Autism. Focus on Autism and Other Developmental Disabilities Vol 13 no 2 p 113-121*

Cress, C. & Marvin, C. (2003) *Common questions about AAC services in Early Intervention. Augmentative and Alternative Communication 19(4), 254-272*

Department of Education. (2001). *Students with physical impairment: Augmentative and alternative communication.* Brisbane, QLD: Author.

Dewart, H & Summers, S (1995) **The Pragmatics Profile of Everyday Communication Skills in Children.** wwwedit.wmin.ac.uk/psychology/pp/children.htm

Goossens', C., Crain, S. and Elder, P (1992) *Engineering the pre-school environment for interactive, symbolic communication: 18 months to 5 years.* Birmingham, AL : Southeast Augmentative Communication Conference Publications * clinician Series.

Kraat, A. (1987) *Communication interaction between aided and natural speakers: A state of the art report. (2nd Edition)* Wisconsin- Madison: Trace R&D Center.

Light, J., Collier, B. & Parnes, P. (1985a) *Communication interaction between Young Nonspeaking Physically disabled Children and their Primary caregivers : Part 1 - Discourse Patterns Augmentative and Alternative Communication 1, p.74-83*

Light, J., Collier, B., & Parnes, P. (1985b). *Communication interaction between young nonspeaking physically disabled children and their primary caregivers: Part 2 - Communication function. Augmentative and Alternative Communication, 1, p.98-107*

Light, J., Collier, B., & Parnes, P. (1985c) *Communication interaction between young nonspeaking physically disabled children and their primary caregivers : Part 3 - modes of communication. Augmentative and Alternative Communication, 1 p.125-133*

McPhee, M. & Porter, G. (1996) *Children, parents and professionals learning together: Developing augmentative and alternative communication in group programs utilising the principles of conductive education.* Proceedings of the Australian Early Intervention Association 2nd National Conference. Melbourne April 1996.

Porter, G. (2000) *Ideas for the design of low- tech dynamic displays: User friendly, multi-level communication books.* (printed in , Department of Education. (2001). *Students with physical impairment: Augmentative and alternative communication.* Brisbane, QLD: Author.)

Porter, G. (2002) *Learning with Sabrina – Graphic symbols as a first language? Proceedings ISAAC conference, Denmark*

Porter, G. (2004) *Chatting at school? Proceedings ISAAC conference, Natal Brazil*

Porter, G. (2004) *Young children developing language using AAC*
AGOSCI National Tour, Australia

Porter, G. (2007) *Pragmatic Organisation Dynamic Display (PODD) communication books.* Melbourne: Cerebral Palsy Education Centre

Porter, G. and Kirkland, J. (1995*) Integrating Augmentative and Alternative Communication into Group Programs: Utilising the Principles of Conductive Education*. Melb: Spastic Society of Victoria

Romski, M.A., & Sevcik, R.A. (1992) *Developing augmented language in children with severe mental retardation*. in S.F. Warren & J. Reichle (Eds), *Communication and language intervention series: Vol 1. Causes and effects in communication and language intervention* (pp. 113-130) Baltimore: Paul H. Brookes Publishing Co.

Romski, M.A. & Sevcik, R.A. (2005) *Augmentative communication and early intervention: myths and realities. Infants and Young Children 18 (3) p174-*

Silverman, F. (1980) *Communication for the Speechless* Englewood Cliffs, NJ: Prentice-Hall

Schlosser, R.W. (2003*) Effects of AAC on natural speech development In The Efficacy of Augmentative and Alternative Communication: Toward Evidence-based Practice* Academic Press USA

von Tetzchner, S. & Grove, N. (2003) *Augmentative and alternative communication: Developmental issues.* London: Whurr Publishers Ltd.