# GETTING STARTED!!!
## Using VISUAL SYSTEMS to promote COMMUNICATION

### By
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# ACKNOWLEDGEMENTS

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# Topic 1 - Introduction

Welcome to *'GETTING STARTED!!! Using Visual Systems to Promote Communication'.*  This practical resource booklet has been written for parents and discusses a range of visual systems that can be used at home to develop your child's communication skills.  Along with the booklet is a DVD which demonstrates the use of the strategies discussed in the booklet with children with communication difficulties.

Communication is a process that is happening throughout the day.  Having a communication difficulty can restrict/limit the child's ability to participate in everyday activities.  When a child can't get their message across, they usually become frustrated.  Whatever a child's age, it is important to address this frustration.  Visual systems can provide the child with an effective method for communicating needs, wants, information, feelings and ideas.

Parents should note that the use of visual systems is not giving up on your child's verbal skills.  Visual systems do not stop your child from learning to speak or producing speech.  Visual systems can form the foundation of communication skills that may allow verbal communication at a later point but most importantly can be a great help during this transitional time.

As parents you spend most time with your child doing real life activities, so you are in the ideal position to develop your child's communication skills.  The booklet and DVD describe a range of strategies that you can use to turn your child's everyday routines and activities into opportunities for communication and learning.  Please adapt or modify the suggestions to suit your individual circumstances.  Most importantly, by injecting fun into the learning process you can make the communication practise an enjoyable one.  Once your child realises that using visual systems is fun, they will automatically, not only learn to communicate effectively, but they will seek to learn more.

*Dolly Bhargava*
*Disability Specialist Speech Pathologist*

# Topic 2 - What is communication?



**Sending message** ⟶ **Receiving message**

**Receiving message** ⟵ **Sending message**
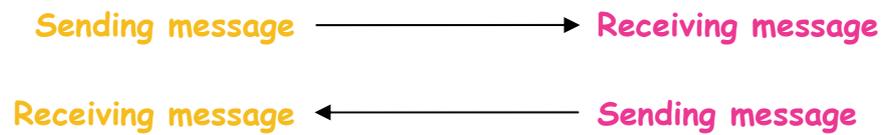
*Communication* can be considered as the exchange of messages between at least two people i.e. sending and receiving message so that we can understand each other.

When thinking about what communication involves it is useful to think of it in terms of three broad categories:

1.  *Receptive communication* is the process of **receiving** and **understanding** a message from a communication partner.  For example, understanding words, phrases, instructions, directions, questions etc.

2.  *Expressive communication* refers to the way the child **conveys** a message (i.e. to communicate their needs, wants, information, feelings and ideas) to a communication partner verbally and/or non-verbally (for example, using facial expressions, vocalizations gestures, signs, body language).

3. *Social communication* refers to **when**, **how** and for **what purpose** the child uses communication.  For example, making eye contact, sharing with others, having a conversation etc.

Developing communication skills is complex for a large number of children with disabilities.  When children cannot understand messages from their environment and/or get their message across using speech alone, **visual systems** that incorporate **visual supports** can enhance and support the child's communication skills.

# Topic 3 - What are the different types of visual supports?

Least abstract/ Iconic
/Easy to understand
/recognise

START HERE

**1. Objects** refer to the use of everyday objects from an activity for communication. Objects can represent an activity, location, and person. *For example, to inform the child its time to eat → show them their plate or its time to go swimming → show them their swimming costume or its time to go to grandma's → show them grandma's scarf that looks like the scarf grandma always wears.*

**Object symbols** are a step up from using everyday objects as the child needs to associate the object symbol with an activity/location/person. An object symbol is made by using an object that is associated with the activity and Velcroing it onto a cardboard or laminated sheet. *For example,* a *mouse to represent a computer activity* or a *packet of crackers and cheese to represent morning tea.*

Computer

Morning tea

and depending your
child's response
gradually progress to

**2. Photos** refer to the use of photographs for communication. This includes non-digital and digital photos, Polaroid photos, pictures cut out from magazines, catalogues etc. Photos can represent people, activities, places, objects (food, drinks, toys, grooming/personal hygiene, clothes).

Bed

Mum

Vegemite sandwich

HERE if appropriate

**3. Computer line drawings** refer to the use of coloured or black and white line drawings (hand drawn or commercially produced). Examples of commercially available programs include Clipart, Boardmaker, Softpics with Fantasticpics, COMPIC etc. These pictures can be easy to recognise (iconic/least abstract) to difficult to understand (abstract). As you can see below a computer line drawing of an apple or an aeroplane is easier to recognise compared to a feeling (for example, angry) or an action (for example, washing face). If you use abstract drawings you will need to teach their meaning (i.e. help your child make the association between the concept in real life and the drawing.

*Coloured + Iconic*        *Black & white +Iconic*        *Coloured + Abstract*        *Black& white +Abstract*

apple

aeroplane

angry

Washing face

Most abstract/
Most difficult to
understand/recognise
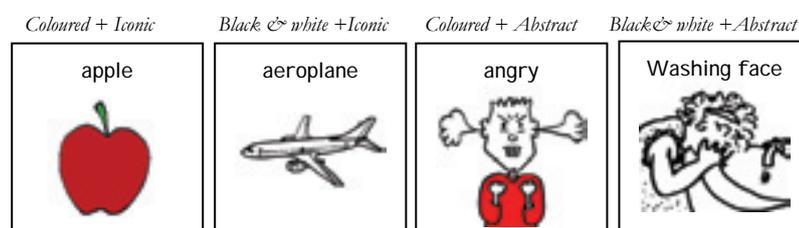
**4. Written word** refers to the ability to read and understand the words.

**My morning routine**
1. Go to the toilet
2. Wash hands
3. Brush teeth
4. Wash face
5. Comb hair
6. Eat breakfast

## Topic 4 - What are visual systems?

*Visual systems* incorporate a range of **visual supports** to help the child's communication skills.  There are a whole range of visual systems that can be used to facilitate the development of receptive, expressive and social communication:  Below is a list of visual systems:

☐ Schedules

☐ Mini Schedules

☐ Calendars

☐ Category Books

☐ Social Stories

☐ Circles Concepts

☐ Activity Checklists

☐ Social Scripts

☐ Comic Strip Conversations

☐ Chat System

☐ Wh System? (Who? What? Where? When? Why? System)

☐ Cause – Effect Links

☐ Shopping Lists

☐ Problem Solution Charts

☐ Behavioural Rules

☐ Cue Cards

☐ PECS (Picture Exchange Communication System)

☐ Choice System

☐ ALS (Aided Language Stimulation Boards)

☐ ILS (Interactive Language Stimulation Boards)

☐ PODD (Pragmatic Organisation Dynamic Display)

NOTE: In this booklet (topic 11) we will **only** be discussing the visual systems that were used as part of **this** project which was a collaborative team effort between a Disability Specialist Speech Pathologist, Carson Street School and parents of children attending the Early Intervention Program at Carson Street.

It is important to **embed** visual supports into visual systems.  As the saying goes "A picture can say a thousand words…" in other words a visual support (for example, an object, photo, computer line drawing) on its own can communicate a variety of meanings.  For example, if you saw a photo of a 'park' it could mean 'I want to go to the park' 'I went to the park', 'I am going to a park'.  However, if the photo of the park was embedded in a visual system it would help convey the specific message.  For example, to convey the message 'I want to go to the park' the photo of the park can be embedded in a 'Choices' system whose purpose is to present all the activity options (Figure 1).  To convey the message 'I went to the park' the photo can be embedded in a 'Chat Book' whose purpose is to help the child talk about what they have done (Figure 2).  To convey the message 'I am going to the park' the photo can be embedded in a 'Schedule' system whose purpose is to help the child understand the sequence of events in their day (Figure 3).

**Figure 1 – Choices System**
**'I want to go to the park'**

My Outings Choices

park     beach

**Figure 2 – Chat Book**
**'I went to the park'**

My Chat Page

park

**When?** Today
**Who?** I went with mum
**Where?** We went to the park
**What?** We saw lots of pretty
yellow flowers at the park

**Figure 3 – Schedule**
**'I am going to the park'**

Afternoon     park     icecream     home
PM
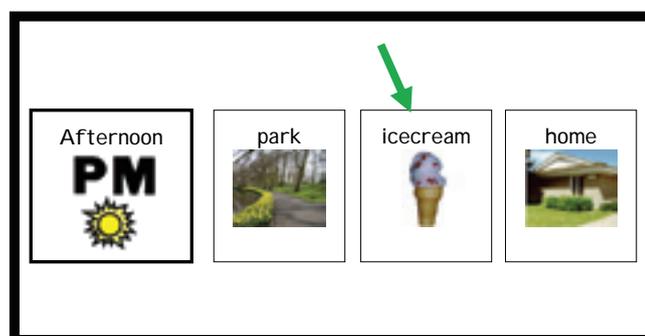
Below are examples of more visual systems that can specifically support the child's receptive, expressive and social communication skills.

### Example of a Receptive Communication Visual System

Peter has a hearing impairment and attention difficulties. He finds it difficult to understand verbal messages

First breakfast Then TV
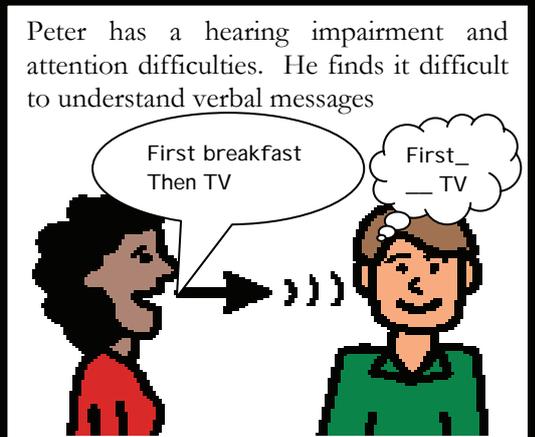
First_ ___ TV

When a **First/Then** visual system is used by mum with the visual supports (i.e. a photo of breakfast and TV) Peter can understand what is being communicated

| First | Then |
|-------|------|
| breakfast | TV |

### Example of an Expressive Communication Visual System

John has cerebral palsy. He has difficulty controlling his speech muscles which makes it hard to understand him. He loves to sing rhymes with his mum.
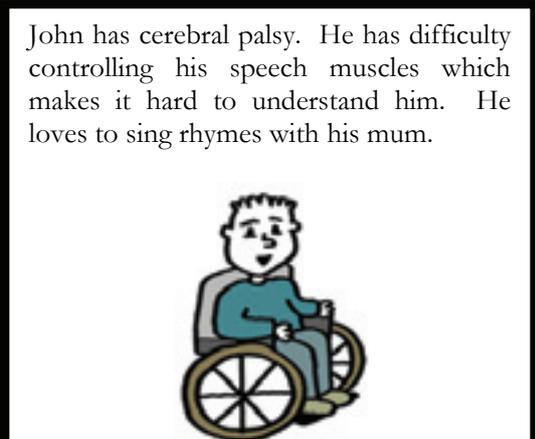
John uses the **Choices System** to tell his mum what song they should sing together by pointing to the visual supports on the page (computer line drawings of songs).

Song choices
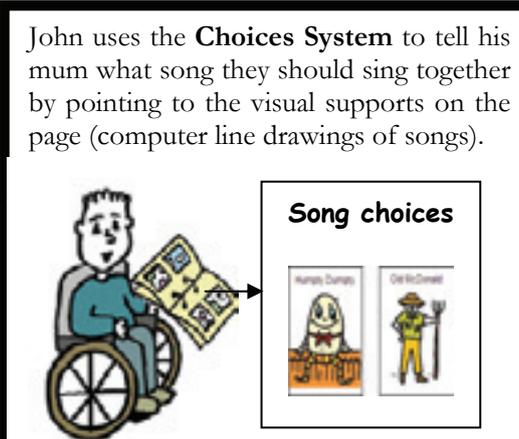
### Example of a Social Communication Visual System

Sheila, Rani and Neal have Autism. They have difficulties taking turns when playing together for example, taking turns to build a tower of blocks or blowing bubbles.
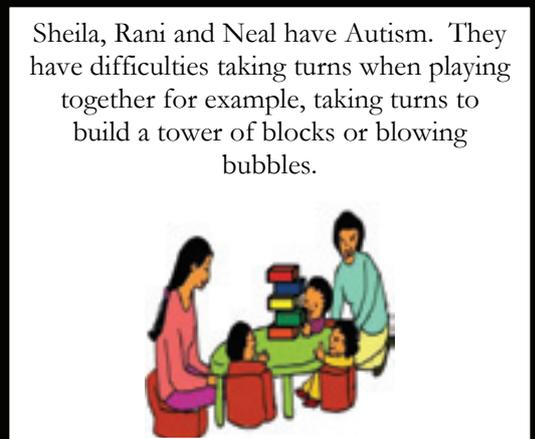
Their mums, - along with using words like 'Rani's turn', 'Sheila's turn', 'Neal's turn and 'Wait'; use a **Wh?** system 'Whose turn is it' - which is made up of visual supports (written words) to show them who has the first/second/third turn.

1. Rani
2. Sheila
3. Neal

## Topic 5 - Why use visual systems?

Visual systems can be particularly helpful for children with the following difficulties:

a) **Communication difficulties** - In order for communication to take place, the child needs to understand what is being communicated to them and be able to convey their messages. It can be very frustrating for children who have difficulties with understanding and/or expressing themselves. This frustration can often lead to the child resorting to using inappropriate behaviours to get their message across. **Visual systems** can make communication more accessible.

b) **Slow information processing** - Slow information processing means that the way the brain is processing communication is affected. As a consequence the child requires more time to "take in" the information → process (interpret) information → respond to the information. The child may require multiple opportunities to practice and remember the information. Without the additional time the information may come and go too quickly without the child understanding or responding appropriately.

**Visual systems** are permanent and non-transitory whereas language is fleeting. In other words when we present information verbally, the words are available for a brief moment and if the child did not hear the verbal information then they have missed out. Whereas when the information is presented visually it is static and it can be there for as long as the child needs.

c) **Attention difficulties -** Effective communication requires the ability to rapidly establish attention on what is being said, maintain attention and shift attention to the next topic. However, many children with attention difficulties experience difficulty establishing, maintaining and shifting attention at the speed necessary to participate effectively in communication interactions. As a consequence the verbal information may disappear before the child has had a chance to pay attention enough to take in what is being said. They may miss a lot of information and only receive fragments of the verbal information.

**Visual systems** can address these issues by staying there as long as the child needs to see the information, take it in and respond to it.

**d)** <u>**Learning style**</u> - Learning style refers to how your child approaches learning. Researchers discuss a variety of learning styles but in this booklet we will discuss only three – visual, auditory and tactile learning styles. Some children may have a dominant style of learning, with far less use of the other styles. Other children may find that they use different styles in different circumstances. There is no right mix, nor are the styles fixed. Your child can develop ability in less dominant styles with guidance and support.

| **Visual learning style** <br> - learn through seeing | **Auditory learning style** <br> - learn through hearing sound and music | **Tactile/Kinaesthetic/ Physical learning style** <br> - learn through moving, doing and touching |
| --- | --- | --- |
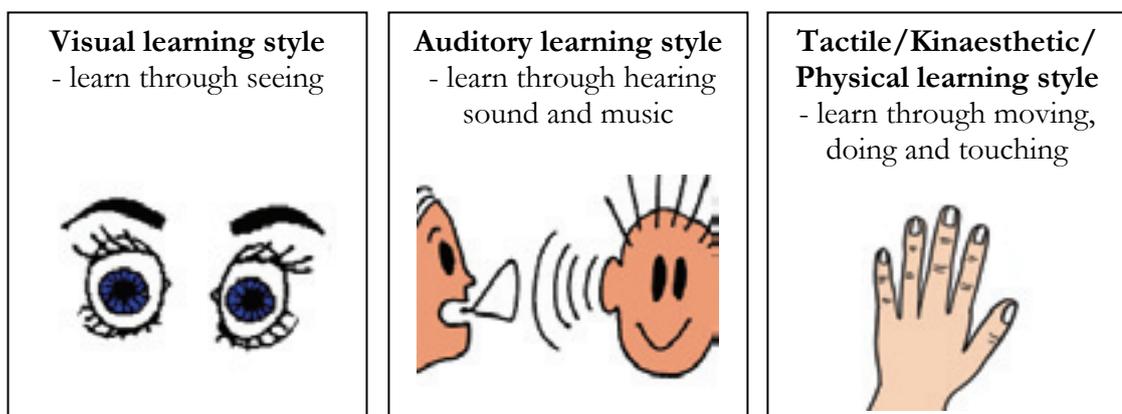
Many children are not easily able to understand verbal messages as this requires the child to have an auditory learning style. However, using **visual systems** can supplement the verbal information and clarify the information. Also, promoting the child's active physical exploration / engagement in the activity it can increase understanding and learning.

In conjunction with the above difficulties, visual systems are beneficial for a number of children with communication difficulties. For example, children with:

- Disorders (for example, Autism, Asperger's Syndrome
- Attention Deficit Disorders
- Sensory impairments (for example, Hearing impairment, Vision impairment)
- Syndrome (for example, Down's Syndrome, Fragile X Syndrome)
- Intellectual disability
- Multiple disabilities (for example, Cerebral Palsy, Deafblindness)
- Speech disorders (for example, Dyspraxia, Dysarthria, articulation disorders)

By using visual systems the child can **develop** the following skills:



Communication

Listening

Social skills

Attention

Vocabulary

Cat    Mat

Self esteem

**Visual Systems promote the development of:**

Independence

Life skills

Play

Writing

Reading

Maths

1 + 1 = 2
2 − 1 = 1
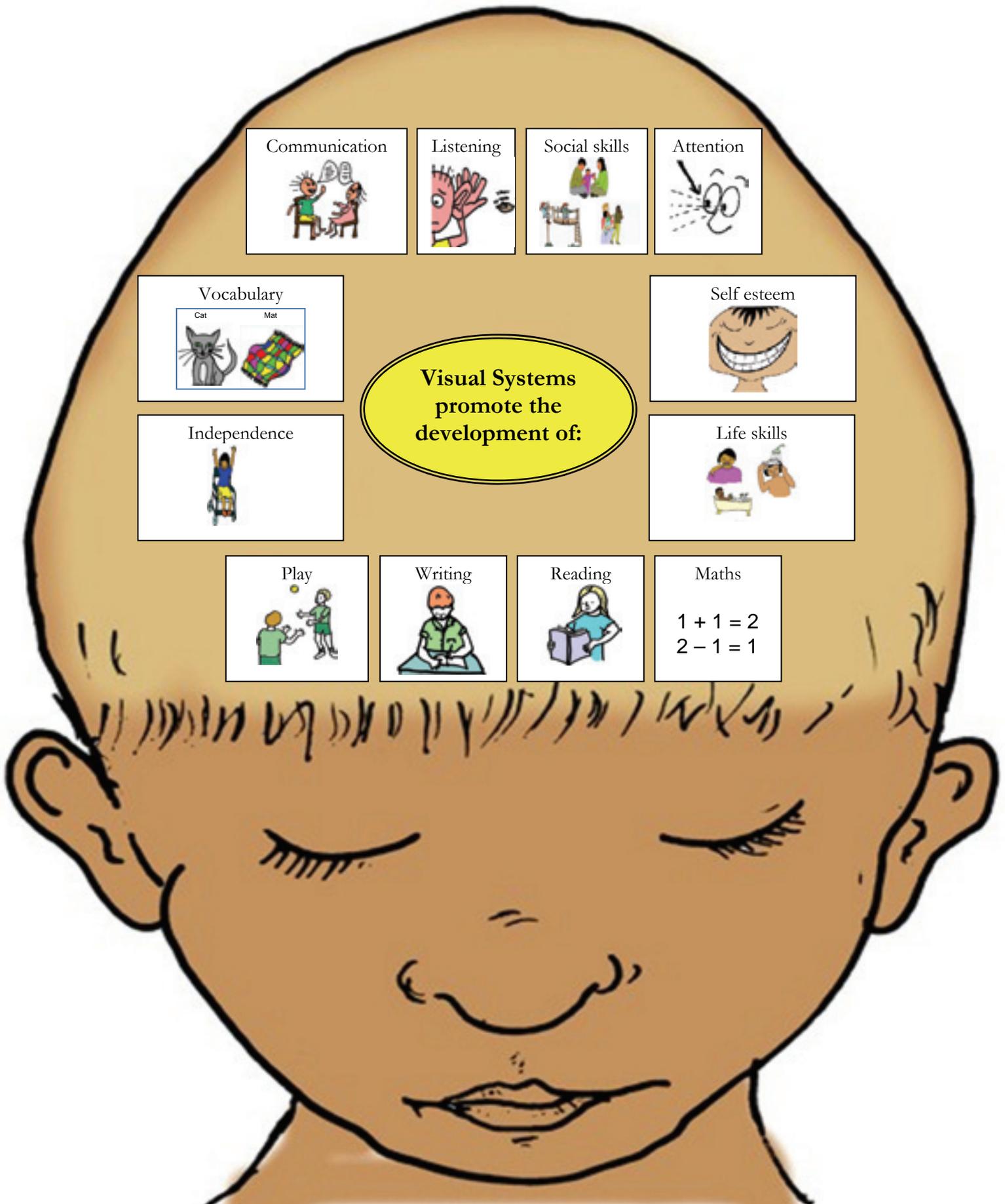
## Topic 6 - When should you use visual systems?

Visual systems should be used throughout the day as communication is an **integral part of life**, so it is best learned and practiced as part of everyday routine. You can create activity specific visual systems that can facilitate the development of your child's receptive, expressive and social communication skills.

**Integrate visual systems into the child's life**

| Sleeping | Eating | Toileting |

| Bathing | Getting dressed | Playing | Cleaning up |

| Visiting people | Shopping | Fun outings |

## Topic 7 - Who should use the visual systems described in Topic 11?

The visual systems discussed in Topic 11 are for children with **medium to low communication support needs***.* The table below lists the sort of information that can be understood and expressed by children with low, medium and high communication support needs.   Please refer to it to help you identify the communication support needs of your child and if the visual systems described in Topic 11 are suitable for your child.

| | Low Communication Support Needs | Medium Communication Support Needs | High Communication Support Needs |
|---|---|---|---|
| **RECEPTIVE** | Child is developing an understanding of:<br>• time – past, present and future<br>• simple/complex directions, language concepts<br>• speech, signs<br>• photos,  computer line drawings *(for example, Boardmaker, Softpics),* written word<br>• Visual systems *(for example, schedule, checklists)* | Child is developing an understanding of:<br>• things happening right now<br>• their name, and your voice pitch and pattern<br>• speech when accompanied by other cues *(for example, gestures, sound and objects)*<br>• how their behaviours and actions affect people and the environment (i.e. intentionality)<br>• understand objects and show an interest in photos | Child is beginning to develop an understanding of:<br>• Speech cues *(for example, sit, eat, drink)*<br>• Object cues *(for example, when shown a cup →child opens mouth)*<br>• Sound cues *(for example, when microwave bell rings →child gets excited)*<br>• Taste cues *(for example, when offered food→child licks lips)*<br>• Smell cues *(for example, upon smelling the hand cream  →child puts hand out)*<br>• Location cues *(for example, when told computer →child looks/moves towards computer)* |
| **EXPRESSIVE** | Child can communicate:<br>• wants, needs and feelings<br>• with speech, photos, signs, computer line drawings, and written words<br>• Visual systems *(for example, choice systems, chat books)* | Child can communicate:<br>• choices by pointing, looking or pushing away; request for 'more'<br>• nonverbally *(for example, facial expressions, body movement, with limited gestures, signs)*<br>• with objects and 1 -2 photos | Child is beginning to communicate:<br>• in response to what's happening on the inside *(for example, pain, hunger)* or in the environment *(for example, startles in response to a loud noise)*<br>• by non verbal means<br>• by using consistent signals that can be interpreted by a communication partner<br>• does not respond to photos, line drawings, written words |

If after reading the table you are unsure that the visual systems discussed in Topic 11 are suitable for your child please contact your local **speech pathologist** (speech therapist).  The speech pathologist can perform specific assessments in order to find out which areas of communication appear to be difficult for your child.  Based on the assessment the speech pathologist can provide information and strategies to help your child (for example, visual systems, strategies for facilitating speech development).

# Topic 8 - What are some of the considerations for choosing appropriate visual supports and visual systems?

Each visual system should be individualized to meet the needs of the child.  In order to create systems that will be effective tools for each child, consideration must be given to a variety of factors related to the visual support such as:

1. **<u>Choice of Visual Support</u>** – Deciding on the way a message should be represented – i.e. objects, photos, computer line drawings or written word will depend on what the child understands.  The ability to understand different levels of abstraction will vary from child to child.  Begin by using visual support that your child understands.   For example, if you child responds best to photos then photos should be used.  Remember to always use speech when using visual support.

   If you are unsure, researchers suggest that it is best to start with objects and then gradually move to photographs before moving to computer line drawings.  The aim is to start simple and then gradually work towards the more abstract.  For example, consider how a child might learn to request a drink:  Starting with a photo to make a request for a real object can be too abstract.  Initially, the child might need a real cup to request juice.  You can teach that a photo of a cup and a real cup represent the same thing by first using the real cup with the photo, and then transitioning to just using the photo.  Some children may always prefer the real object.  The goal is simply to provide whatever makes the connection for a child.  If you see confusion or frustration in the child's attempts to communicate, decrease the level of abstraction.  If you are unsure how to begin to use visual systems with your child at home, contact a speech pathologist.

   It is important to combine the visual support with a written word.  Labelling the visual support will promote an interest in letters and words, and some children may even become early readers.   By labelling the visual support it also ensures that everyone using the visual support with the child will use the same language when interacting with them.

Use a minimum font size of 18 point and in a standard non cursive font (for example, Comic Sans MS, Arial, Century Gothic).

2. **Number of visual supports** – You will need to consider the number of objects /photos /computer line drawings your child can use at a time. Researchers suggest that you should gradually build the number of visual supports you have on your child's visual system. You may begin with one or two and as your child's understanding develops you can keep adding more.

3. **Size of visual support** - Depending on your child's visual skills the way you present the visual support may need to be modified. It is important to make sure your child can see the visual support so you may need to change the size of the visual support for optimum viewing. If the child needs the visuals to be distinctive, highlighting and darkening the outline of the picture may help. In some types of visual impairments by presenting the visual support on a contrasting background is beneficial. For example, a dark object /photo /computer line drawing on a white background or a light object/photo/computer line drawing on a dark background.

4. **Time -** Most importantly be sure to give your child enough time to focus on the visual support.

5. **Presentation of visual support –** Depending on your child's visual scanning abilities (horizontal scanning – looking from left to right; vertical scanning – looking from top to bottom) present the visual support from left to right. This is to encourage horizontal scanning which is what we use when reading.

6. **Location of the visual system** – The visual system should be easily accessible for the child. It should be stored in the location where the child will be engaging in the activity. For example, a food and drink choices page could be kept in the kitchen. You could put it on the fridge or a wall or a dining table so that it's in view.

7. **<u>Portability of the visual system</u>** –This is an important consideration which will determine how big/small; heavy/light or fixed/portable the system will be. If the child has difficulty with mobility then you will have to determine ways that the child can access their visual systems as independently as possible.

8. **<u>Tips on taking photos</u>**
   - Have a good camera preferably a digital camera.
   - Make sure that there is enough light so that the photograph comes out clear. Use the flash as necessary.
   - When taking photographs to use for communication, it is helpful to make the photograph as simple as possible include only one object in the picture or make the background blank.
   - When taking a photo focus on what's really important and try to avoid any extraneous aspects that may be distracting.  For example, compare figure 1(target – Meadow Lea Margarine) vs. figure 2 (target – 1 VHS video cassette tape) vs. figure 3 (target – putting on socks).



Figure 1 - uncluttered | Figure 2 - cluttered | Figure 3 – distracting background
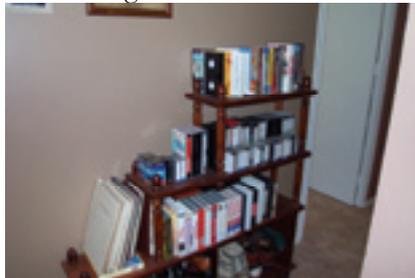
   - If you do have extraneous parts you can chop them off by either cutting around the extraneous parts or using computer programs like "PhotoShop" to crop the important part in your picture or enhance the image etc.
   - Take the photo from a good distance and from the child's perspective.
   - Get a variety of shots so that you can choose the most appropriate photo i.e. the one that conveys the information accurately.
   - You can print the photos at most photo shops

9. **<u>Additional cues</u>** - In conjunction with the visual systems use **speech** and the following **cues** to add meaning to the message such as:

- Routines i.e. use them in the same way each and consistently.
- Environmental arrangement /Location cue for example, dining table set up with utensils→time to eat; library→story time; bathroom →bath.
- Body language (i.e. facial expressions, proximity, body stance, movement of body, reaching, touching, pointing, eye contact, eye gaze, and gestures).
- Key signs (for example, Makaton is a key word signing system that provides a means to communicate and encourages language development).
- Other natural cues (i.e. taste, touch, smell).

# Topic 9 - What do you need to make visual systems?

You will need the following:

- Velcro (rough/smooth or hook/loop)
- A4/A3 Laminator
- A4/A3 Laminating pouches
- Scissors
- White/Coloured paper
- Digital camera for photos
- Colour printer
- Magazine and catalog pictures
- Labels from food products, toy boxes, etc.
- Computer line drawing picture software programs if appropriate. There are several picture software programs, below we have listed the programs that were used as part of this project:

| Boardmaker | Softpics With Fantastic Pics | Picture This |
|---|---|---|
| Boardmaker is a communication and learning tool containing over 4,500 Picture Communication Symbols (PCS). It is designed to enhance the language and learning process for students of all levels.<br>Phone: (07) 3808 6833<br>Fax: (07) 3808 6108<br>Web: www.spectronicsinoz.com<br>Email: mail@spectronicsinoz.com | Softpics with Fantastic Pics is a flexible and easy to use image library and software package for creating Visual Systems. It contains over 3500 images. It is designed by Australians for Australians<br>Phone: (02) 9876 3568<br>Fax: (02) 9876 3568<br>Web: www.innovativeprogramming.net.au<br>Email: bloom@iinet.net.au | Picture This…Pro is an easy to use program and contains 5000 quality photographs.<br>Phone: (07) 3808 6833<br>Fax: (07) 3808 6108<br>Web: www.spectronicsinoz.com<br>Email: mail@spectronicsinoz.com |

# Topic 10 – How do you make the visual systems?

1. **Gather the materials** - Scissors, glue, A4/A3 paper, laminating pouches, Velcro and visual support representing the activities (objects, photographs, computer line drawings).

2. **Visual supports -** If using objects you need to make sure your child can recognise and understand the purpose of the object *for example, a cup is for drinking.* Once your child understands this show them the object before commencing with the activity *for example, show the child their nappy + give it to your child to feel + say 'Time for a nappy change' and then proceed with nappy changing. This will help your child make that association that when they see the nappy it means that its time for nappy changing.* Once your child has made the association between the object and activity you can then Velcro the object onto a laminated sheet (object symbols). These object symbols can be stored in a folder which you can use at any time and in any place. This is particularly useful if you are not in the environment of the activity and you want to communicate about that activity. If you want you can also include a photo of the item so that your child can in time make the association of the photo with the object (refer to Figure 1). Label the object so that your child can associate the written text with the object (refer to Figure 1and 2).

| | |
|---|---|
| **Figure 1- Storytime object symbol** <br> A book to represent storytime | **Figure 2- Sultanas object symbol** <br> A packet and a photo of sultanas |
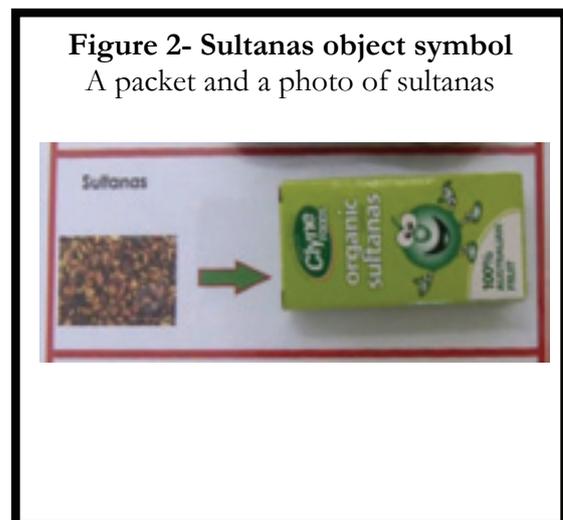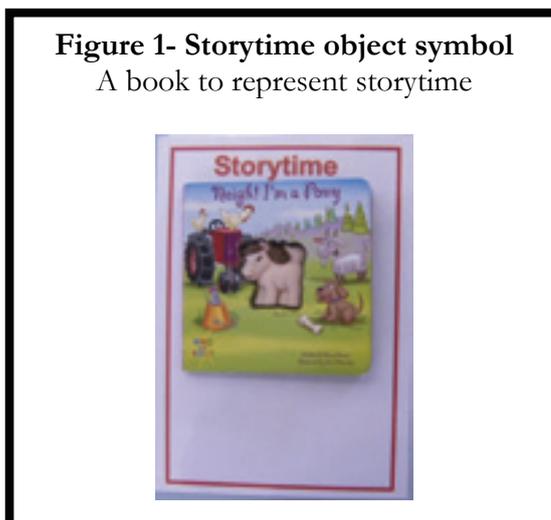
If using photos or computer line drawings cut them to an appropriate size, laminate and Velcro them. Choose if you want rough or smooth Velcro behind the object/photo/computer line drawing and use it consistently.

3. **Visual System** – Depending on your child's visual skills adapt the design by considering:

   a) **Arrangement** of the visual support in the system

**Figure 1 - Schedule**
*The schedule of the day is arranged in a left to right format.  NB: The*
*day has been divided into 3 sections - morning / afternoon / evening.*



**Figure 2 - Schedule**
*The schedule of the day is arranged in a top to bottom format.*
*NB: The day has not been divided into three sections.*

- **Size** of visual support

**Orange**

3cm X 3cm

Orange

5 cm X 5cm

Orange
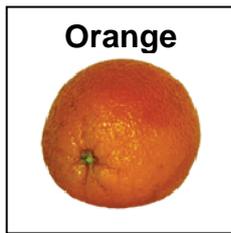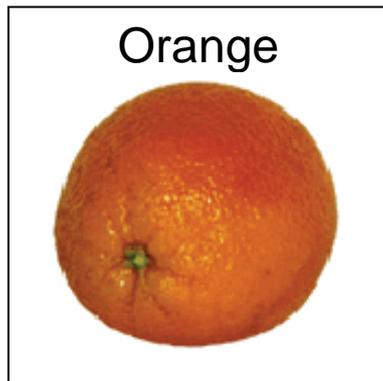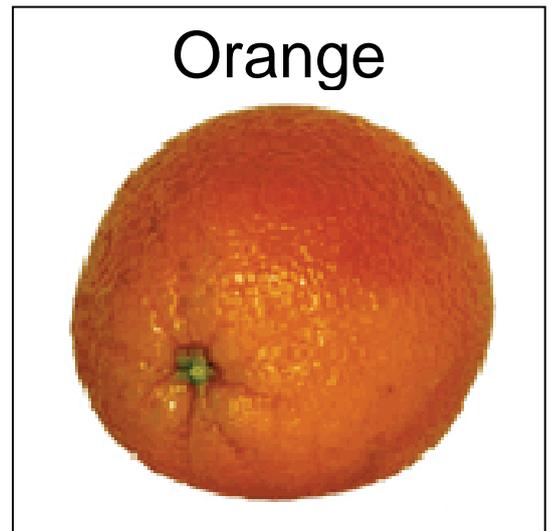
7 cm X 7cm

- **Detail and complexity** of visual support

Limited detail

banana

Complex detail

playground
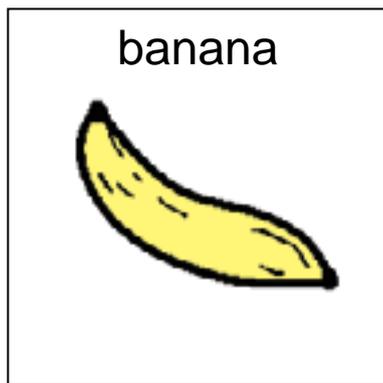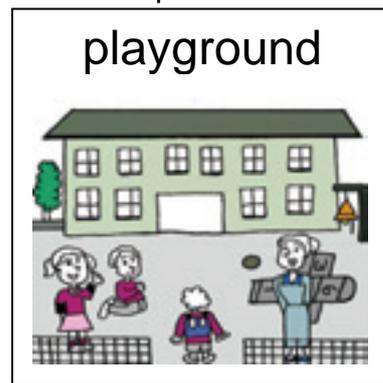
- **Background colour/contrast** of the visual support and/or visual system.

Visual Support I

Black outline of image on a
yellow background

drink

Visual System

First section – green
Then section - red

First        Then

Morning tea        Computer
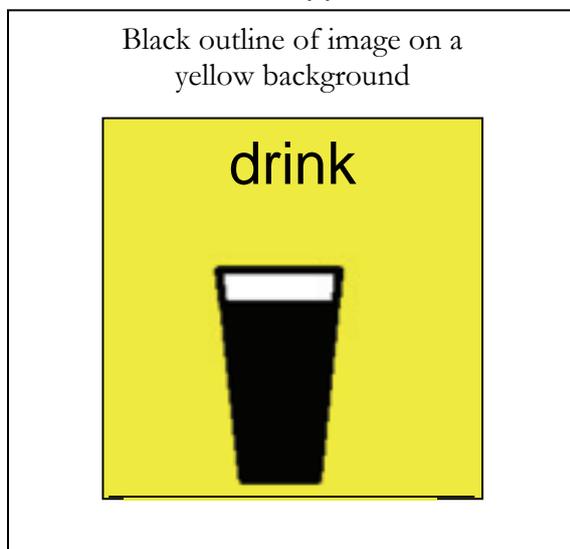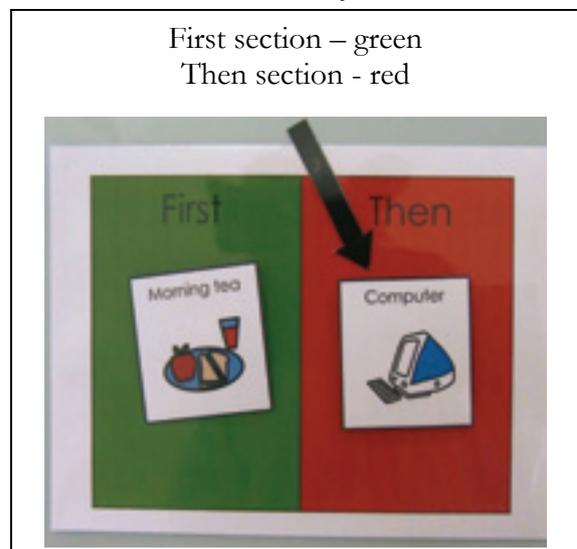
4. **Storage**– You can store the additional visual supports in a number of ways. By storing them in an organised manner you can access them as you need to. Here are some suggestions:

| Picture card holder with transparent pockets | Boxes |
| --- | --- |
|  |  |



**Folders for example, A4/A3/A5**
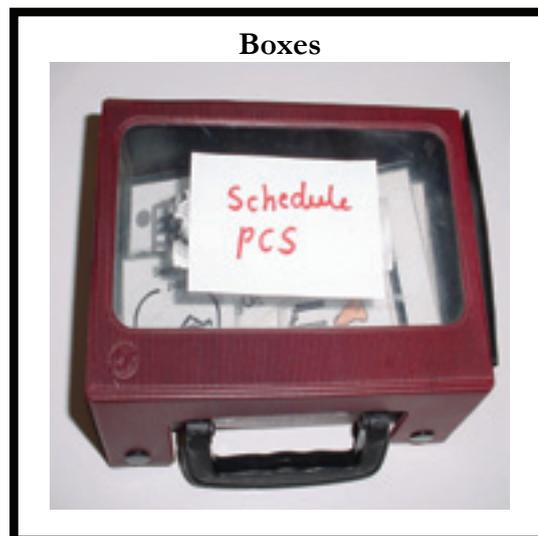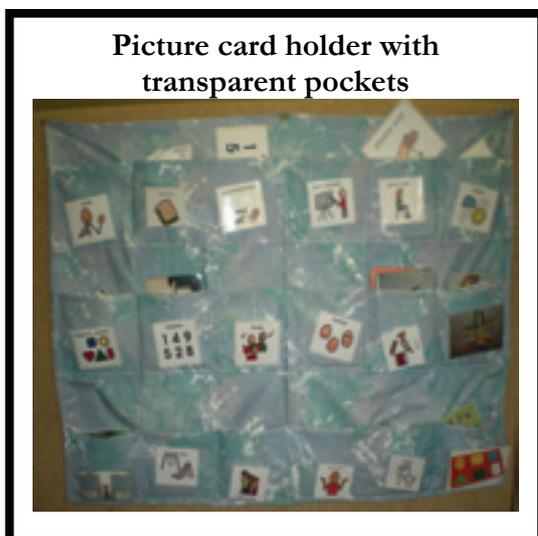
You can organise the pictures into categories and place them on category specific pages. Examples of categories include breakfast items, lunch items, dinner items, snack items, inside activities, outside activities, DVD choices, feelings etc. The pages can be colour coded so that you can easily find the right category. For example, breakfast – blue; green – lunch, pink – snack. This is arbitrary so you can decide on the colours and categories.

**Snack items**

| banana | apple | yogurt |
| --- | --- | --- |
| crackers | toast | pasta |
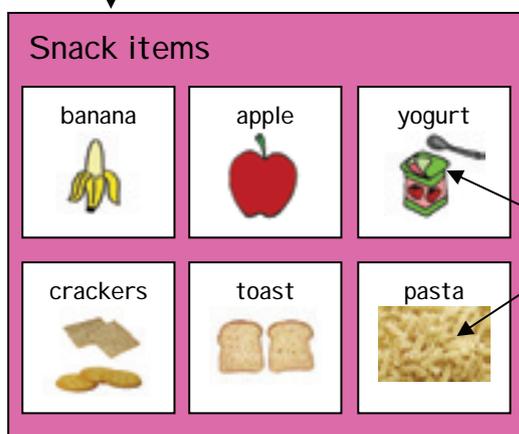
You can use a combination of visual supports depending on your child's understanding for example, photos and computer line drawings.

# Topic 11 – Visual System a) First/Then

A 'First-Then' visual system informs the child about the sequence of events they are expected to participate in i.e. **first you …and then you..**. It assists the child transition from one activity to another as they know what they will be doing next.  It can also motivate the child to complete a non-preferred task especially if it is followed by a preferred activity.   The items in the first/then system can be represented as object symbols /photos/computer line drawings as appropriate.

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**Example of a First/Then Visual System**

Stephanie is a 5 year old girl with a Global Developmental Delay and a Hearing Impairment.  She uses hearing aids.  She relies a lot on signs, visual cues such as objects, computer line drawings and photos, body language, and facial expressions to understand her environment.  At home her parents use the first/then system to help her understand her routine.

Movable green arrow that highlights what activity the child is engaging in

FIRST — Play outside

THEN — Dinner

The use of different colours further highlights the difference between 'first' and 'then'

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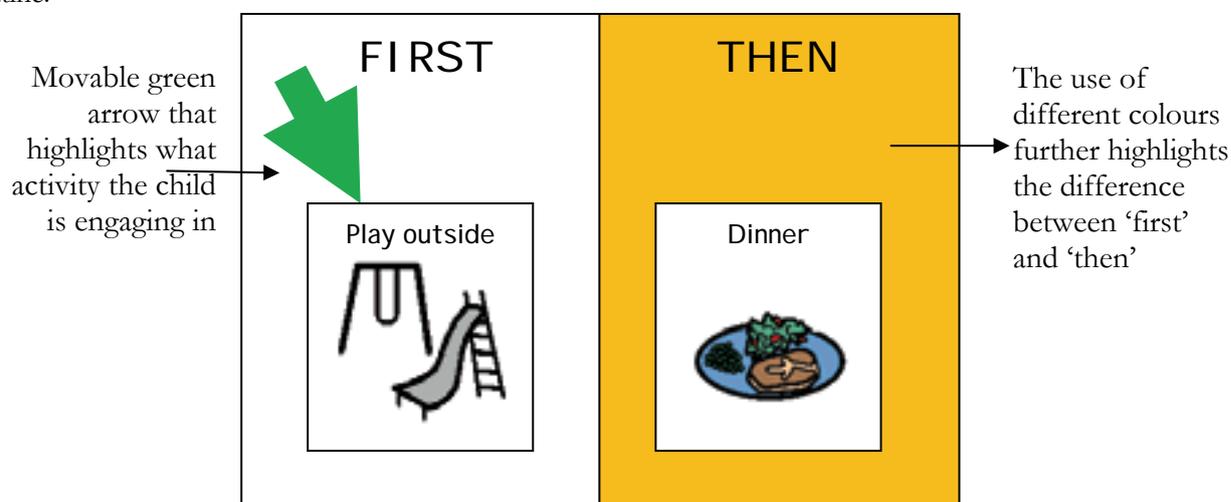
**Example of a First/Then Visual System**

Stephanie was reluctant to try any activity which was not of her choosing.  To encourage Stephanie to participate in an activity for example, making a puzzle - a gradual approach was utilized.  In other words put one puzzle piece on the puzzle board and then get a break i.e. 'first you put one puzzle piece on, then you get a break.  Gradually, the expectations were built i.e. two…three…four…five puzzle pieces and then a break.

Movable green arrow that highlights what activity the child is engaging in

FIRST — One puzzle piece

THEN — break

The use of different colours further highlights the difference between 'first' and 'then'
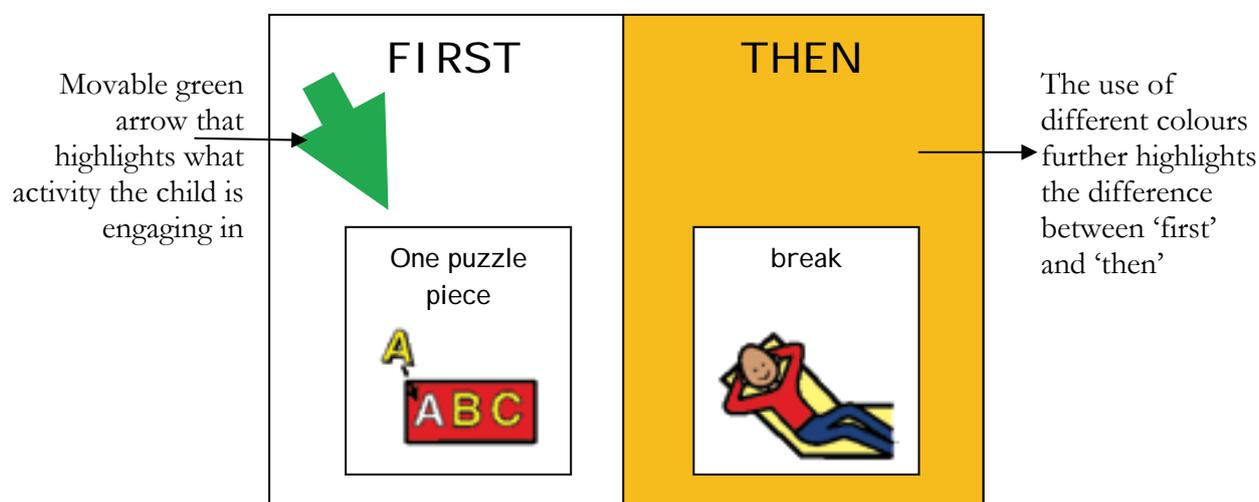
# Topic 11 – Visual System b) Daily Schedule

A schedule is a visual system that provides information about the **sequence and order of activities** in a particular time period. Schedules provide a means to represent abstract concepts such as time in a more concrete and manageable form. Schedules can provide the child with a sense of security and control because they can refer to it to see how their day is planned and structured instead of feeling anxious because things seem to be happening randomly to them. The items in the schedule can be represented as object symbols /photos/computer line drawings as appropriate.

**Example of a Morning Schedule top→bottom**



**Example of a Daily Schedule left → right (divided into three sections)**

The daily schedule shows the <u>big picture</u> for the day and is generally not specific. The schedule may say, "playtime" but that may be anything for example playing with puzzles, trains, blocks, playing outside etc. Consider how <u>many</u> activities you will display on the schedule at the one time (for example, morning activities vs. the entire day's activities). When an activity has <u>finished</u> the child can remove the picture symbol and put it in a finished envelope/box. Alternatively, the child can turn the picture around to indicate the activity has finished.

**Example of only the morning section being displayed**



**Example of a Finished Envelope**

Black and white chequered boxes are drawn onto an envelope
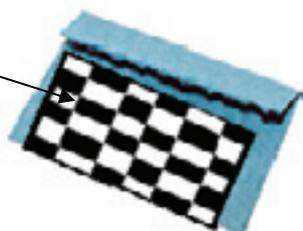


**Example of child turning the picture**

# Topic 11 – Visual System c) Mini Schedule

A mini schedule is visual system that represents a task analysis of an activity from the main schedule. Task analysis refers to breaking down an activity into simple, clear and manageable steps. Sometimes there are lots of **steps within an activity** which are not shown on the daily schedule. This can prove confusing to the child. For example, get ready is very general, but 'put your lunchbox in the fridge', 'put your communication book on the teacher's desk', 'put your drink bottle on you desk' and 'hang up your bag' defines the precise steps within the "getting ready" instruction. The items in the mini schedule can be represented as object symbols /photos/computer line drawings.

**Example of a getting ready in the morning mini schedule**



**Example of a washing hands mini schedule**

## Example of making a sandwich mini schedule

1. Get 2 slices of bread

2. Spread margarine on both slices of bread

3. Choose a topping

4. Put topping on one slice of bread

5. Put other slice of bread on top to make a sandwich

6. Cut in half, then cut in four squares on chopping board

7. Eat

8. Pack away    and    wipe table

## Example of a getting organised in the morning mini schedule

Grace uses a mini schedule to get organised in the morning before class starts i.e. 1.put communication book in box→2. put lunch box and bottle in fridge→3. hang bag on hook.
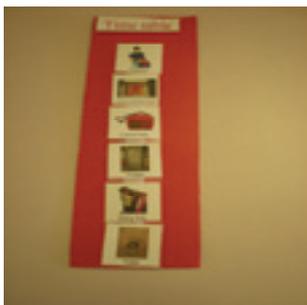
# Topic 11 – Visual System d) PECS (Picture Exchange Communication System)

PECS stands for The Picture Exchange Communication System. The PECS training program was developed at the Delaware Autistic Program by Bondy and Frost. It has been designed to help children and adults with autism and other developmental disabilities to **learn how to initiate communication**. By using a structured and systemized teaching approach to teach the child communication, PECS helps the child learn the:

- o Function of communication (i.e. exchange of a message between two people related to needs and wants),
- o Purpose of visual supports (for example, communicate their needs and wants by using visual supports) and
- o Importance of approaching the communication partner with a visual support to initiate communication.



**Example of a PECS folder**
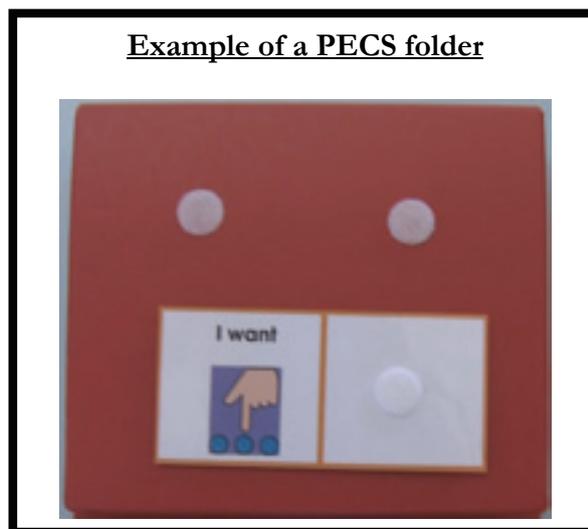


**Example of a toys page in folder**
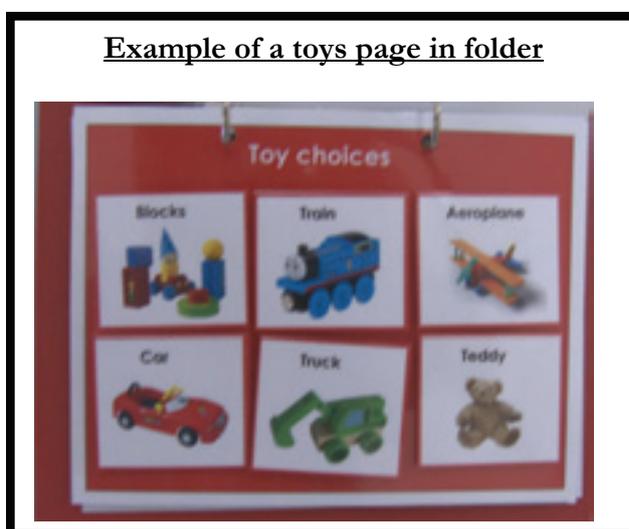


**Example of a snack page in folder**
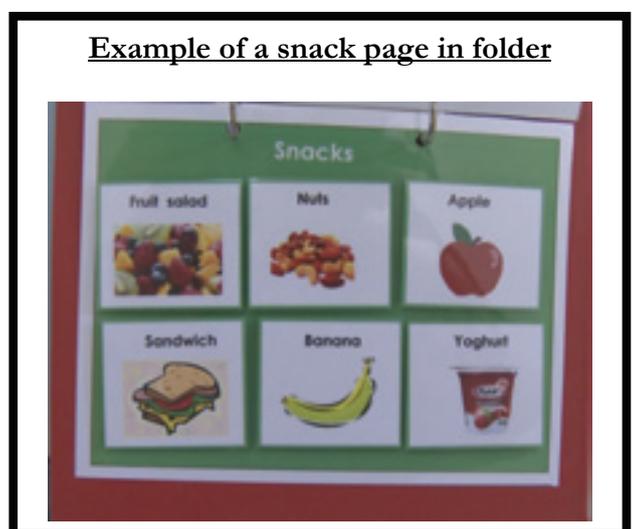
### Example of Lucas using his PECS folder

Lucas uses his PECS folder during meal time to make a choice of what he would like to eat. When the folder was first shown to Lucas, he threw the folder on the floor as he did not know what to do with it. After a few days of consistent and repeated practice he learnt to take off the picture symbol and exchange it with the communication partner to get the item.

# Topic 11 – Visual System e) Choice Making

A choice making visual system is a **menu of choices** that provides the child with the opportunity to **select one** object/activity… from a set of options.  This promotes the child's control over their environment, increases their independence motivation to participation, facilitates personal satisfaction and encourages self esteem.  Learning how to make a choice is a skill that is learnt by having multiple opportunities to practice making choices.  For example, when Peter was offered a choice between Brussel sprouts and carrots he chose Brussel sprouts.  His father offered him the Brussel sprouts and Peter had a taste.  He then spat them out in disgust.  This was a learning opportunity for him where he got to evaluate the choice in terms of its consequence and decide for himself whether the item was acceptable or not acceptable.  Therefore, it is crucial to provide the child with **several opportunities** to practice **choice making** between varieties of items throughout the day.  The choice items can be represented as object symbols/photos/computer line drawings as appropriate.

**EXAMPLE OF MAKING CHOICES**

1. **Learning how to indicate a choice** - When offered two choices Tom without looking would point to one of the photos.  At this stage Tom was learning that if he wanted something he would have to express himself (for example, pointing, reaching out or looking at it).

My drink choices

Milo

Cordial

**2. Learning how to carefully look at the visual supports before indicating a choice -** A strategy that encouraged Tom to look at the choices was to use one photo of Milo and a blank card (i.e. you get nothing if you choose this one).  This encouraged Tom to carefully look at his choices.

**My drink choices**

Milo

Another strategy that encouraged Tom to look at the choices was to use one photo of a preferred drink (for example, Cordial) and a non preferred drink (for example, spinach juice).  This further encouraged Tom to carefully look at his choices.

**My drink choices**

Cordial          Spinach juice

**3. Gradually offer more choices -** After a year of practising choice making with increased number of choices (i.e. between  2..3..4..5..etc) Tom can now make a choice from 6 items.

Drink Choices

Glass of water     Glass of juice     Milo

Juice     Cordial

Bottle of water

# Topic 11 – Visual System f) Labelling the environment

Labelling the environment can help maintain **structure and organisation** of the environment by labelling shelves, activity areas and storage containers. It promotes early reading, matching skills (for example, real objects to object symbols/photos/computer line drawings/words). This will help you to support the child's ability to independently access and return materials, keep his/her environment structured and organised. You can go on a label walk where you point/touch the labels and say/sign the name of the item. This way the child is more likely to feel more secure in their environment and more familiar where items are. The items in the calendar can be represented as object symbols /photos/computer line drawings as appropriate.

The door has been labelled with the written word

The fridge has been labelled with the written word 'fridge' and photo of a fridge

The chair has been labelled with the written word and a computer line drawing

# Topic 11 – Visual System g) Calendar

A calendar is a visual system that helps teach the meaning of **time** (for example, days of the week) as they build a concrete link to the past, present and future. You can mark main activities, appointments, holidays, events, trips, other important days such as birthdays. The items in the calendar can be represented as object symbols/photos/computer line drawings as appropriate.

This calendar was used to inform Rod what days he was / was not going to childcare. A 'no symbol' is used to represent not going to kindy

This calendar was used to inform Han what leisure activities, appointments etc. he was going to participate in during the week.

# Topic 11 – Visual System h) Activity Checklist

An activity check list is a visual system that **identifies the materials or items needed to carry out an activity**. To enable the child to become as independent as possible, activity checklists are a reminder of what they need to have to carry out an activity. Children who have difficulty with organising themselves to do something find activity checklists extremely beneficial. The items in the activity checklist can be represented as object symbols /photos/computer line drawings as appropriate.

**EXAMPLE**

This checklist was developed to help Aiden remember to take his toys to the beach.

To the **beach** I need to take my..

Towel | Beach ball | Bucket

This checklist was developed to help Sam remember what ingredients he needed to make a banana milkshake.

To make a **milkshake** I need...

Milk | Yogurt | Banana

This checklist was developed to help Tania remember what to take with her to her grandmother's place.

To **Grandma's** I need to take my..

Biscuits | Teddy

## Topic 11 – Visual System → 'Let's Chat' System

The 'Let's Chat' system offers the communication partner specific strategies to facilitate the development of the child's communication and literacy skills. The 'Let's Chat' book is a tool that can be used by both the child and the communication partner to have an **interactive chat** about topics that are meaningful and interesting to the child.

The 'Let's Chat' book is produced using a child centred approach where there is a direct connection between the content and the child's life. It contains a written account about the child's experiences, interests, background etc accompanied by visual information. By basing the information on topics that are important, meaningful and motivating to the child it is a great way of tapping into the child's interest and contributing to the development of a positive attitude towards literacy and communication.

The "Let's Chat" process requires interactive and active participation by both the communication partner and the child. The entire process promotes the development of the child's social and communication skills in a meaningful and functional way - before, during and after the experience. By chatting with the child about the experience **before** it occurs will help prepare them in terms of what to expect. **During** the activity by interacting with the child and others the communication partner can model a variety of social and communication skills. **After** the activity has occurred creating the pages in the "Let's Chat" book together will enable the child to revisit their experience with the communication partner, which has several benefits for the child's communication and social development.

Firstly, it acknowledges the child's experiences and background knowledge. Secondly, it can be used as a reference where the child has a good chance of knowing what the communication partner is referring to. Thirdly, by reviewing such information it develops their observational skills, which helps their understanding of the experience and clarifies it. Fourthly, it provides them with a means of expressing themselves and conversing about their past, present, future needs and aspirations.

Finally, it provides the communication partner with the opportunity to demonstrate to the child how they can share information about their experiences with others by using their method of communication for example, speech, sign, gesture along with the visual and written information to get their message across.

By using the "Let's Chat" process on a frequent basis it provides the child with meaningful practice which helps improve and develop their confidence in their communication and social skills.  For example, they will learn how to **begin** a topic of conversation that is meaningful and interesting to them, **maintain** and **end** the conversation appropriately.   This empowers them to have more control of the conversation, have more opportunities to participate actively in a conversation with a greater number of people and have successful interactions.
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## QUESTIONS THAT ARE USED TO CREATE THE 'LET'S CHAT' PAGE

- **Who** did you go with? (Identify the participants involved in the activity)
- **What** did you do? (The sequence of events)
- **How** did you get there? (Means of getting to the activity)
- **When** did you go? (Time of activity)
- **Where** did you go? (Location of the activity)
- **Why** did you go? (If there was a specific reason)
- **Comments** ( Additional information not included in the above questions)

The items in the "Let's Chat" page can be presented with object symbols /photos/computer line drawings as appropriate

Please refer to:

Bloom, Y. & Bhargava, D. (2003) **Let's Read Together.   Part 2 Creating personalized material to promote literacy in children and adults using AAC Strategies.** Beecroft:  Innovative Communication Programming

for more information on the 'The Chat System' to develop your child's communication and literacy skills.

# EXAMPLE OF A 'LET'S CHAT PAGE'

This chat page helps James talk about what he did on Sunday. He can use pictures + text to tell others - who he went bowling with (photo of mum and dad), when he went (computer line drawing of Sunday), where he went (photo of bowling) and what he did (photo of James bowling, photo of restaurant, photo of home).

## EXAMPLE OF A 'LET'S CHAT PAGE'

Jenny's chat page is made up of two parts. The page on the right is the storage page where computer line drawings representing all the activities she could possibly do are stored there. She selects the appropriate computer line drawing based on what she has done and places it on the page on the left. For example, if she had to tell someone what she did on Tuesday night she would use the 'Let's Chat Page' in this way:

-   At home…….dress ups (computer line drawing – to inform the listener that she played dress ups at home on Tuesday)
-   I went…….   park (computer line drawing – to inform the listener that she went to the park on Tuesday)
-   I bought…….drink (photo – to inform the listener that she bought a drink at the park on Tuesday)
-   I watched…TV (photo – to inform the listener that she watched TV on Tuesday)
-   I ate………home (computer line drawing of home – to inform the listener that she ate at home on Tuesday).



**Suggestions of other sentence starters include:**

-   **For dinner I ate _____** *(name of actual food item e.g. spaghetti bolognaise)*
-   **For dinner I drank _____** *(name of actual drink item e.g. orange juice)*
-   **The cartoon I watched was _____** *(name of actual cartoon e.g. The Simpsons)*
-   **The game I played was _____** *(name of game e.g. cricket)*
-   **I played with _____** *(name of person I played with e.g. my sister Ruth)*

# TOPIC 12 - TIPS FOR ENCOURAGING SPEECH DEVELOPMENT

| | |
|---|---|
| Play body movement **imitation games** to teach your child the concept of imitation for example, copying actions when singing a song, waving bye-bye, clapping hands, touching body parts, etc. as body imitation often leads to speech imitation. | *Grace is copying Tiffany's actions and touching her head.* |
| Encourage the child to **look at your mouth** while you model sounds/words. For example, hold the objects next to your mouth as you say the word.<br><br>If the child mispronounces a word **model correct production** of the sound. **Exaggerate** the sound and make sure your face is visible to the child.  Say the misarticulated word correctly with emphasis. If the child says, "That's a big wabbit," you say, "Yes, that is a big rabbit. A big white rabbit.' | *Andrea holds the book next to her mouth as she says the word 'book'. This helps Jayden see how the word is produced.* |
| Encourage **oral motor imitation** and **play**.  Make funny faces in the mirror, encourage movement of the tongue, lips, cheeks, and jaw.  For example, blow out your cheeks; lick your lips, open your mouth, close your lips tightly, pucker your lips, smack your lips, shake your head up and down. | *Jayden is copying Andrea and blowing his cheeks.* |
| Play **blowing games**, for example, blowing cotton balls, bubbles, feathers, candles, pieces of paper, whistles etc.  For example, blow whistles provide excellent practice for the lip rounding and lip compression needed for making sounds such as /p/, /b/ /m/ /w/. | *Grace is blowing bubbles.* |
| Emphasize **small, fun words**, such as oh, wee, wow, boo, yeah, as well as play sounds (vehicle noises, animal sounds, etc.).  Vary sounds with vowels for example, combine /p/, /b/ and /m/ with the vowels /a, e, i, o, u/ - /paa, pee, pii, poo, puu/. | *Jayden practises saying /uuu/ by copying Andrea.* |
| Consistently **pair particular sounds** with an activity, such as "whoosh" every time the child slides, blow your cheeks out and making a popping sound, make circles on your tummy, rub and say 'mmmm', raise your hand in the air and say 'so-o-o-big', wave your hands and say 'bye bye', move a car and say 'vroom', move a toy dog along the table and say 'woof-woof'. Emphasize words that your child is more likely to have success with, such as short words that begin with b, p, m, h, w, n, t, or d. | *Grace is saying /vroom/ with Tiffany as they both push the car.* |
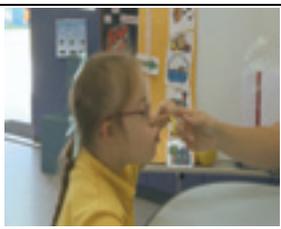
# TOPIC 13 - TIPS FOR ENCOURAGING LANGUAGE DEVELOPMENT

| | |
|---|---|
| Before communicating get your **child's attention** before speaking for example, tapping the child's hand, saying their name.  Get down to your child's eye level. | *Tiffany gets Grace's attention by getting down to her eye level and then communicating by saying and signing 'finished'.* |
| Stand still when talking to your child to decrease **distractions**.  Decrease **background noise**, especially for children with hearing loss for example, turn off music, TV, noisy appliances, close windows and doors. | |
| Use **visual cues** such as gestures, signs, showing objects /photos /computer line drawings in addition to using speech as appropriate.<br><br>**Check** often to make sure your child understands what is said. | *Andrea tells and shows Jayden that its time to play with puzzles by pointing to the computer line drawing of puzzle.*<br><br>*Jayden shows his understanding by going to the puzzle area and choosing a puzzle* |
| Use everyday **routine activities** to help your child understand the steps and the language involved in the activity.  For example, language embedded in mealtime activity includes nouns (for example, food labels, utensils); verbs (for example, eat, drink, chew, cut, wipe, open, close); prepositions (for example, in, on, under) and adjectives (hot, cold, empty, full, all-gone, more). | *Andrea uses the washing hands activity to reinforce nouns (tap, water, dryer, towel); verbs (wash, rub, wipe) and adjectives (hot, cold).* |
| **Watch** your child, **wait** for your child to initiate communication, **listen** and **respond** to your child accordingly. | *Grace wants to give dolly a drink but can't find the items. So Grace has to ask Tiffany where the items are and then go and locate the items.* |

| | |
|---|---|
| **Self-talk** involves talking aloud to yourself about whatever activity you are engaged in when your child is around.  Keep your sentences short and simple.  For example, as you make lunch, say something like, "I am making lunch. I need bread. Here's bread. I need peanut butter.  Spread it on." ...and so forth, you talk about what you are doing while your child is watching. | *Andrea and Jayden are having a tea party.  Andrea engages in self talk as she drinks her cup of tea by saying "I'm drinking a cup of tea.  Its got milk and sugar. Yum Yum!*  |
| Even before the child starts asking, "Wha  dat?" you can use **descriptive language** to provide the answers.  Description provides words, labels, and descriptions of objects and actions in the.  For example, in describing what your child is playing with, touching, or seeing, you might say, "That is a fast car. It is red. Uh-oh, one of the doors is broken. See, this one is broken." | *Tiffany is describing Grace's actions during doll play, by saying, "You're giving dolly a cuddle".'*  |
| Using **expansion language** means adding more information to the words that your child uses to talk about objects or actions.  What you are basically doing by adding more words is revising and completing your child's speech, but you are doing it without directly correcting what your child has said.  This method requires careful listening on your part.  For example, your child might say, "Car."  Considering the where, when, and circumstance you might reply, "Yes, that is John's car." | *Andrea  is expanding on Jayden's verbalisation "book" by saying "You're giving dolly a book"+ signing 'give book'.*  |
| **Expansion-plus** can be used once your child is using his or her own short, simple sentences, you can add descriptors, prepositions, pronouns, and verbs to make the sentences more complete. For example your child might say, "John, go bye-bye." You might respond, "Yes, John is going home".  You are not correcting your child's sentence so much as adding more information to it.  As another example, if your child says, "Car go" you might respond, "We are driving the car to the grocery store". | *Tiffany is expanding on Grace's verbalisations of "dolly bottle" by saying "Dolly's thirsty!!! You're giving dolly a bottle of milk.  She is hungry" + signing 'thirsty, you, milk*  |
| Develop your child's ability to follow **instructions** gradually by using speech and visual supports.  Start with one instruction at a time.  When they start to get this right most of the time, build your instruction to include 2 parts (for example, "Wash your hands, then get changed"). | *Andrea asks Jayden to turn the page in the book by using speech + signing 'turn the page' + tapping on the page.*  |
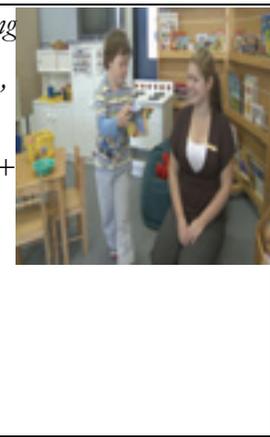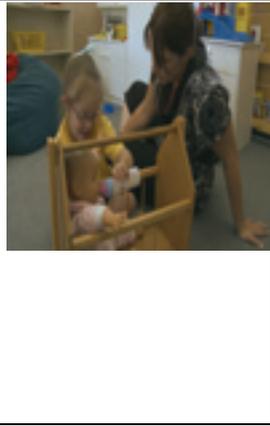
**Set up situations** where your child has a reason to communicate by:

- o Providing inappropriate amount of materials (for example, give them a tiny amount of juice)
- o Interrupting the routine or expectation to allow the child to "comment" (for example, forget to peel the banana or open the packet of sultanas)
- o Desirable object in sight but away (for example, put their favourite toy on the opposite side of the table). Offer the child something that is disliked or unwanted to allow a rejection (for example, offer broccoli even though they dislike it)
- o Intentionally giving a wrong response (for example, if you child has a toy they like to play and they ask you to turn it on. Pretend that you have turned it on and give it to them)
- o Offer your child with choices (for example, during playtime show them each object and ask if they want to play with a 'car' or 'lego')

**Read** with your child, and follow their lead. Reading books will increase their vocabulary and exposure to different concepts. Take new words or concepts introduced in the book and use them in real life situations with your child.

Most child love speech in **rhythm, like rhymes and songs**. Activities that involve movement, dancing, mime, singing or memorizing nursery rhymes or other short poems provide great speech and language practice, and help your child see herself/himself as an effective communicator.

To help the child memorize songs or rhymes, use the **'fill in the blank'** technique. For example, after you have recited a nursery rhyme to her many times, start leaving off the final word and have her fill it in for you. Gradually omit more and more words, allowing them to fill in the missing lines, till they can recite the whole rhyme by themselves.

*Jayden and Andrea are singing 10 green bottles. While singing they are also using pictures of green bottles, signs and lots of actions. Jayden fills in the blank e..g Ten **green bottles**. Hanging on the wall. And if one **green bottle**….*

# A SPECIAL NOTE

Children gain their self esteem from the messages they receive and through their interactions with the world. Filling your interactions with positive statements and providing a positive environment is a big step towards building your child's self-esteem. **PRAISE** AND **ENCOURAGEMENT** are essential vitamins for a child but there is a fundamental difference between them. **Praise** focuses on the end result whereas e**ncouragement** focuses on the process of what a child does i.e. the effort, participation, improvement or displays of confidence the child exhibits during the learning process. Hence, use a combination of praise and encouragement to provide timely guidance, ongoing reassurance, so that the child feels secure, valued and the confidence to explore and build on their communication abilities.

| Effort: *Tom has a go at colouring in for the 1ˢᵗ time* | Participation: *Jenny helps her mum pack away* | Improvement: *Liam is improving his ability to use the walking frame* | Displays of confidence- *Sheila can ride the bike for periods without her dad holding on to her bike* |
| --- | --- | --- | --- |

## TOPIC 14 – APPENDIX – Useful Books

1. Bloom, Y. & Bhargava, D. (2003). **Communication assessment manual for intentional and symbolic communicators.** Beecroft: Innovative Communication Programming.

2. Bloom, Y. & Bhargava, D. (2003) **Let's read together. Part 2 – Creating personalized material to promote literacy in children and adults using AAC strategies.** Beecroft: Innovative Communication Programming.

3. Bloom, Y. & Bhargava, D. (2003). '**Let's talk together' - Great ideas manual. Update!** Beecroft: Innovative Communication Programming.

4. Bloom, Y. & Bhargava, D. (2003) **Participation through communication guide.** Beecroft: Innovative Communication Programming.

5. Bloom, Y. & Bhargava, D. (2004). **Schedules kit!** Beecroft: Innovative Communication Programming.

6. Bloom, Y. & Bhargava, D. (2004). **Using AAC to develop emotions and problem solving skills.** Beecroft: Innovative Communication Programming.

7. Bloom, Y. & Bhargava, D. (2007). **Teaching choice making skills.** Beecroft: Innovative Communication Programming.

8. Bloom, Y. & Treloar, S. (1997). **'Let's talk Together' – The great ideas manual.** Beecroft: Innovative Communication Programming.

9. Gray, C. (1993) **The original social story book.** Arlington, TX: Future Horizons.

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## TOPIC 14 – APPENDIX – Useful internet sites

www.dotolearn.com – This site has picture communication cards, songs, games, learning activities for children with a range of disabilities.

www.usevisualstrategies.com – This site has information for using visual supports solve behaviour problems and improve communication in children with a range of disabilities.

www.mayerjohnson.com – This site has information about Boardmaker and other resources to assist children with communication difficulties.

www.images.google.com – This site has thousands of pictures you can access for free.

www.teacch.com – This site has lots of information on Autism and related issues.

www.pecs.com – This site explains the Picture Exchange Communication System by Bondy and Frost.

www.playsteps.com – This site illustrates and sells visually structured play task.

www.tonyattwood.com and www.aspie.com – These sites have great information about Autism and Asperger Syndrome.

www.innovativeprogramming.net.au – This site has information about Softpics with Fantasticpics and other useful resources.