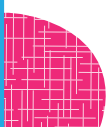


How to design a communication aid



Non-electronic Communication Aid Scheme (Necas)

scopevic.org.au
disability support services





How to design a communication aid

This information will assist you to design a non-electronic communication aid.

Communication aids provide a method of communication for people who cannot talk or whose speech is difficult to understand. When designing a communication aid for an individual there are many options to consider. The person designing the aid needs to fully understand the communication skills of the person who will be using it, and their reason for using it.

Below are some things that you need to think about when designing a communication aid.

What do you need to consider?

The person

- How does the person communicate?

For example: how does the person indicate yes/no, express wants & needs, make choices, understand routines and instructions?

- What are the person's skills and abilities?
 - Vision
 - Cognition
 - Language/literacy skills
 - Hearing
 - Physical skills, which includes hand skills and mobility.
- Do you need to do an assessment of communication?

This may help you determine if the person is communicating at a non-symbolic level, intentional/emerging level, or symbolic level. Understanding the person's communication skill will help guide the choice of communication aid.



The purpose

- What is the communication aid for?
- Carefully consider all vocabulary on the communication aid – it should enable a person to communicate something that they could not otherwise communicate.
- Why does the person want to use the communication aid?
 - To assist expression, for example, give the person with little or no speech a way to request things, inform others, ask questions, give opinions, help them ‘speak’ for themselves.
 - To assist comprehension, for example, provide visual supports to help the person understand what’s happening, or what to do and be more independent.
 - To assist communication partners, for example provide information for others to get to know the person, and learn how to interact with the person.

Support - how & who

- Who are the communication partners? How skilled are they?
- Who will support the person to learn to use the communication aid? For example, parent, friend or support worker.
- What are the opportunities to use the aid? When, where, and who with?
- Have you involved the person in the design of the aid and the content on the aid? Does this include choices about what the person wants and doesn’t want?

Types of Communication Aids

Aids for expression

- Alphabet Board
- Chat Book (can include objects, photos or pictures as mementos)
- Communication books (multi-level)
- Overlays for electronic communication devices (specific for device)

Aids for expression - specific situations

- Communication boards (theme based)
- Community request cards



Aids for comprehension (visual support)

- Object symbols
- Budget wheel
- Calendar
- Chores chart
- My day book
- Shopping books or lists
- Timetable
- Who's here today?

● **Aids for communication partners**

- Book About Me
- Personal Communication Dictionary
- Personal History "This is your life"
- Key Word Sign line drawings

Specific Design Considerations:

Size & shape

What shape does the communication aid need to be?

- Book?
- Board?
- Card?
- Folder?

- What size does the communication aid need to be?
For example: A5, A4, A3, credit card size
- Does the communication aid need to be in landscape or portrait?

Portability

- Is the aid designed to be portable or placed on a wall?
- Can the person walk? (If yes, the communication aid should not be a size that can be carried).
- Is the person in a wheelchair? (If yes, the communication aid may be designed to sit on a lap or wheelchair tray. The aid may need a means of attachment that allows easy access and storage).



Size of words

- What size does any writing need to be?
Select font size e.g. 12, 14, 16, 18.

Size of pictures

- What size do the pictures need to be for the person to see them?
(measure in centimetres, for example 4cm x 4cm etc).

Type of symbols to be used

- Has the person had a communication skills assessment?
- Do you know what symbol system would suit the person best?
 - Object Symbols
 - Photos
 - Have photos on a disk been included?
 - Are they in a compatible format? (JPEG, TIFF).
- Picture symbols
 - Boardmaker Symbols (PCS)
 - COMPIC
 - Other eg. Clipart, Widgit (Rebus) Symbols
- Black & white or colour pictures?
- Whole words and phrases
- The alphabet (ABC or QWERTY format)

OR

- A combination of the above.



Access

How will the person access the communication aid?

- Direct Access (the person uses a part of their own body to identify items on the communication aid)
e.g. points with finger, whole hand, eye pointing, head pointer
- Scanning
e.g. Partner assisted (where the communication partner slowly reads or points to items on the communication aid until the person indicates 'yes').

Other Considerations

- Does the person need to have 'buffers' in between each page so he/she can turn the page more easily? (e.g. rubber stops, Hook and Loop, foam)
- Does the person have any problems with their vision?
- Will the person be able to see the individual pictures or photos?
- Do certain themes need to be colour-coded?
- Does the background of each page need to be a different colour?

If completing a NECAS application:

- Always provide instructions for use
- Consider does the person want their name, contact details and photo on the aid?
- Consider if the person wants the communication aid to introduce them and describe how they communicate?



Describe / design the communication aid you want
Remember to be detailed, specific, and provide all content

Content

- What vocabulary items will be included on the communication aid?
 - Has the person had input about what goes on their communication aid?
 - What are the specific words &/or phrases?
 - Are the vocabulary items relevant, interesting and motivating to the person?
 - Are the vocabulary items functional?
 - Do the vocabulary items cover a wide range of language functions? (request, reject, describe, comment)
 - Does the word need to be above or below the picture so that communication partners can read them?
 - Should the words be organised into certain categories? (people, places, questions)
 - Does a picture need a phrase to explain it, or is just one word enough?
- Remember to carefully consider all vocabulary on the communication aid – it should enable a person to communicate something that they could not otherwise communicate. If a person can communicate the vocabulary item in another way, they don't need it on their communication aid.



Layout of pictures/words

- How does the person want the communication aid to look?
- How many vocabulary items on each page can the person cope with? (for example, 3 picture cells x 3 picture cells = 9 picture cells on a page)
- How much spacing does there need to be in between the vocabulary items? (a little, a lot)
- Is there any colour preferences (e.g. background colour)?
Does the person want pictures/symbols in black & white, or colour?

For multi-level communication books:

- Are there preferences for contents page and page tabs?
- Do the pages need to be numbered?
- What is the purpose of each page? (theme-based items, general chat, choice-making, information sharing)
- Consider if the person needs a different display page or requires different communication aids for different situations?




For visual supports / aids for comprehension:

- Storage considerations – do you need to consider a separate storage system (e.g. storage book or display area) to store the individual pictures when not in use?

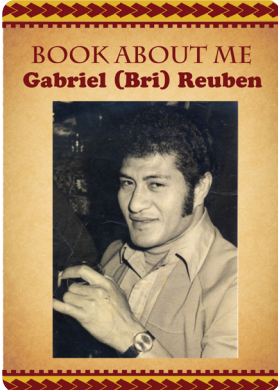
Examples of Non-electronic communication aids

Listed below are some examples of the non-electronic communication aids available through the Non-electronic Communication Aids Scheme (NECAS). The scheme is funded by the Victorian Department of Human Services. It provides individualised aids to adults aged 18 and over who cannot speak or who have speech that is very difficult to understand.




Product	Description
<p>Alphabet Board</p> 	<p>An alphabet board may be suitable for people who have literacy/spelling skills. It can be designed specifically to suit the person's needs e.g. using either an ABC or QWERTY format – with direct access or partner-assisted scanning.</p>
<p>Alphabet Board (Frenchay Alphabet Board - FAB™)</p> 	<p>An alphabet board may be suitable for people who have literacy skills. The Frenchay Alphabet Board - FAB™ is made from a hard plastic and has a non-slip rubber base.</p> <p>The board is washable and durable. It can be ordered specifically to suit the person's needs in terms of size and layout Layout: either ABC or QWERTY format Size: either Tabletop (310mm x 165mm x 10mm) or Pocket (228mm x 108mm x 10mm).</p>
<p>Budget Wheel</p> 	<p>A 'budget wheel' may be suitable for people who understand photos, pictures or words.</p> <p>It may be useful for a person to have a visual support to help manage their money. It allows a person to understand how to budget, so that his or her income does not exceed their expenditure.</p> <p>The budget wheel has been designed as a way to match the amount of money a person has with the different expenses that happen over a week. Each piece of the wheel can be used to represent the cost of an item and activity. As the item or activity is paid for, it is placed on the wheel. When the wheel is full, no money is left.</p> <p>You will need to provide a list of all expenses that a person has.</p>




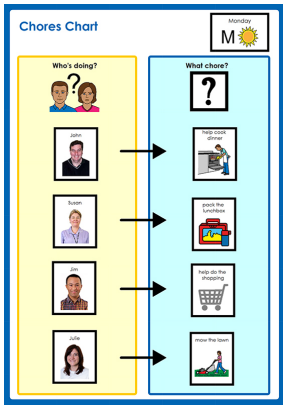
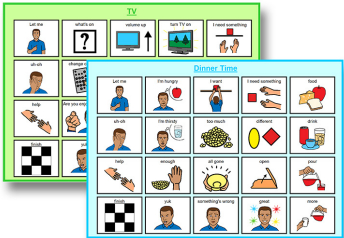
Description	Description
<p>Book About Me</p> 	<p>A 'Book about me' is useful for communication partners or support people.</p> <p>It needs to be developed to contain current, relevant information about a person's needs, abilities and interests. You need to describe who the person is, their like's and dislikes and social interests. Provide information about a person's daily routine, what he or she can do independently and where he or she might need some assistance. For example, describe how to support a person consistently with activities of daily living e.g. during mealtimes, getting dressed.</p> <p>Photos can be included. Photos provide communication partners with topics of conversation, for example, about friends and family, hobbies or interests, and social outings.</p> <p>Photos can also be used to illustrate how to support a person with activities of daily living.</p> <p>You will need to provide all information content and personal photos.</p>




Product	Description
<p data-bbox="133 316 293 353">Calendar</p> 	<p data-bbox="561 316 1468 523">A calendar may be suitable for people who understand photos, pictures or words. It may be useful for a person to have a visual support to remind him or her about what appointments or special events he or she has each month.</p> <p data-bbox="561 569 1487 812">The calendar has been designed to have pictures or photos to represent events, activities or appointments. These can be added or removed each month as appropriate. You will need to provide a list vocabulary items, and personal photos if needed.</p> <p data-bbox="561 858 1455 1148">Vocabulary ideas include appointments for hairdresser, doctor, dentist, and other health professionals (e.g. physiotherapy, podiatry), visits to friends and family, special events such as birthdays, weddings, holidays and funerals and other activities such as going to the gym, swimming, shopping, and going to the movies.</p>



Description	Description
<p>Chatbook.</p> <p>Also known as remnant/memento or conversation book.</p> 	<p>A chat book may be suitable for a person who understands objects, photos or pictures.</p> <p>A chat book is used by a person who finds it hard to express themselves. Mementos or souvenirs are collected, and stuck in a captioned book so that the person can share information about activities and events that they have experienced.</p> <p>It may be designed as a folder with plastic pockets. The plastic pockets allow for storage of mementos and the inclusion of written updates about events and activities. Most people require help to keep their 'chat book' updated.</p> <p>Each page in a chat book usually includes a topic of conversation. The topic is represented by a photo or a memento from the event or activity plus written information about the activity or event. There should also be some interactive statements and questions for the other person. The aim is to extend the chat or engage other people in a conversation.</p> <p>A framework for developing chat book will be given.</p> <p>You will need to collect mementos, write interesting information, and keep the chat book regularly updated.</p>

Product	Description
<p>Chores Chart.</p> <p>Also known as a jobs board or duty roster.</p> 	<p>A chores chart may be suitable for a person who understands photos, pictures or words. It may be useful for a person to have visual support or cue to remind him or her what jobs need to be done at home or work.</p> <p>A chores chart has been designed with photos or pictures to show the daily or weekly tasks within the home or work environment.</p> <p>A photo of the person responsible for the individual tasks is displayed next to the job.</p> <p>You will need to provide a list of vocabulary items for all jobs identified and any personal photos if needed. Vocabulary ideas include, routine tasks e.g., set the table, clear the table, unpack the dishwasher, feed the fish, sweep the floor and collect the mail.</p>
<p>Communication Boards</p> 	<p>Communication boards are for people who can use a visual display of photos, pictures and/or written words for communication. The purpose of a communication display is to provide a method of communication for people who cannot talk or whose speech is difficult to understand.</p> <p>These aids are detailed and made specifically to suit the person's individual needs and specific situations. The choice of communication display and design features depends on the communication skills of the person who will be using it and his or her reason for using it. Vocabulary selection is vital. Vocabulary enables the person to communicate something that they could not otherwise communicate.</p> <p>It must be relevant to the person's interests, needs, and social skills. It is important to design the aid specifically for the person. Ask a speech pathologist for help.</p> <p>You will need to provide layout design, a list of vocabulary items and personal photos if needed.</p>



Product	Description
<p data-bbox="133 293 513 369">Communication Book (Multi-level)</p> 	<p data-bbox="561 293 1485 537">Multi-level Communication books are for people who can use a visual display of photos, pictures and/or written words for communication. This communication aid allows access to a large vocabulary, and provides a method of communication for people who cannot talk or whose speech is difficult to understand.</p> <p data-bbox="561 583 1469 950">The choice of communication book design features depends on the communication skills of the person who will be using it and his or her reason for using it. One style of multi-level communication book has an index on the first page, which enables the user to go to a range of topics. Pages can have tabs to make it easier to navigate through the book. Each page contains an option that allows the person to return to the index and change the topic.</p> <p data-bbox="561 996 1430 1249">The select of appropriate vocabulary is vital. Vocabulary enables the person to communicate something that they could not otherwise communicate, and must be relevant to the person's interests, needs and social skills. Some people also include the alphabet if they have spelling skills.</p> <p data-bbox="561 1294 1414 1373">It is important to design the aid specifically for the person. Ask a speech pathologist for help.</p> <p data-bbox="561 1418 1414 1496">You will need to provide layout design, a list of vocabulary items and personal photos if needed.</p>

Product

Description

Community Request Cards



Community request cards may be suitable for a person who understands photos, pictures or words.

Community request cards are used by a person who cannot speak or who are difficult to understand. The cards are used to request items and services in the community. Instead of using speech to request an item or a service, the person gives or shows the card for the other person to read. The content on the card outlines what is wanted with all the details needed for their request to be met.

Community request cards have a line drawing, photo, picture or even an object plus detailed written information. The information outlines what the person wants e.g., 'white coffee with black sugar' and what the communication partner should do e.g., 'put the change back in my wallet.' A number of difference cards can be developed for different situations in the person's life such as going bowling, eating out or going to the movies.

You will need to provide the message content for individual requests.

Overlays for electronic communication devices



Overlays are required for some electronic communication devices, for example GoTalk.

These devices have speech and/or print output and many need a photo, picture or word based overlay that communication partners can change for the individual when required.

Standardised overlays for devices can be developed, as per the individuals specific needs.

Please note: NECAS does not provide the electronic device, this needs to already be owned by the individual.

You will need to provide details about the type of aid, overlay configuration and all vocabulary content.

Product

My Day Book



Description

My day books may be suitable for a person who understands photos, pictures or words.

My day books are a valuable way of using pictures and photos with people who need support to share information about the things that they do in their day. They can be useful for people who need visual reminders.


My day books allow for communication about the things that the person has been doing, where they have been, who they saw, how they have felt, anything different or special that has happened and it may also include other information such as reminders for the next day.

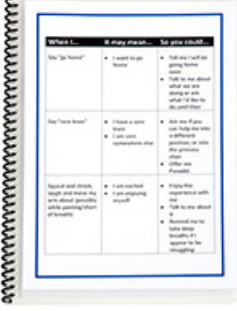

It may be possible to create a 'do it yourself' diary, with sections of the book that the person can add pictures or photos to. The book may include sections on:

I went to , I did , I saw , I felt , and I need to remember to bring

You will need to provide vocabulary content relating to places, activities, special events, people, feelings and common items to bring.



Product	Description
<p>Object Symbols.</p> <p>Also known as tangible symbols.</p> 	<p>Object symbols may be suitable for people who can understand that whole or parts of real objects can represent things, activities or events.</p> <p>The objects selected need to look, feel or have something to do with the item or activity they represent e.g. a piece of towel that smells like chlorine for swimming.</p> <p>Object symbols can be used for making choices. Instead of using real objects, object symbols representing items or activities are offered for the person to choose between, e.g., hairbrush = please brush my hair, hand lotion = please give me a hand massage.</p> <p>Object symbols can also be used to help the person understand what is going to happen in their day. Daily or weekly events and routines may be identified by the object symbol associated with the event or activity, e.g., purse = shopping; seat belt buckle = go in the car.</p> <p>Pictures or photos with a written prompt are attached to the object symbol for the communication partner, as a way of introducing the person to a two dimensional representation.</p> <p>You will need to provide a list of objects. Make sure the objects relate to functional activities and are meaningful to the person.</p>

Product	Description
<p>Personal Communication Dictionary</p> 	<p>A Personal Communication Dictionary (PCD) is useful for communication partners who do not know the person well, and are unfamiliar with the way a person communicates.</p> <p>A PCD is a sheet that records what a person does (person's individual gestures, body language, facial expressions, vocalisations and/or signs); what this means; and what the role the communication partner can play (It may also record when and where the behaviours may be seen).</p> <p>A gesture dictionary is similar and outlines all the manual signs and gestures that the person understands or uses to communicate.</p> <p>You will need to provide comprehensive information:</p> <ol style="list-style-type: none"> 1. Identify and describe behaviours (e.g., what the person does) 2. Record and interpret behaviours (e.g., what this might mean) 3. Outline the best response to the behaviour (e.g., what others should do).
<p>Personal History "This if your life"</p> 	<p>A 'personal history' provides communication partners with information and photos about a person's life and family history.</p> <p>A 'personal history' includes information about a person's past and present skills and interests, likes and dislikes, and future aspirations and dreams. It can be used as a conversation starter or to gain information about the person, especially when they find it difficult to express themselves and tell you their own story.</p> <p>You will need to provide all information content and personal photos.</p>

Product

Shopping books or lists



Description

Shopping books or lists may be suitable for people who recognise photos, pictures or words.

A shopping book or list allows a person to pre-plan what he or she wants to buy, or indicate if he or she wants something extra or different. Shopping lists need to be individualised to contain grocery and personal items for each individual.


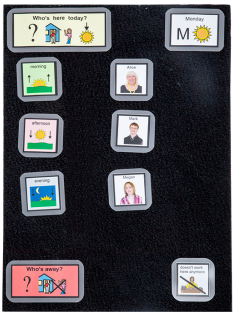
Shopping lists may be represented in a number of ways. Examples may include:

1. A laminated shopping list where individual items are listed and marked off with a non-permanent marker. Once the items are brought the list can be wiped clean and re-used.

2. A picture shopping book that contains individual pictures of grocery and personal items. Items can be selected and transferred to a Hook and Loop compatible list to take shopping. Once the shopping is completed, the pictures are placed back in the shopping book for next time.

You will need to provide a complete vocabulary list of shopping items. Please identify specific brand items if needed.

Vocabulary ideas include; fruit, vegetables, meat products, dairy products, pantry goods, frozen foods, personal care items and other household items.

Product	Description
<p>Timetables</p> 	<p>Timetables may be suitable for people who recognise photos, pictures or words and need to know what's happening at different times of the day or week.</p> <p>A timetable provides a person with visual cues about the daily routine, and helps people to recognise and anticipate activities that will happen during the day or week. A timetable can also be used to encourage choice making, for example, a person might decide the order that he or she wants to do some things.</p> <p>Decide if the timetable is for an individual or group of people. This may influence the size of the timetable and portability. The display of the timetable can vary greatly, depending upon the needs of the individual. Decisions need to be made about the complexity of the display, i.e. how many pictured activities the person can cope with. Decide if the timetable needs to represent daily events or activities, or if weekly layout is appropriate. Time referents could be 'morning' 'afternoon' 'evening'.</p> <p>You will need to specify the layout, and provide a vocabulary list of activities and events.</p>
<p>Who's here today</p> 	<p>'Who's here today charts' may be suitable for people who recognise photos, pictures or words and who like to know what is going on around them.</p> <p>A 'Who's here today chart' displays the whereabouts of different people. It prepares a person for who they should expect to see, any changes that occur unexpectedly, and reasons why staff or others are away.</p> <p>Decide who will be responsible for taking photos. It is important to have good clear photos of everyone including: support staff, casual workers, friends, and family. Consider having extra picture symbols of an unknown person to represent 'unexpected guests'. Show reason's for 'Who's away'. The frequent reasons provided for staff absence include: not well, on holidays, doesn't work here anymore, not on shift.</p> <p>You will need to provide clear photos of people.</p>





More Information

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making it happen