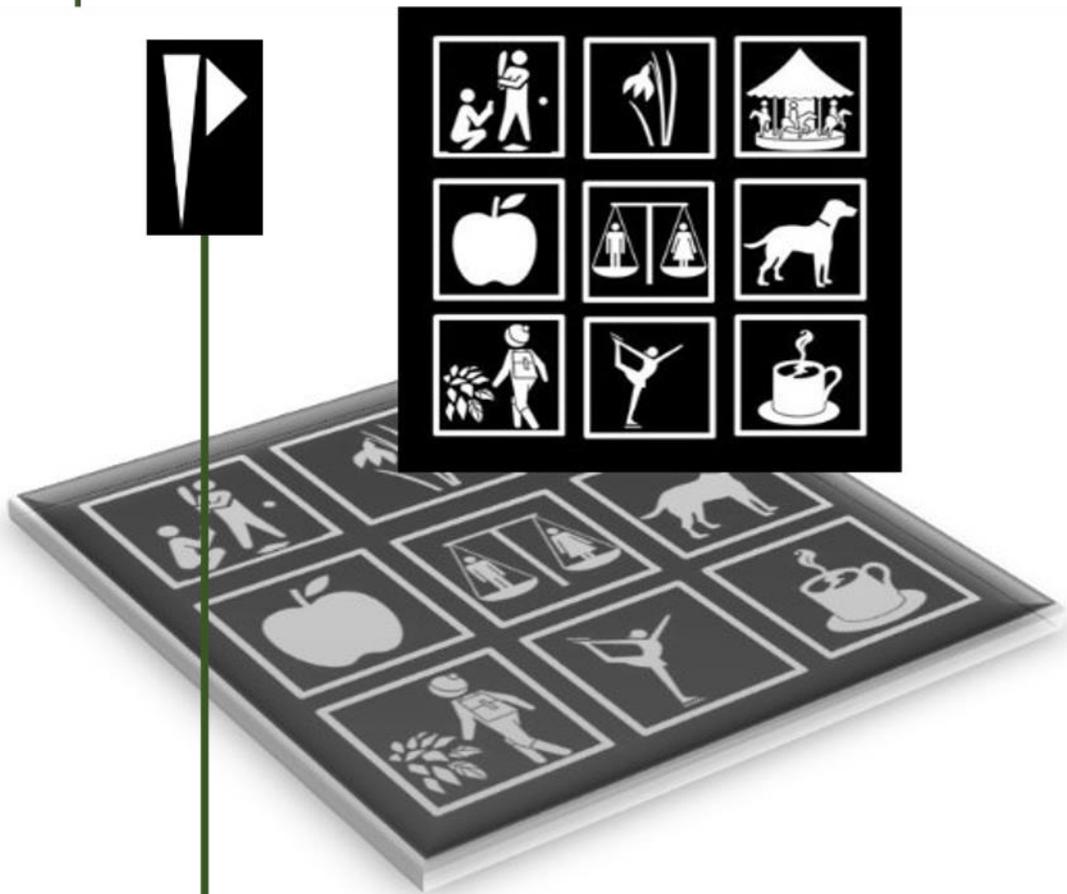


PICTOGRAM SYMBOLS For All Ages



Subhas C. Maharaj

PICTOGRAM SYMBOLS *For All Ages*



Subhas C. Maharaj

*The wise man does not set his mind either for anything
or against anything;
what is right, he will follow.*

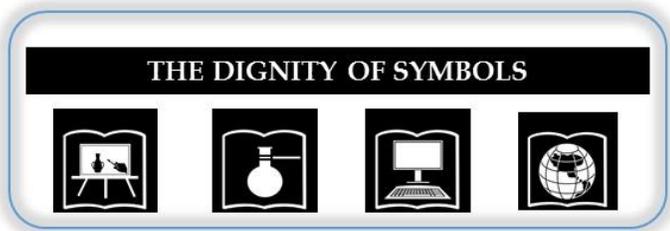
Confucius, Spring and Autumn Period.
The Little Book of Chinese Proverbs, Marks & Spencer, London, 2001

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PICTOGRAM – IDEOGRAM COMMUNICATION © 1981 Subhas C. Maharaj,
with additional symbols by SIH, Sweden, and JPIC, Japan

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INTRODUCTION

What the eye can see and the mind interprets become the visual image for communication and the visual image can be expressed in a written form, spoken, in an artistic form or as a symbol.

A pictorial representation may encapsulate the image with the saying, *a picture is worth a thousand words* and flow with a variety of interpretations. However, the fuzziness of the picture over-shadows the intent of the message and; therefore, to achieve direct and relevant communication intent there is a need to select the salient feature or features of the intended image and define it as a symbol.

Pictogram symbols exist in the world around us giving us directions, providing instructions, identifying locations and indicating danger. The symbols are bold, clear and graphic with a white symbol on a black or darkened background or a black symbol on a yellow or orange background. The colour variations reflect the specific objective of the symbol.

Pictogram symbols were designed and developed for communication with and for nonverbal individuals and individuals limited in verbal expressive skills. The symbols are distinguished at two levels. Pictograms representing items and objects Ideograms expressing actions and abstract ideas.

Pictograms convey a singular meaning, e.g. a *car* is a motorized vehicle and the symbol for *woman* is the conventional for a “western” woman.



Ideograms may have multiple interpretations and divergent images for a symbol, e.g. *give - take or remember*



For the symbols *give* and *take* the item being taken or given is a ball or a round object. This can be replaced easily by a square item or a cookie or giving a gift. For the sake of neutrality the item is round without the markings for a ball.

Remember is presented in the conventional form that has been traditional in western society.

Communication and social interaction create the *Journey for a Lifetime*.

For those who are gifted with the attribute to speak, this dimension creates the integration and expression of our humanness.

For those who are limited in oral expression there needs to be another channel for communication.

For individuals who are deaf or hard of hearing, manual communication provides the alternative.

For those who are not adept at remembering and utilizing manual signs, visual communication strategies become the main source for communication.

The journey of communication expands the total life of the individual. Just as oral language is intrinsic from birth to death and understood within the cultural bounds of the individual, the visual communication strategy should also provide the flow for social integration within the community throughout the life journey of the individual.

While many visual communication strategies have been developed, many have had limited endurance and many have been promoted for national pride and benefit, e.g. Blissymbols; Sclera and Makaton.

What is required not the promotion, but the application and the continuation of the use of the visual strategy as the *Journey for a Lifetime*. The primary consideration is the transparency of the visual strategy and its generalization within the community, that is, the symbols should also be used as environmental referents, thus minimizing the stigma of being nonverbal and highlighting the disability of the individual.

Pictogram Symbols were designed and developed to provide a viable strategy for communication. Significant considerations were:

1. The *Sophistication* of the symbols to maintain the *Dignity* of the child and the adult.

The symbols can be applied to all facets of communication and through all ages of the individual

2. The *Appropriateness for Maturity* so that the symbols are not focused for children and used for adults.

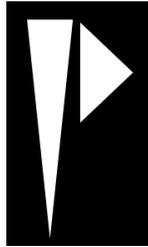
There had to be a balance so that the child is not overburdened with abstract symbols and that the adult is not embarrassed in using puerile symbols.

The design, focus and presentation of the symbols transcend age barriers, and used seamlessly from child to adult to senior.

The advantage is that there are no sudden breaks from one strategy to another or one system to another as the child grows and moves from school to a work environment.

The fundamental shift in philosophy is that Pictogram Symbols can be used as an educational support program in the classroom with all students and equally as a communication platform for the nonverbal student. The management of teaching tools assists the teacher and generalizes the use of Pictogram Symbols for communication and social interaction. The implication is that program integration encourages inclusion rather than exclusion and mitigates the view of differentness.

2400 Pictogram Symbols are available for FREE. Go to www.pictoworld.com and click on the icon



76 PictoAction Symbols can be accessed through the www.pictoworld.com website for FREE by clicking on the icon



HISTORIC NOTE

In 1980 I met Margrita Lundman at a conference in Toronto, Canada, and she carried the concept to Sweden. I am not sure what magic wand Margrita and Magnus Magnuson waved but Sweden became the first country to translate, design and develop Pictogram materials for special needs students and subsequently Umea became the center for Pictogram Symbols.

The Swedish Team led by Per Gunvall and Hans Carlberg brought together Kerstin Falck, Anita Holst, Kerstin Rudin, Staffan Holmberg, Katherine Sahlander, Jane Brodin, Britt Carlson, Anita Johansson, Henry Svahn and Bennie Markstrom at different stages to create new and inspiring materials for communication and for classroom use in terms of books and computer software.

Kerstin Falck made a significant contribution to the application of Pictogram Symbols in the education system. She has really been the 'Spirit' behind the success of the Pictogram Program in education. The support of the Swedish Government is admirable in encouraging the utilization of Pictogram Symbols in Sweden and in Europe.

Professor Kazuko Fujisawa introduced Pictogram Symbols to Japan and it was the dedicated work of Professor Tomoyoshi Inoue, Doshisha University, Kyoto, that resulted in the translation and development of Pictogram Materials in Japan and published by the Brain Shuppan Publishing Company in Tokyo.

The Japanese experience led to the formation of J-PIC, the Japan-Pictogram Ideogram Communication Association, headquartered in Kyoto. While J-PIC has many members across Japan who have furthered the use of Pictogram Symbols, Dr. Yuko Yamana, Hayashi san, Dr. Shimuzu, Dr. Shinje and Mr. Hakuba have been instrumental in developing new Pictogram Symbols and researching the application of the Symbols in education and the country as a whole.

The development of software using Pictogram Symbols provided the visibility of the symbols as a strategy for communication and the ease in the creation of materials for education.

Sweden was the first to design Pictogram Manager and this enhanced the visibility and the translation of the symbols into many languages. The software was advanced to create multiple applications and translations into 23 languages.

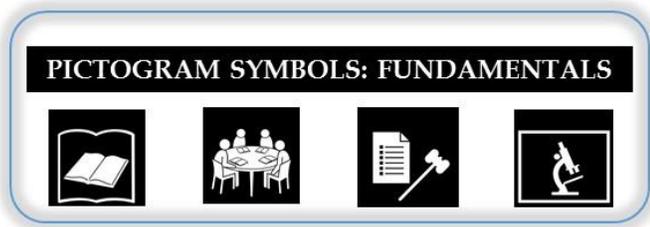
Sato san and his team at Godai Embody have created many software products to enhance the use of the symbols as a communication strategy and in education.

The inclusion process has been achieved in Sweden and Japan and Swedish and Japanese Educators have created educational materials that satisfy the communicative and educational needs of the nonverbal individual. The work of Kirsten Falck, Kirsten Rudin, has been inestimable and inspirational in developing materials using Pictogram Symbols for classroom application in Sweden.

Professors Kazuko Fujisawa and Tomo Inoue created the Japanese Pictogram-Ideogram Communication (JPIC) in Japan with exhaustive studies on the use of Pictogram Symbols and the preparation of printed and software materials.

In Canada the bright lights were the support by the George Reed Foundation and Professors Allan Law and Brien Maguire, University of Regina, SK. This strengthened the validity of the symbols as a communication strategy. My work in advancing the Pictogram Program was stopped in 1983 when the one-man department I worked from was closed. This was the culmination of a concerted effort to eliminate Pictogram Symbols from the landscape in favour of the recently acquired Blissymbols by a Canadian agency.

Through perseverance Pictogram Symbols continued to provide the widest application in visual communication, in education and in community creativity. The scope of work with Pictogram Symbols is available on www.pictoworld.com



PICTOGRAM SYMBOLS

The Communicator

Pictogram symbols have maintained the rationale that the “Symbol is the Communicator”. That the symbol has to be bold, clear and graphic, and only essential details that would enhance the recognition of the symbol are included.



Clear
Crisp
Bold and Graphic



White Symbols on a Black Background.

In addition, symbols that were considered ‘universally and culturally acceptable’ or familiar were incorporated as Pictogram Symbols.

Symbol Construct



The white symbol reflects light and creates the strongest visual impact.

The black background eliminates figure-ground distortion



Pictograms



Pictogram Symbols represent items and objects

Ideograms



Ideograms represent ideas and actions

Symbol Design



A bold, clear & graphic symbol

The Representation

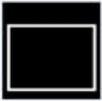


Pictogram Symbols capture the 'commonsense and conventional knowledge' of visual representations for items, objects and ideas.

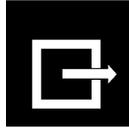
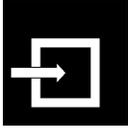


The symbols are reflected in clear drawings and designs and the previous reference as Pictogram and Ideogram Symbols are now referred to as Pictogram Symbols.

Standards

	CATEGORY		EXAMPLE
	Symbol Background		Long Distance
	Room		Bathroom
	Building		Gift Shop
	Television		Bowling
	Class		Art Class
	Category		Activities

Directions



Arrows indicate motion and can be used to express time – past, present and future

Pronouns



Direct references. Multiple I's = We
Multiple individual = They

Impact and Focus



The high visibility of the symbols increases the effectiveness of message transmission. The symbol is the point of interest, the point of interaction and the “Communicator”. This is a significant factor when visual acuity is uncertain and line-drawings generate communication uncertainties.

The White Symbols on a Black Background provides the greatest exposure to content and generates attention to task. The contrast draws interest and this focus has been noted in attention to task with hyperactive-attention deficit children and children within the autism spectrum.

Symbol Quality



Pictogram Symbols maintain a quality in drawing design that respects the user's dignity and sensitivity in utilizing a visual language for interaction. The symbols may be used with young child and adults without the skepticism of the symbols being child-like for adult use or too obscure for use by children.

Companion Language

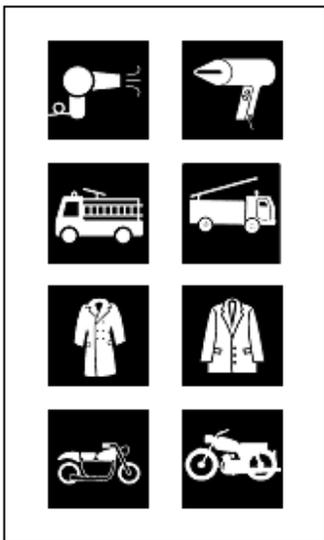
Human communication is an admixture of speech, manual gestures or signs and pictures. Pictogram Symbols form a “A Pictorial Language” that easily mixes with the use of gestures, manual signs, speech-vocalizations, pictures and photographs.

It is a companion language to natural languages where symbols can be adjusted or re-designed to reflect cultural preferences, e.g. the symbol of a *woman wearing a sari* in India will be more acceptable than a *woman in western dress and vice-versa*. The Pictogram concept does not provide for grammatical markers, besides the use of arrows, that would emulate a natural language nor would such an endeavour be fruitful.



The children walked to the park and played on the slide.

Visual Synonyms



Changes in presenting a symbol or an alternate conceptualization for an idea or an action may be regarded as a visual synonym. The design change may represent the prevalent acceptance of the design within the country and vary from country to country. The symbols are culturally but convey the central idea-concept. sensitive and

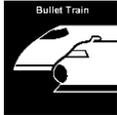


The symbols for hospital are different in North America, Sweden and Japan. However, the bold H for hospital in North America can be confused with the H in Germany which indicated a School Bus-Stop.

Cultural Symbols



Cultural symbols add to the richness of the symbol repertoire and present the unique quality of the country.



These symbols would have relevance in the country of origin or among people and groups who share and continue the cultural heritage.

Communicating with a Single Symbol



“Wash the dishes!”



A single symbol may be used to express multiple intentions or requests.

The symbol of a person seated at a desk may mean:

I want to work at my desk

Or as a directive:

- Study!
- Work at your desk
- Be seated at your desk!

Symbol Sequencing



Multiple symbols can be used to accentuate a statement.

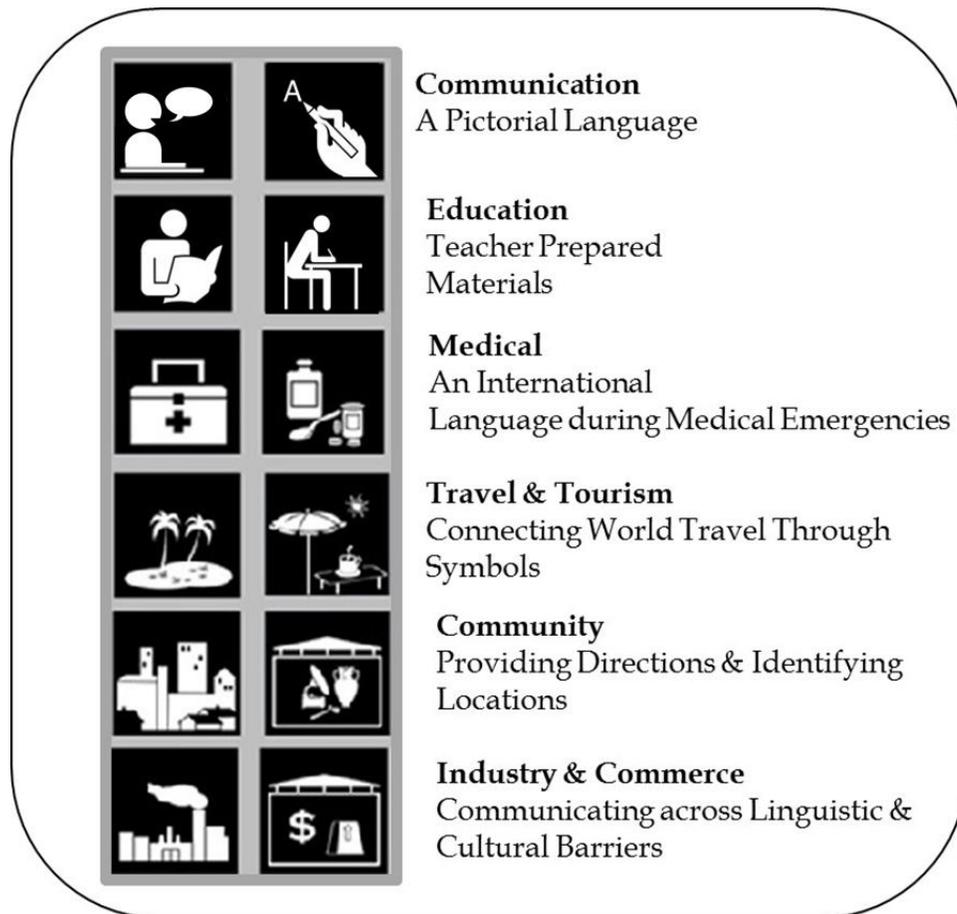
“Grandpa’s birthday is at the restaurant.”

Symbol Versatility

Pictogram Symbols are more than a strategy for visual communication for nonverbal and individuals limited in verbal communication.

The distinct quality of the symbols enhances the communicative intent and this generates and maintains the interactive flow.

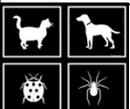
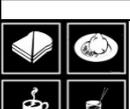
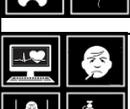
Pictogram Symbols have been used to identify, guide and direct many facets of our lives from washroom indicators to emergency locations.



Category Identifiers

Single Symbols and Multi-Symbol Identifiers are valuable in creating rapid access to categories of symbols. These are suggestions and selections and preferences may vary to suit the child/student and the circumstances.

 Action Symbols	 Activities
 Animals & Insects	 Animated Symbols
 Appliances & Tools	 Bathroom
 Clothing & Personal	 Dessert & Snacks
 Educational Items	 Food & Drinks
 Fruit & Vegetables	 Household Items
 Human Body	 Infant Care & Toys
 Locations	 Medical
 Miscellaneous	 Months, Seasons & Environment
 Music & On TV	 Occasions & Greetings
 Opposites & Questions	 People & Emotions
 Professions & Pronouns	 Vehicles & Transportation
Your Pictures	

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	Opposites & Questions		People & Emotions
	Professions & Pronouns		Vehicles & Transportation
	Your Pictures		



THE GLOBAL VIEW

The Symbol is the Communicator

Clear, bold, graphic Pictogram Symbols facilitate the recognition of 'visual-information' for international communication. The symbols reduce barriers and communicate intent irrespective of linguistic and cultural differences. The pre-knowledge of symbols of a country can facilitate international travel and communication. Pictogram Symbols can supplement the rudimentary forms of nonverbal communication across continental barriers.

Visual symbols, whether as line drawings or as Pictogram Symbols, have been used primarily for Alternate and Augmentative Communication (AAC). The need for AAC strategies for the nonverbal individual is undeniable and the results have been the generation of multiple visual communication symbol-styles and systems that at different levels have benefitted nonverbal individuals.

This is still a narrow band within the individual's educational-knowledge needs and as an AAC strategy only, it supports the 'differentness' and the creation of a 'sub-group' of nonverbal *AAC Users*.

We have challenged this view and advocated the inclusion of the Symbols within the educational program in schools and the application of Pictogram Symbols in the Community.

Our view is that to achieve the communication potential of Pictogram Symbols as a "Companion Language" with symbols that are readily understood and used actively in all spheres of the social and physical environment of the individual. The advocacy is for the 'global' application of Pictogram Symbols to create a 'seamless' transition in the use of the symbols for communication within the educational program and in the environment and from childhood to adulthood.

The familiarization and use of Pictogram Symbols in education expands the boundaries for inclusion which ultimately satisfies the communicative and interactive value of the symbols in society.

The quality of Pictogram Symbols respects the dignity and sensitivity of the child and the adult and this strategy of communication is *The Journey of a Lifetime*.

SELECTING A STRATEGY: SYMBOLS OR MANUAL SIGNS

The question: Whether sign-language or visual communication is the most effective strategy to initiate communication with nonverbal children/students is often debated.

There is 'no right response or wrong response'. Visual and Manual Systems have both strengths and weaknesses. While the Visual System may be easier for the *Viewer* to recognize and respond to, the portability of the communication device, binder or cards is definitely a weakness. The written word above the symbol is an added benefit especially if the symbol represents and abstract concept.

Manual systems have no portability issues, *the hands do the communicating* and this is a definite advantage. There are no special devices or cards to carry and display. However, the communication process may be halted to free the hands if the child/student were carrying a bag or a book. An additional issue is the familiarity of the *Viewer* with the specific sign-language used.

In both instances the child/student and the social-group will have to be taught the symbol or the sign. Visual cues in a visual world may have the advantage.

Advocates for a manual system present the concept of *freedom to communicate*, that *communication is in the hands* and that there is a natural propensity to use gestures and pointing with oral speech. That the *User* is not dependent on a Communication Board; pages in a binder or on a communication device to initiate and maintain the communication process.

Advocates promoting a visual system advance the concept that the visual cue is a complimentary referent to the item or the action, and as such, it supports a rapid learning process for the *User*, the peers and the social group.

Whether a visual or a manual system is used, there is a "Memory Game" that applies equally to both. There are inherent differences in application and outcomes. What we have to consider is not the system that is to be used but what suits the individual the best.

In a study using Signed English with cognitively disabled adolescents the results confirmed the role of memory and retention as the central factor in the use of manual signs as a consistent communication strategy.

Maharaj, S.C. & Wolfe, K. (1976) The Initiation of Social Interactive Processes through the use of Total Communication (Oral and Manual) with Mentally Retarded Children limited in Verbal Abilities. National Conference of the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA). Halifax, Nova Scotia.

INTEGRATING COMMUNICATION STRATEGIES

Bringing together all the information about the child's/student's communication abilities and developing a comprehensive approach requires the estimation of communication potential. Each mode of communication needs to be assessed and apportioned within the communication framework.

Oral Communication: The question is: What can the child/student say and how can this information be used successfully in generating expressive speech?

Manual Communication: Observing and recording gestures or standardized signs used and how they could be integrated into functional communication.

Visual Communication: Identifying the symbols, photographs and pictures the child/student uses to express intent.

An estimation of each mode of communication will provide a relatively balanced communicative-strategy.

COMMUNICATION DESIGN

An Initial Communication Format (Format A) was designed to profile the total expressive communication of the child/student. The objective was to assist the Team understand the communication potential and determine the primary and secondary strategies to achieve successful outcomes.

- Identifying the number of words the child/student says or attempts to say will provide the estimation for oral output. (Communication Profile: Format B)
- The gestures and signs used that can be incorporated into the communication strategy.
- The photographs that will be instrumental in developing the communication program.
- The number of Pictogram Symbols the child/student will use to complete the communication circle.

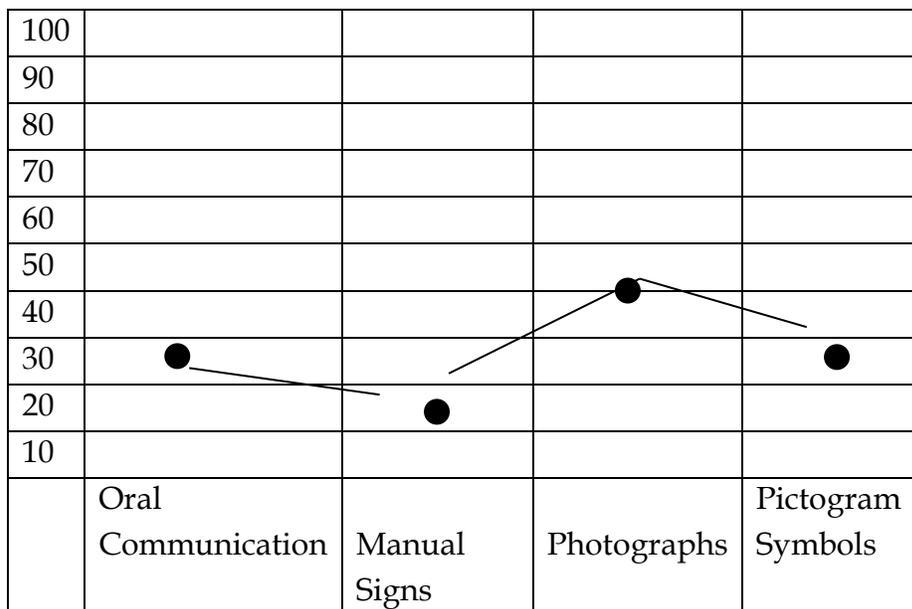
The information is calculated arithmetically, expressed in percentages and presented in a graph format. This information graphically provides the Teacher/ Programmer a guide in developing the best Total Communication Plan for the child/student.

Note: It is important to use the Initial Communication Format as a 3-month or 6-month assessment to determine whether there are changes in skills and whether there need to be a change in the objectives of the program.

These are the figures and percentages obtained through the *Initial Communication Format*:

	Oral Communication	Manual Signs	Photographs & Pictures	Pictogram Symbols	Total
Number	8	6	14	9	37
Percent	21	16	39	24	100%

The percentages can be represented on a graph to illustrate the total communication status and visibly identifies the communication strength of the child/student.



Assessments/Tests



Standardized testing for receptive and expressive speech is not always successful with very young children/students with 'special needs' and the use of gestures and visual cues for communication are infrequently considered. Therefore, informal means for gathering information are necessitated which means obtaining information from *'Those Who Know the child/student the Best'* or the "Communication Team". This approach becomes the most significant base from which to develop goals and objectives.

The Communication Team



The Team includes members of the Family, a Family Associate/Advocate, Professionals and Para-Professionals. Each provides an insight that can be used cumulatively to develop goals and objectives.

The Team composition will vary from situation to situation and this secures the customization of the strategy and the program plan for the child/student.

The Speech-Language Pathologist (SLP) provides the professional knowledge and guides to the process of 'Team Maintenance' and program development. The SLP analyzes the process and informs the Team about communication strategies and options; about materials for programming and communication devices that will advance the child/student's communication potential.

The 'ownership' of the program is given to the family since they have the ultimate responsibility for the child/student. The Team Members are vital in assisting in the formulation of goals and objectives and providing the family with information relevant to their specialty.

The 'Contact Person' for the team, who may be regarded as the 'Case Manager', may be the Parent, the SLP, the School Teacher or a Parent Associate.

The Team Members are asked to contribute information related to:

Speech & Language: What can the child/student says.

Manual Signs: Does the child/student use gestures or a sign system to communicate?

Visual Communication: Does the child/student use symbols, pictures or photographs to communicate?

Environmental Communication: Does the child/student point to items in the environment to express communication intent?

CREATING A COMMUNICATION PROFILE

Some children/students do not respond favourably to standardized tests, unfamiliarity with task expectations or are fearful of the new situation. Additional considerations are the child's/student's level or *stress* and *anxiety*.

Obtaining information from the parent or caregiver becomes the initiating process for determining preliminary goals and objectives.

The Communication-Activity Profile (Format B) was designed to assimilate pieces of information into a cohesive profile to identify the child's/student's skills, abilities and preferences; and to use the information to prepare activities that are motivational and achievable. The profile includes the operative environment that may influence the social-communication process and includes the knowledge of the words, word-combinations, pictures, photographs or signs and gestures to convey intent. The interests and preferences provide an opportunity to generate activities that can initiate, establish, consolidate or expand learning and communicating. The focus is on the strengths and what the child/student can do and this is the process for success. Observation during play or interactions with parent/s -caregiver/s will add to the creation of a social-communication profile.

The additional information from those who know the child/student the best will widen the scope of the profile. The intent is to determine the multi-modal communication strategy to establish a foundation for social interaction as a precursor to a compatible strategy for communication that the child/student will use for the program. It is also illustrative that while one strategy may be central for communication, other strategies may be used as circumstances dictate.

A profile may include, besides the personal information and health status; prior assessments and evaluations; words/phrases the child/student says clearly that others may understand; words/phrases the parent/s or caregiver/s understand; signs and gestures; toys, books and any pertinent information that can add to the Profile.

The information is used to support the child/students developing speech skills, manual or visual communication and the comprehension of the word; sign or visual symbol related to an item or idea and the use of the information for communication. The child's/student's likes, preferences and accomplishments are used to develop a customized program to assure success in learning and communicating.

SIGNIFICANT ELEMENTS IN THE DEVELOPMENT OF THE PROGRAM

Strength: Focus on what the child/student can do best and this will encourage participation and enthusiasm to pursue new communicative goals.

Success: "What the Individual can do Best" is the basis for successful outcomes.

Challenges: Challenge the 'Strength' and the 'Success' of the student to develop educational and additional social-interactional goals.

Pragmatic: Focus on strategies that work for the student.

The Team: The information and support from the Team assists in developing goals and objectives and realistic outcomes. Maintaining communication formally and informally is essential to program development.

Customization: Prepare the program for the student and not the student for the program.

Key Element: The child/student first comes first and then the collection of data.

Consistency: Maintain the same style and structure for the program. Changes influence learning outcomes.

Evaluations: Assess the progress /regress of the program and adjust accordingly.

Holistic: Consider the total experience of the individual from medical difficulties to medication, from social situations to care-givers. Family dynamics may have a direct influence on program outcomes.

PRE-REQUISITES FOR THE PROGRAM

To create a successful program one must have the fundamentals in place. When the basic elements are not synchronized then we must look for 'correction points' and make adjustments to produce successful outcomes. With very young children/students and children/students with special needs we need to know some of the program fundamentals. That is, the ability of the child/student, specific disabilities, the disciplines involved, present educational programs, the attention to task and the ability to point-touch to initiate a visual strategy for communication.

The pertinent pre-requisites, among others, to establish a visual communication program is the ability of the child/student to point-touch a symbol to initiate a response, to comply with a request and attention to task.

The basic information required to begin a program for a very young child/student is to determine whether:

1. He/she can attend to a task for 2 to 5-minutes. This may be estimated through play activities such as, making a puzzle, stacking blocks, looking at a book, etc.
2. He/she has the appropriate touching-pointing skill to develop a visual communication strategy. Use toys that are activated by touching-depressing a key or pictures and photographs.
3. He/she displays appropriate sessions behaviour. The child/student does not initiate self distractions, is not disruptive, does not wander away from the seated/work area (floor or desk); does not attempt to leave the program area; or display emotional distress in the program area.

Note: While the visuals included are Pictogram Symbols only, the use of pictures and photographs to provide specific information is encouraged.

Pointing-Touching-Giving



To assess Pointing-Touching-Giving (PTG) Pictogram Symbols can be used to establish a baseline.

The number of symbols/pictures used will depend on the ability of the child/student.

Note:

1. The concept *give* is included because some children/students will pick-up the symbol and give it to the instructor.

Giving the Symbol is acceptable at the beginning of the program, but this needs to be extinguished in favour of pointing or touching

2. This is not a test of knowledge. The focus is to assess the child's/student's understanding of touching-pointing-giving.

In some instances a single symbol may be used to establish PTG, while in other situations multiple symbols may be used.

3. The 'time limit' is based on: *How long the child/student continues with the task?* and *What reasonable time expectations for the session can be planned?*
4. Actual items/toys can be used to generate the PTG action.

Multiple sessions may be required to elicit and consolidate PTG and this may be achieved through playing with toys; through action-games or through reading and pointing to pictures in the book.

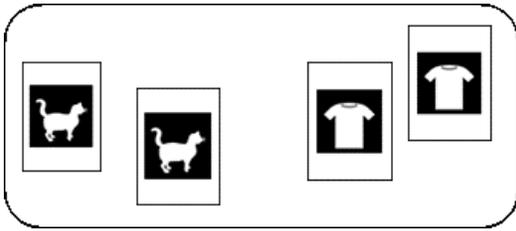
If behaviour is significantly disruptive then the assistance of a Behavioral Psychologist may be required. If this ancillary intervention is necessary then behavior management becomes the primary focus prior to the introduction of any visual strategy.

It may be expedient to keep the activities within the child's/student's endurance level at the beginning of the program and then increase the activity-time gradually.

ASSESSING ABILITIES

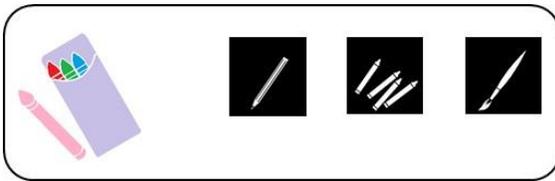
A multi-modal approach to training is recommended. Most common nouns can be expressed with concrete items and these can be matched with symbols, while verbs require motion and this is best expressed through gesture, pantomime or through sign-language.

Making Cards:



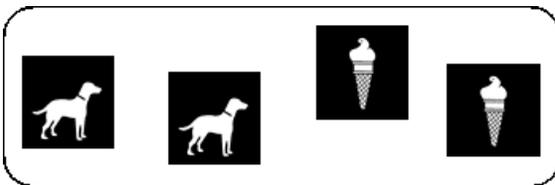
Select 4 to 6 concepts to begin the program. The items are agreed upon by the Team. Print 2-sets of the symbols and paste them on Bristol board or cardboard cut to the size of playing cards. These are the foundational symbol cards and used for many activities and games.

Matching



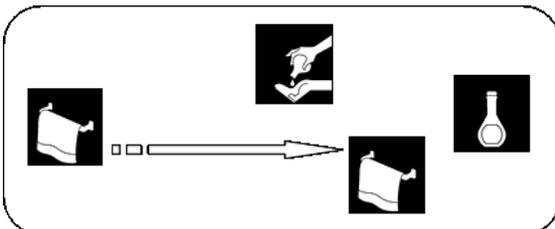
Items -Toys:

Actual items like 'crayons' can be used to develop the association with the symbol. Animal figurines and toys are valuable in initiating the learning process for young children/students.



Symbol to Symbol:

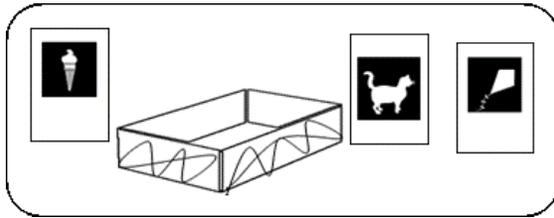
Matching and Memory Games can be used effectively to consolidate symbol learning.



Find the Card:

The child/student is shown a Symbol Card and is asked to find the matching card from multiple cards.

Identification



Finding the Symbol Card:

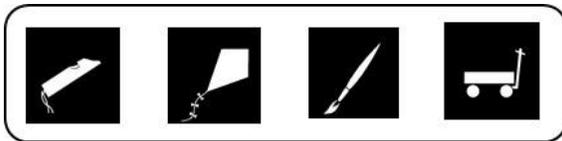
Place a number of Symbol Cards in a box and ask the child/student to find a specific card.



Help the Superhero:

Some children/students may pay attention and learn when a stuffed animal, a cartoon character or a Superhero is included in the activity.

The Superhero is asked to match a symbol or find a symbol card and the child/student assists the Superhero.



Request: Find the Symbol Card:

The child/student is asked to find a Symbol Card from 2, 3, 4 or 5 cards that are in front of him/her.

The request to find 2 or 3 Symbol Cards will depend on the ability of the child/student to complete the task.

Hide & Find

Hide 3 to 5 Symbol cards around the work-area. Give the child/student a matching card and ask him/her to find the other card.

The activity can be made interesting when the child/student hides the cards and the instructor/Tutor has to find the matching pair.

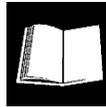
Removing 2 or 3 cards and asking the child to name the missing cards will depend on the ability of the child.

SERIALIZED IDENTIFICATION

This strategy is suggested to establish the foundation of future programming. It flows methodically to establish programming structure; adds new symbols and information within the child's/student's learning capacity and builds attention to task.

1. Adaptation to Task:

This is to familiarize the child/student to the symbol and the task. The target symbol is placed on the table/work area and through touching, pointing or giving the tone is set build upon the attention to task.



2. Biased Discrimination:

The blank piece of black paper/cardboard is placed next to the target symbol and the child/student is asked to touch-point-give the target symbol.



Note:

The position of the target symbols is alternated with the *blank symbol* to assess comprehension and learning.

3. Symbol Choice:

A second symbol is introduced and the student/child is asked to provide the target symbol and subsequently the new symbol.



Symbol Choice can become the basis for a communication strategy. The symbols can be replaced with fruit, drink or snack items and the item selected is what the child/student receives.



Example:

If the child/student likes strawberries and bananas, these two items cut-out from a grocery flier are pasted onto a cardboard strip.

During a snack-break the cardboard strip is placed before the child/ student and a choice has to be made. The fruit that is pointed-to is what the child/student receives. This activity allows for choices to be made and has significance as the child/student grows and the program progresses.

4. Spaced Selection:

The blank symbol is placed between the two symbols as a means of introducing a third symbol.

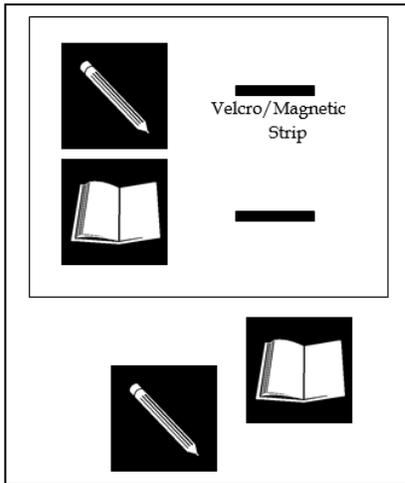
5. Multi-Symbol Identification.

New symbols can be introduced as the child/student adds to his/her grasp of the symbols.



Depending on the child/students familiarity with the item and the symbol the criteria for learning may be as low as 2/3 or as high as 8/10. This is a short activity and can be executed a few times a day to keep the program and learning flowing.

TEACHING BOARD



A simple teaching board can be made as a supplementary symbol-learning activity.

1. Use a firm piece of cardboard for the teaching-board.
2. On the left-hand side of the Board create spaces for 5 symbols.
3. Corresponding to the strips on the left-hand side paste 5 Velcro or magnetic strips on the right-hand side of the board.
4. Paste sets of Pictogram Symbols on pieces of board and paste either a piece of Velcro or a magnetic strip on the back of the symbol
5. Attach up to 5 symbols on the left-hand side of the Board and the symbol sets are placed on the table/work-area.
6. The child/student is asked to match the symbols.
7. New symbols can be added to the number of sets and symbol reviews can be conducted within a few minutes
8. The objective is to consolidate the learning process.

DEVELOPING GOALS AND OBJECTIVES



The following sample of goal and objectives are provided to illustrate the manner of developing program actions and possible outcomes. The duration of the program may vary; however, it may be expedient to establish a reasonable time-frame so that progress can be measured and adjustments made.

It is imperative that there is a strong grasp of the symbols so that they can be transferred smoothly into a communication strategy. (Format C)



*Achieve success with a few symbols
rather than having many for show.*

Step One: Listening and Responding

GOAL: Pointing/Touching/Giving Toys and Common Items upon Request

To develop _____ ability to Point/Touch/Give (select action) an item or toy upon request.

	Objectives
	a) The child/student will Point-Touch-Give the item placed before her upon request.
	b) The child/student will Point-Touch-Give one of two items placed before her upon request.
	c) The child/student will Point-Touch-Give one of three items placed before her upon request.

Note: Say the target word and give the child/student sufficient time to repeat the word or produce a sound as a response.

Result:

- a) Excellent progress has been noted. _____ responds by Pointing/Touching/Giving 1 out of 2-items/ 1 out of 3-items that are placed before him/her consistently.
- b) Some progress has been noted. _____ is able to Point/Touch/Give an item placed before him/her upon request at least 50% of the time.
- c) Progress has been minimal. While _____ has shown some gains in areas of attention to task and following directions, he/she is inconsistent in providing correct responses.



Focus on the child's/student's potential and build on strengths and successes.

	DEFINITIONS
Pointing	The child/student uses one finger to indicate a response.
Touching	The child/student more than one finger to indicate a response.
Giving	The child/student hands the item/symbol to the Instructor.
Prompting	The Instructor provides information, a suggestion or direction to the child/student to make a selection.
Guidance	The Instructor assists the child/student manually to make a response.

CUSTOMIZING VOCABULARY

While there are many vocabulary-lists advanced as basic for communication and may be beneficial for some, a significant consideration is the child's/student's social-communication environment and the vocabulary generated that would facilitate social integration.

The family and the environment will dictate the words the child uses and wants to use. While many words that relate to food, shelter, clothing social interactions may be common to children/students, there are essential differences in urban and rural settings and from community to community which influence the uniqueness in vocabulary and expression.

Customization is the child's/students preferred set of words, more meaningful and has greater potential for language development oral or visual.

MY VOCABULARY BUILDER

This format (Format D) is used to create a vocabulary-profile that would add to the child's/student's skills to initiate communication and express needs and wants.

The parent/s, Caregiver/s and the Team suggest vocabulary words/items related to the home, friends, relatives, food preferences; activities; special locations and nay other item word that is important in the child's/student's world.

The information obtained is central to the emergent and generative communication skills of the individual. The collection of the information gives the Team an integrated perspective of the primary communication strategy and the complementary strategies that will be incorporated into the program.

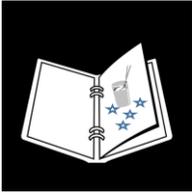
CONSOLIDATING THE FORMAT

- The Communication Profile provides the initiating vocabulary and these may be limited to *Mom and Dad*. These words become the basis for a *Communication-Talking Book*.
- The Vocabulary Builder identifies the vocabulary that will build the child's/student's social and interactive communication world.

The process is to consolidate and build child's/student's vocabulary skills and encourage the use of the word and/or symbols to develop language sequences and structures for communication.

All modes of communication must be acknowledged and used in developing the program. It is ill-advised to focus on the selected strategy and system and exclude other mean for communication. Thus, a primary communication strategy based on symbols should include salutation and identification gestures; should include salutation words; pointing and vocalizations to encourage *Total Communication Inclusion*.

TALKING BOOKS



Talking Books (Format E) are created to support the child's/student's speaking skills. If speech is not an option then the book is used as the precursor for a Communication Board for the nonverbal child/student.

The books are created by using symbols, photographs, and pictures from catalogues, magazines and flyers using the words and concepts the child/student knows. These visual cues become the central point in the initiation of communication skills or in expanding communication skills both verbally and visually.

Introduce the Talking-Book with one picture or photograph per page so that the visual cue is clear and the child is not distracted with multiple pictures. Even if there is only one picture in the book the child/student responds to or can say, it is an accomplishment that builds self-confidence and self-image.

Each time the child/student says or touches the photograph or symbol he/she is given a sticker to paste on the page. This is both reinforcement and an indicator for acknowledging success visually and verbally. In addition, this is a record of the child's/student's performance and establishes the foundation for future activities in the child's quest for communication and interaction.

Talking Books are a positive approach to get the child/student to start talking and an effective way to build speech & language skills. For the child/student who requires a visual strategy this is also a positive start for communication and interaction.

If photographs of siblings or extended family members are used, then it is valuable to write the name of the person below the photograph so that a *Listener/Viewer* who is not familiar with the child's speech pattern can acknowledge what the child had to say and model the name correctly for the child.

While the primary goal is to *Initiate and Consolidate* communication skills the overriding goal is to give the child/student the confidence to initiate and participate in the communication process.

It is important to realize that the Talking Book comprises the child's/student's vocabulary and experience and there should be no pressure to add words or symbols that will not be used in general communication.

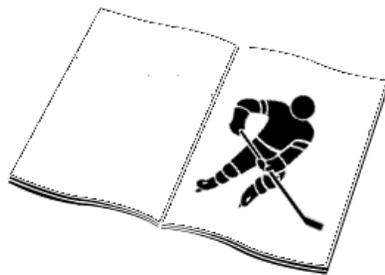
Encourage the child/student to assist in finding pictures or drawing pictures related to the target symbol. This enhances the learning process.

Objectives

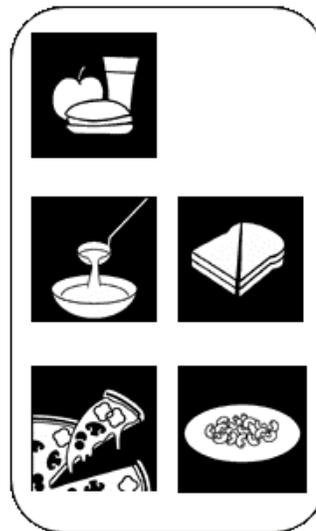
1. To give the child/student an opportunity to express his/her vocabulary and add new words/pictures/symbols.
2. To use the visual cues to develop word-combinations and language sequences.
3. To encourage the child/student to say/identify the symbols/pictures he/she knows upon request.
4. To build self-confidence and imaging.

The initial focus is to build a vocabulary base and subsequently develop language sequences and structures. At the initial stage there is no emphasis on the manner the child says a word (articulation), however, the correct pronunciation of the word should be modeled for the child.

Vocabulary



Theme



Use the following themes and ideas to develop books for comprehension-expression-communication:

General Activities	Getting-up in the morning
	Breakfast - Lunch - Suppertime
	What do I see on the way to Preschool - School?
	My Friends & Teachers at Preschool - School
	My Day at Preschool - School
	Going to the Park, the Swimming Pool, etc.

Family Activities	Helping Mom and Dad
	Going Shopping - Going to Church
	Having a Picnic - Having a Haircut
	Visiting Relatives

Favourite Activities	Toys & Games
	Shows, Characters and Books
	Pet Animals



The activity must provide the child/student with success and a sense of accomplishment.

Learning and assessing can be accomplished simultaneously and it is important for the child/student to see the progress made. While the sticker is the indicator of success it is also the basis for participation and interaction which are valuable assets as the child/student progresses in learning speech sounds, language structures and communicating with symbols.

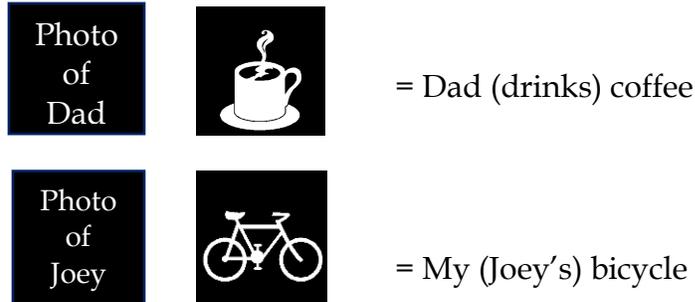
The recording is done by the Child/Student. He/she is the Evaluator. Experience has shown that the child/student learns 'positively' when he/she is the active participant in the process as the recorder. This empowerment has been noted to have a positive impact on the program as changes in objectives are made. There is pride in the accomplishment.

Ideas for Talking Books include, Family Members and Friends, food and drink items, toys, animals, clothing, furniture and appliances, TV shows and special characters, that is, whatever encapsulates the child's/student's world.

Additional books could focus on general activities such as, going to the park, to school, getting dressed; bed-time; etc.

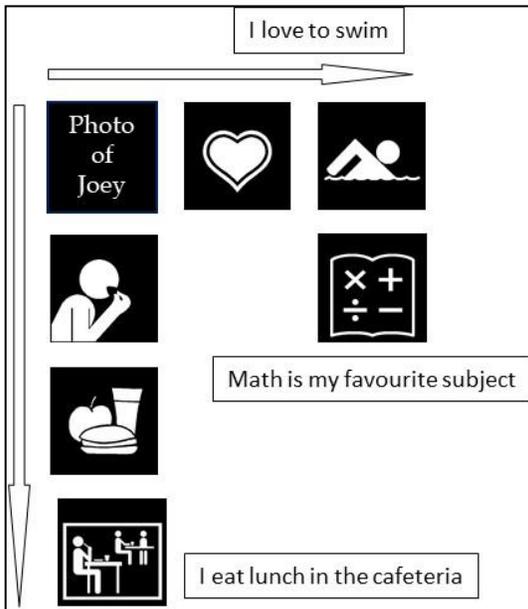
BUILDING THE COMMUNICATION BOARD

The Communication Book is the precursor to the Communication Board. The symbols/photographs/pictures are transferred to the Board one at a time and linkages are made. Example: Dad + coffee; Joey + bicycle; etc.



The number of symbols/photographs the child/student responds to successfully with determine the size of the Communication Board. It is advisable to begin with the symbols and photographs that are known best and gradually add new items.

Concept Clusters



Communication Boards are generally designed to identify the different parts of speech and are listed in columns, e.g. columns of nouns, verbs, pronouns and miscellaneous.

The Pictogram Symbol Program was the first to introduce the concept of concept clusters to facilitate communication. The clusters follow the flow of the message; that is, there are no columns separating the parts of speech.

The symbols are arranged around the pivotal concept.

The Communication Board/s may be arranged in categories, e.g. communication relevant for the classroom; at home; with friends, etc. or at the elementary level it may express multiple concepts.

THE BEST STRATEGY

The approach is to use all modes of communication that are available based on the ability of the child/student. Information obtained from “*Those who Know the Individual the Best*” (family members and professionals) provides the insight that can be converted into a strategy for customized communication and social interaction.

It is important to note which activities interest the child/student and which are tolerated. Focus on the interest and strengths as this will expedite the learning process and translate into success.

Keep the session interesting and motivational for the student with multiple short activities.

Assess the child’s/student’s capacity to work with the number of symbols during the session and keep this number as the *learning-working margin*. During a session other symbols or pictures may be introduced to support the learning process, but the session focus is only on the ‘Target Symbols’.



Success builds attitude, self-imaging and motivation.

PLAYING, LEARNING & ASSESSING

Games are an excellent strategy for teaching children/students and in this informal, creative and ‘un-stressful’ manner the child/student learns to find and say and use Pictogram Symbols.

The teaching-training program follows the strategy described for identification and includes “Prompting” and “Guidance” as required. The steps are the follows:

1. Familiarization

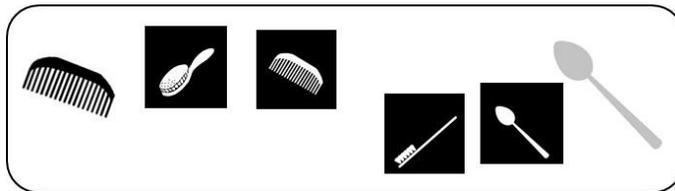
- a. Relating the symbol to an item, replica of an item or a toy or an action.
- b. Matching the symbol to the symbol beginning with one item and one symbol and gradually adding other items and symbols.

2. Choice - Using Toys

- a. Two symbols are placed before the student.
- b. The child/student is shown an item, a replica of an item, a toy or an action is performed (pantomime, gesture or sign) and is asked to point or touch or give the symbol to the instructor.

Note: For the child/student who is hard of hearing or deaf the requests for symbols are through the use of and actual item or a replica or a matching symbol.

Actual items or toys can be used to determine whether the child/student relates the symbol to the item.



Symbol to Symbol



The child/student is shown a symbol or asked to point to the matching symbol/symbol requested from a display of three (3) to five (5) symbols.

Pantomime & Gestures



The demonstration of an action and having the child/student imitate the action is an experiential way of teaching verbs. The action is related to the symbol in this training technique.

PictoAction



PictoAction is an animated presentation of Pictogram Symbols and can only be created with Microsoft PowerPoint and shown as a dynamic presentation

Through the active demonstration the child/student can associate and remember the symbols. Access PictoAction Symbols from www.pictoworld.com

PictoAction has the following symbols to assist the child/student in learning action-symbols and action-words.

Bath	Cry	Fight	Know	Push	Smell	Tie
Blow	Cut	Follow	Lift	Read	Speak	Touch
Break	Dance	Give	Listen	Rest	Stand	Trip and Fall
Build	Dig	Go	Lock	Run	Stir	Walk
Buy	Draw	Help	Pack	See	Sweep	Want
Carry	Drink	Hide	Paint	Sew	Swim	Wash
Catch	Drive	Hit	Peel	Shine/Polish	Take	Wear
Climb	Drop	Jump	Pick	Sing	Teach	Wipe
Come	Dry	Kick	Play	Sit	Tear	Work
Cook	Eat	Knit	Pour	Sleep	Think	Write
Crawl	Fall	Knock	Pull	Smash	Throw	

A combination of pantomime and action can benefit some children and students.

Research has shown that children learned the animated symbols faster than the static printed images.

PictoAction

Copy and paste these symbols using PowerPoint to see the symbols in action.



PictoAction © 2008 Fumihiro Hayashi & Godai Embody, Kyoto, Japan

76 PictoAction Symbols can be accessed through the www.pictoworld.com website for FREE by clicking on the icon



COMMUNICATING WITH SYMBOLS

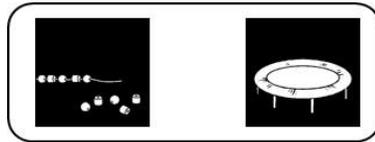
Once the child/student has learned a few symbols and is familiar with some photographs and pictures the next step is to encourage *making a choice* with regards to an activity desires, a snack, a drink, a place to visit, etc.

This initial section of the program will depend on the number of visual symbols available and what choices can be arranged.

A food choice may be as simple as the choice between an 'apple' and a 'banana'; 'soup' and 'spaghetti'. or 'milk' and 'water'; etc. In this example activities are presented as choices.



Or a choice between an inside activity and an outside activity



READY TO GO

Assessing is similar to the Pointing-Touching-Giving activity, except that the process starts with two (2) symbols that are placed before the child/student for identification and then additional symbols can be added.

Identification is ascertained when the individual can select the symbol requested at a minimum of two (2) out of three (3) times.

A reasonable level of confidence may be 4/5.



TEACHING & LEARNING

Central to learning is action, participation and interaction. *Learning by Doing* is fundamental not only for the child/student but also for the adult and this active learning process is fundamental to the holistic process of 'Learning with Games'.

The Sequence and Objective for each game is described and is beneficial for:

5. The child/student who has intact hearing but requires a visual strategy for communication.
6. The child/student who is hard of hearing or deaf and requires a visual strategy for communication.
7. The child/student who is developing speech and language skills.

Learning through Games can be Fun and the child/student will be willing to engage in activities that are of interest and motivational. Games and activities created with Pictogram Symbols have shown to maintain the interest and attention of the child/student. Furthermore, creating the materials for the games provides a new experience for the child/student and this participation add to the learning process.

The Pictogram Symbols library contains over 2,000 symbols and 76 animated symbols that may be organized into 23 categories. The symbols can be accessed for FREE through www.pictoworld.com

PICTOGRAM SYMBOLS		
Action Symbols	Activities	Animals & Insects
Appliances & Tools	Bathroom Items	Clothing & Personal
Desert & Snacks	Educational Items	Food & Drinks
Fruit & Vegetables	Household Items	Human Body
Infant Care & Toys	Locations	Medical
Miscellaneous	Months, Seasons & Enviro	Music & On-TV
Occasions & Greetings	Opposites & Questions	People & Emotions
Professions & Pronouns	Vehicles & Transportation	

Pictogram Symbols can be used to assist the child/student to talk and to uses symbols to communicate wants and needs. It can be used to teach vocabulary, alphabets and word recognition, number concepts; concepts such as same and different, big and small, hot and cold, spelling, developing language arts skills, and can be used creatively by students in classroom assignments.

As a visual strategy the Pictogram Symbols have been used for:

- *Emergent Language*
- *Language Stimulation*
- *Developing Vocabulary*
- *Articulation*
- *Language Arts: Word Recognition – Reading*
- *Concepts – Associations, Categories, Prepositions....*
- *Visual Spelling*
- *Number Sequencing*
- *Addition & Subtraction*
- *Crafts & Games*

The activities suggested are for “Teacher Prepared Materials”, which allows for the customization of materials and ideas. In addition to the ingenuity and creativity of the educator, the activities are an achievable goal for normalizing the use of Pictogram Symbols in the classroom and playground. This promotes inclusion of the child/student who is using the symbols for communication in school activities.

The ideas provided in this section together with PictoPrint *Merit* can be a valuable asset for program development in the classroom. The activities/games described may be included judiciously in developing program goals and should be age-sensitive.

Successful Colouring-Painting

Creating colouring-painting pages with Pictogram Symbols was one of the first activities considered for the young child/student who experienced difficulty with gross motor and fine motor skills. The Symbols were printed on letter-sized sheets and the child/student was encouraged to colour-paint the white symbol.

Gross Motor Skills

- ❖ For children/students with gross motor impairments a sponge brush was used for painting. The child/student is told to *colour-paint what is white*”

and he/she may make a few strokes to complete the painting, but it was a successfully completed activity.

Note: The activity-time is short in comparison to the preparation-time, clean-up and the drying process, but it is the finished product that is the ultimate reward.

Fine Motor Skills

- ❖ For children/students with fine motor impairments the use of large markers or 'Highlighters' work very well for this activity. The child/student is asked to *Colour only what is white* and while the child may 'scribble' randomly, the finished product is much more pleasing than if the child were colouring the same item as a line drawing.

Developing Motor Skills

- ❖ For children/students who are developing their colouring skills in Pre-schools and Daycares - this activity has assisted in building 'fine motor control' and has been a successful transition towards other colouring activities.

This is an example of scribbling and success. Children/students are sensitive with regards to their abilities. If holding a marker or crayon is a difficulty, it is advisable to make this a painting activity and to use a small sponge-brush.



This simple colouring-painting activity is a major accomplishment and builds the child's/student's self-image.

He/she sees the result of 'a successfully completed task' and the parent/s - caregiver/s can appreciate their child's/student's success.

The results and realization are that the child/student is able to succeed if appropriate activities are selected and provided.

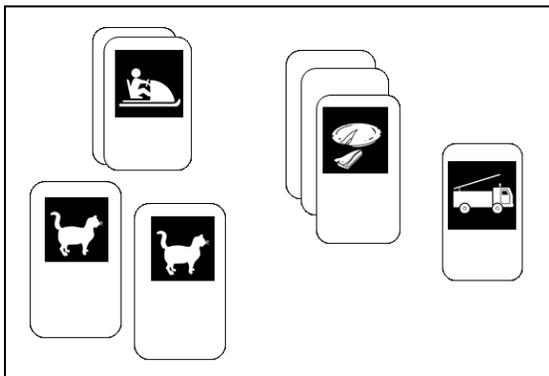
With over 2,000 Pictogram Symbols a new one can be selected for each session whether it is a vocabulary exercise, a language arts lesson or a craft activity.

CREATING & LEARNING

Active Learning is far more stimulating for the child/student than Passive Learning. Creating an item encourages 'ownership' and 'pride' and these factors can enhance learning and attention. Ownership develops self-image and a sense of accomplishment.

PictoPrint *Merit* and Pictogram Symbols can be used effectively and efficiently to create activities for learning and 'fun'

Making Cards



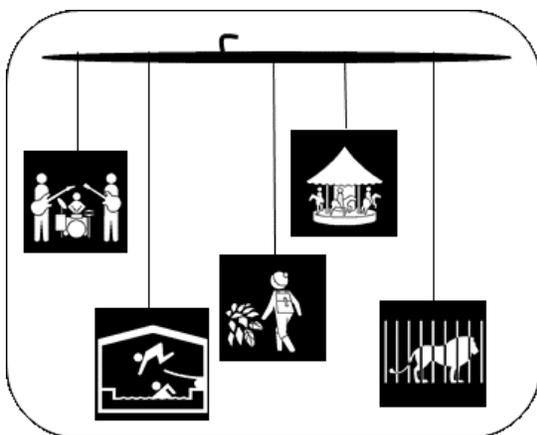
Cutting-out the symbol and pasting it on a piece of cardboard that approximates the size of a playing card can be an exciting activity.

The child/student can enhance the reverse side of the card by colouring, painting, making prints, pasting sparkles or stickers and they are the child's/student's cards.

The cards are used in multiple games to develop visual and expressive vocabulary, language skills and symbol combinations.

Note: If the child is too young to use scissors, then the Instructor may cut the symbol and encourage the child to paste it on the cardboard. The child *creates the cards* by colouring, painting, etc. the reverse side of the cards

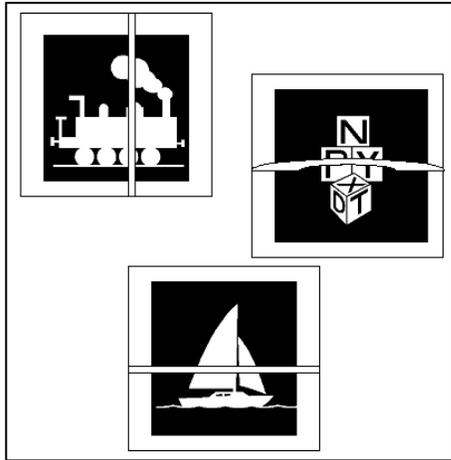
Symbol Mobiles



Tie Pictogram Symbols printed on sheets or made into cards using string or cotton thread to a clothes hanger and make mobiles that can be hung from door openings, windows, and the backs of chairs or the edges of tables. The child/student will have fun making these mobiles and talking about the symbols or pointing to specific symbols upon request.

The objective is to encourage participation in the activity and develop communication-interaction skills.

Making Puzzles



Have fun and learn vocabulary items, concepts by making and playing with puzzles.

Print large Pictogram Symbols and paste them on cardboard or Bristol board. Some children/students may like to colour the symbols, while others may prefer to keep the symbols as they are. Cut the symbols into halves, quarters or into as many pieces the child/student is able to work with.

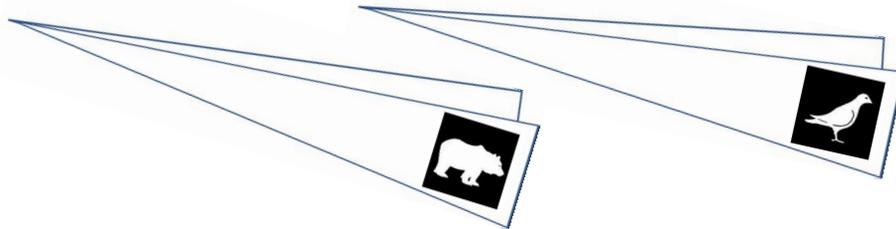
This is the child's/student's puzzle.

The objective is to develop communication and interaction through 'Finding and Assembling'.

Folded Paper Items

Print or paste Pictogram Symbols on paper crafted items such as airplanes, boats, fans, kites and paper hats to build vocabulary, comprehension and language skills.

Children /Students will have fun racing paper airplanes, furthermore, this activity can encourage spontaneous conversations.



Picture Boxes

Cereal boxes or small cardboard boxes can be converted into 'creative talking boxes'. Paste pictures of items the child knows or likes around the boxes to generate conversation

Picture Fan

Make a large paper fan and paste pictures the child knows or likes to talk about and use the opening and closing of the fan, revealing one or two pictures at a time for conversation.

Picture Accordion

Fold paper so that it can open like a large accordion. Paste pictures the child knows or likes to talk about on each fold. As you open and close the accordion you can engage the child in conversation.

Story Box

Keep the drawings and collages made by the child in a box and use the items for 'story telling' and conversation.

THE POWER OF GAMES

Children learn from doing and; therefore, activities that are fun and stimulating can become the basis for a rewarding language-stimulation experience. The variety of ideas that are provided allow for different activities to be tried and included in the program plan.

Variation maintains the interest and involvement of the child/student in the total program and is used to support and enhance the learning process. A change in activity creates a new way of viewing the same objective from a new perspective and the results may be very surprising.

It is important to realize that the child's/student's environment is a *language supermarket* and any activity within that environment has the potential for language stimulation. From watching the rain fall to exercises in household routines, from toys to video shows - there is a wealth of knowledge for the child/student to learn and the Instructor to talk about or collect symbols, photographs and pictures for the nonverbal child/student.

It is equally important to note that while the child/student is exposed to the 'language supermarket' - selective and functional items need attention so that he/she can 'learn and relate' to the environment. The learning process may require the repetition of concepts and labels many, many times before the child/student is ready to use the knowledge gained independently.



Learning is a process and the process takes time.

SYMBOL COMMUNICATION

Games are an attractive way for the child/student to use spontaneous speech; recognize the meaning of symbols and to use the symbols for communication and interaction.

Turn-taking and the game sequencing create the foundation for the 'Request and Response' strategy that is required for successful communication and interaction using symbols.

Games created with Pictogram Symbols in Daycares, Preschools and in the classroom introduce the children/students to the applications of the symbols and minimizes the impact of using the Pictogram Symbols only for communication by nonverbal children/students.

Games are the precursor to the inclusive philosophy of cultivating the knowledge and acceptance by the peer group that symbols can be used for communication and for activities that all children and students can engage in. The symbols become a part of the communicative and educational experience.

It is important to remember that the exclusive use of symbols for communication limits the educational-social-interactional growth potential and marginalizes the child/student with and among the peer or social group.

WHAT GAMES CAN DO!

Games promote participation, interaction and social cohesiveness. The learning process is stimulated and this can be observed through the many facets of receptive and expressive communication.

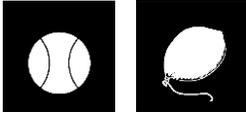
1. Comprehension – Following Directions

The rules of the game can expand the child's/student's knowledge and comprehension of language. This also establishes ground rules for interactive tasks, turn taking and the rules for starting and completing a game.

2. Visual Memory

The child/student learns to focus on the similarities and differences between symbols which become important for the AAC user as the number of symbols for communication increases.

Example:



A ball is round and so is a balloon, but the balloon is different from a ball. Explain the differences and similarities from function to texture.

3. Vocabulary

The words used to play the game can lead to vocabulary consolidation and expansion. Children/students learn new words through action and functionality and card games can provide additions to the vocabulary repertoire. Learning is assessed as the nonverbal child/student expands knowledge and identification of symbols, that is increases in visual vocabulary.

4. Language: Oral Expression

The interactions during a game can encourage the child to imitate and learn to play the game and this can form the rudiments for symbol communication and social interaction.

5. Visual Cues for Communication

The child/student learns to use a symbol card to request another symbol card as in the game 'Fish' and this process can reinforce the use of symbols for communication.

6. Pronouns

Interactive games provide great opportunities for the 'demonstration' of pronouns. The use of gestures and symbols can consolidate the understanding of pronouns and facilitate learning in a concrete and practical sense with immediate feedback.

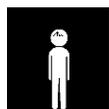
The game format generates statements such as:



I have
My Turn
This is mine



You Have
Your Turn
That is yours



He has
His turn



She Has
her turn

INFORMATION & COMMUNICATION

Activities can be included successfully to develop the child's knowledge and use of symbol communication. It is important that the Instructor provide information about each symbol, item, toy or picture so that the child/student can understand the function or purpose of the symbol/item and how it may relate to other symbols/items in the environment.

Focus on any of the following attributes after the label for the symbol/item is established and understood by the child to express relevancy and functionality.

Use gestures and signs to provide information regarding:

- a) Ownership: Mom's, Dad's, mine, etc.
- b) Size: big - small, tall - short; compare with other similar items
- c) Numbers: two cars, three pencils
- d) Shape: round, square
- e) Colours: white, purple and pink are most readily said by children
- f) Construction: metal, plastic; fur: soft - hard
- g) Components-Parts: wheels, lights, motor for a vehicle
- h) Function: go for a ride in a car; play with a Teddy Bear
- i) Compare and Contrast: similarities and differences - apple & banana; milk and juice...

Personalizing the item enhances the learning process.

GAMES & GAMES

Playing games can provide for a variety of learning opportunities not only for the child/student who is learning to speak, but also for the child developing a visual communication strategy. Games generate contact and interaction; turn-taking; learning the rules of the game; attention to the game and the pleasure of winning.

1. Matching: Setting the Stage

Use 3 to 4 pairs of cards. Place one set of the cards (3 or 4) before the child/student and give the child/student one card at a time to 'match and make' pairs of cards. Label the symbol card and provide additional information related to the symbol

- ❖ The objective is to have the child/student say the word or the nonverbal child/student grasp the purpose-function of the symbol-item.

2. Pair

Place 5 or 6 pairs of cards face down and the child/student and Teacher take turns to find pairs of the picture cards.

Label and describe each symbol card that is viewed.

- ❖ The objective is to strengthen visual memory.

3. Toys in a Box

Place 3 to 5 items or toys in a box and ask the child/student to pick a toy and then find the symbol that represents the toy. This is an achievable activity for the very young child/student. An older child/student will undoubtedly lose interest rapidly in this activity.

To sustain interest in the game:

- Select a box with a lid and tape the lid to the box.
- Cut a hole in the lid that is large enough for the child/student's hand to fit through.
- Place the items/toys in the box.

Ask the child/student to retrieve an item/toy from the box and match it with the symbols placed before him/her. Reverse the process by placing a symbol card before the child/student and ask him/her to find the corresponding item in the box.

- ❖ The objective is to relate the toy/item to the visual cue.

4. Treasure Chest

The symbol cards the child/student has learned of is familiar with are put into a *Treasure Chest* (a decorated cardboard box) and used to review the learning process.

The child/student is given a symbol card and is asked to find a matching symbol card in the 'Treasure Chest'.

- ❖ The objective is to develop the child's/student's associative skills and to review symbols learned for the communication-interaction program.

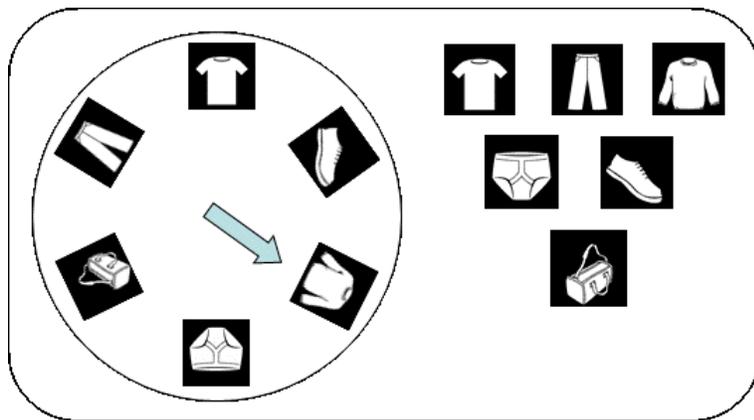
5. Symbol Wheel

- Cut a circular piece of cardboard or Bristol Board.
- Attach with paper clips or paste Pictogram Symbols around the edge of the board. Attach an arrow to the centre point of the board.
- The symbols are changed as the child/student learns the ones on the board.

The child/student is asked to spin the arrow until it stops and then label the symbol or find the corresponding symbol displayed.

To make the activity challenging the child student/ is shown one of the symbols and is asked to spin the arrow to stop at the matching symbol. Taking turns makes the activity interesting.

- ❖ The objective is to consolidate the learning of the symbols and maintain attention to task.

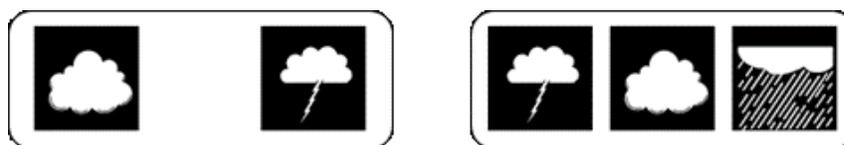


6. Memory: Strengthening Auditory-Visual Memory.

a. Missing Symbol - Symbol Recall

Three (3) to five (5) symbol cards are placed before the child/student. One symbol card is removed from the set and the child/student is asked to find the missing card from the second set of symbol cards.

Removing multiple cards and asking the child/student to find the missing cards will depend on ability.



b. Auditory Memory

The child/student is asked to find one symbol card from 2, 3, 4 or 5 cards placed before him/her. To make the activity challenging ask for 2-cards.

- ❖ The objective is to focus on listening skills and remembering

7. Ask Me

Use as many sets of symbol cards as the child/student can handle in terms of time and interest in the game. The child and the Teacher are given three (3) to five (5) symbol cards each and the rest of the cards are placed face down on the table/work surface.

The child/student and the Teacher take turns playing this game. The child/student asks the teacher for a card to create a match; if the teacher does not have the card requested the child /student is asked to pick a card from the pile.

If speech is difficult to understand or the child/student is nonverbal then he/she may show the Teacher the card that is requested.

The objective is to assemble as many sets of cards to win the game and strengthen auditory and visual memory, as well as, the 'Request-Response' process for communication and interaction.

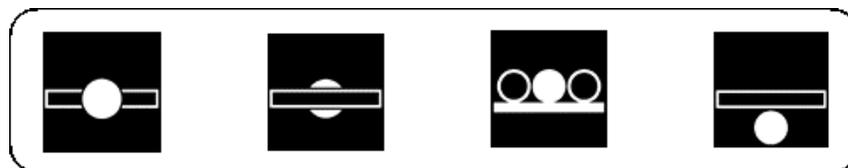
- ❖ The objective is on attention to task and turn-taking.

8. Symbol Hunt

The child/student and the Teacher take turns hiding four (4) or five (5) symbol cards around the work area. The child/student is given one card and is asked to find the matching card and when all the cards are found and matches then it is the child's/student's turn to hide the symbol cards and for the Teacher to find the matching pairs.

The symbol cards are generally hidden behind another item, above it or beside the item and the child/student is guided accordingly.

- ❖ The objective is to assist the child/student understand concepts such as - between, behind, in front, on top, in the middle, etc.



In front

behind

between
centre

below
under

9. Puppet Talk

Some children/students are reluctant to participate during a session. The use of a Puppet to identify the symbol cards placed before the child/student is a positive *Ice-Breaker*.

In some instances the child/student uses the hand-puppet to identify symbols placed on the work-table as requested by the Teacher. In a reversal of roles, the Teacher shows the 'puppet' a symbol card and the child/student has to help the puppet find the matching symbol card.

- ❖ The objective is to generate sound-speech-language

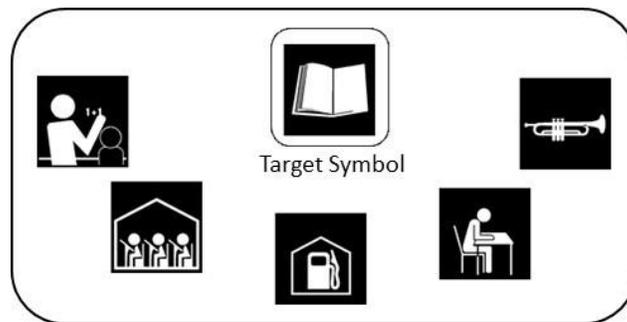
10. Bean Bag Toss

Arrange 5 to 10 symbol cards on the floor. The child/student is given a small bean-bag and is asked to throw the bag on a specific symbol card. If he/she is successful then the card is removed from the floor. The child/student has won this card. The child/student and Teacher take turns playing this game.

- ❖ The objective is to consolidate turn-taking, symbol-recall and selection.

11. Show Me

2 to 5 symbols are placed before the child/student. He/she is asked to find a symbol card as information is provided by the Teacher about the symbol.



- ❖ The objective is to develop associative skills

12. *I Spy*

Arrange 2 to 5 symbol cards on a table. The Teacher describes one of the symbol cards displayed and the child/student 'finds' the symbol card.

The child/student removes one of the symbol cards and the Teacher provides information about the symbol.

- ❖ The objective is to encourage vocabulary and connected speech



13. *Fishing for Symbols*

- Attach paper clips to about 5 to 10 symbol cards and place them face down on the floor. The symbol cards are the fish.
- Tie a piece of string to a pencil and tie a small magnet to the free end of the string. This is the fishing rod.

The magnet will attach to the paper clip and the fish is caught. The card is lifted off the floor.

The child/student is asked or shown a symbol card to 'catch' a specific symbol card that is on the floor. The child/student and the Teacher can take turns playing this game.

- ❖ The objective is to reinforce vocabulary and appropriate speech-sound production

14. *Truck Stop*

Place 5 to 7 symbol cards at different points on the floor. The child/student is given a small truck and is asked to pick-up the cards and put them in the box of the truck. He/she is asked which card has been put in the truck-box and the anticipation is an oral response.

The teacher asks the nonverbal child/student to show the card and the Teacher may provide 1 or 2 incorrect responses and then the correct one to test the child's/student's knowledge of the symbol.

- ❖ The objective is to consolidate vocabulary and speech skills.

15. Mailbag - Mailbox

Use a cloth, paper or plastic bag for the 'Mailbag' and a small cardboard box for the Mailbox. The symbol cards in the truck box are ready for mailing.

The child/student is asked to find a symbol card that he/she would like to send to Dad, Mom, Grandpa, etc. Use Photographs of Dad, Mom, etc. for the child/student to identify and 'post' the symbol card into the Mailbag or Mailbox.

- ❖ This activity illustrates how symbols can be related to people and also used for communication and interaction.

16. Flashlight

- Tack Symbol Cards on a wall.
- Turn off the lights or draw the curtains to darken to room.

Use a flashlight to highlight and talk about the picture. Give the flashlight to the child/student and ask him/her to find a symbol card on the wall.

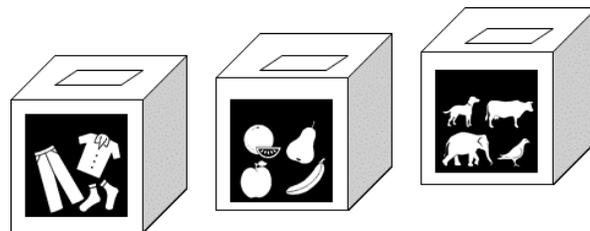
- ❖ The objective is to develop attention to task and provide a 'focus for learning'.

17. Mailbox Categories-Groupings

- Select boxes for the number of categories that are to be developed for the child/student and paste 'category' symbols on each box.
- Cut a thin slot on the lid of the box.
- Give the child/student a symbol card for one of the categories. Label the symbol and provide information about the symbol.
- Ask the child/student to 'post' the symbol in the correct box.

The Teacher may select a symbol card and indicate the 'mailbox' for the card to be inserted and the child/student indicates 'Yes' or 'No' regarding the choice made.

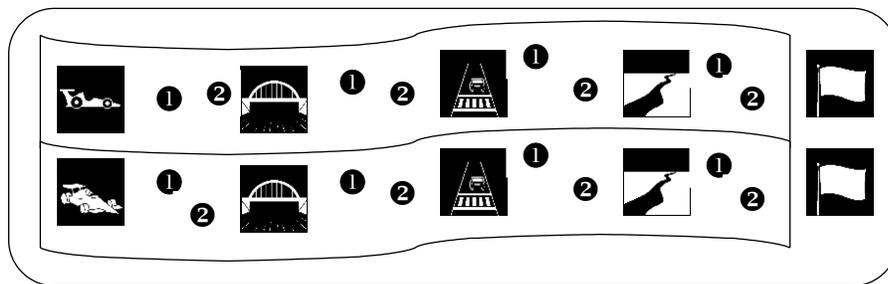
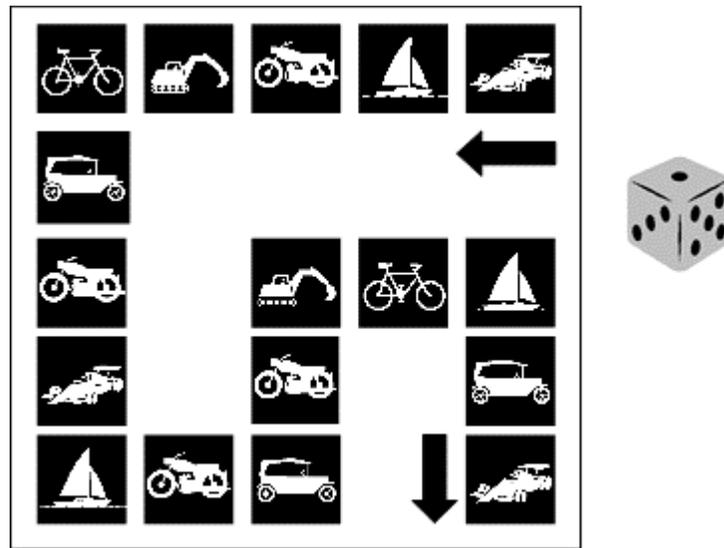
- ❖ The objective is to strengthen the concept of grouping



BOARD GAMES

Create Board Games with Pictogram Symbols to build vocabulary and speech-sound skills. Use themes such as sport activities, animals, vehicles, the weather, food items, etc.

Rolling a six (6) begins the game and a toy car is placed on the board. Only numbers below three (3) count for moving the car forward.



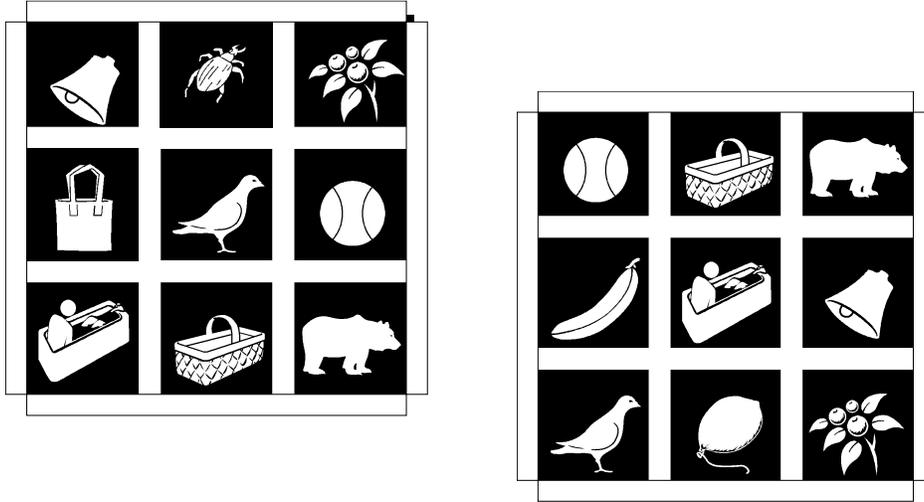
In this game only the numbers One (1) and the Two (2) on the dice account for a move ahead. For all the other numbers on the dice the players stay at the starting point, or get stuck under a bridge, at a crosswalk or a river.

- ❖ The objective is to develop attention to task, turn-taking and provide a 'focus for learning'.

LARGE GROUP ACTIVITIES

PICTO-BINGO

Use Pictogram Symbols to create “Bingo” games to focus on vocabulary, recall or speech-sound usage. Create Master Cards and Calling Cards with symbols available through **PICTOCOM Merit**.



SYMBOLS IN PICTURES

Select photographs/pictures as for this activity. Identify 3 or four 4 items from the photograph/picture and print the Pictogram Symbol. Place the symbols in an envelope.

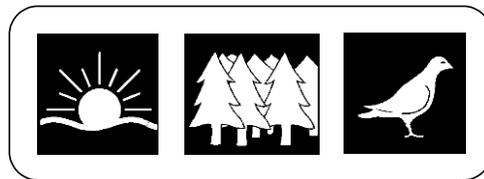
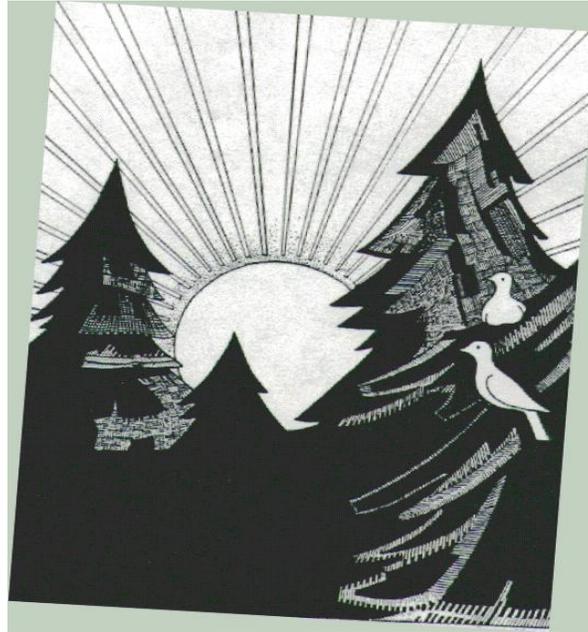
The picture and the envelope with the symbols form a set. Make as many such sets necessary for the class activity.

Place the photographs/pictures on desks and tables around the classroom. Give each student an envelope and request that they find the photograph-picture that corresponds to the symbols in the envelope.

A demonstration of the symbols in the envelope and the items in the photograph/picture will be necessary for students who are hard of hearing or deaf.

Once the students have found the respective photographs or pictures ask each student to talk about how the photograph or picture relate to the symbols.

This is an activity for the whole class



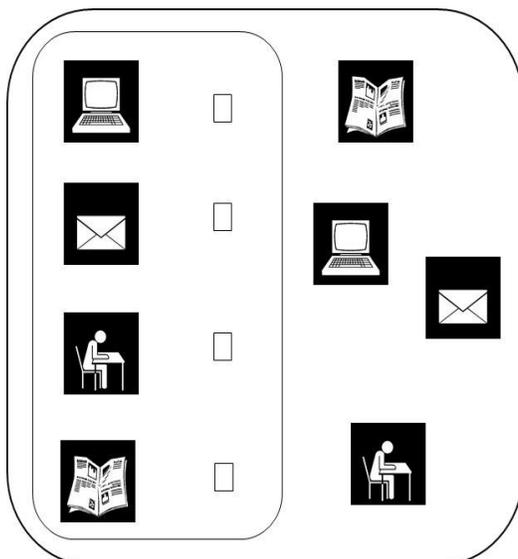
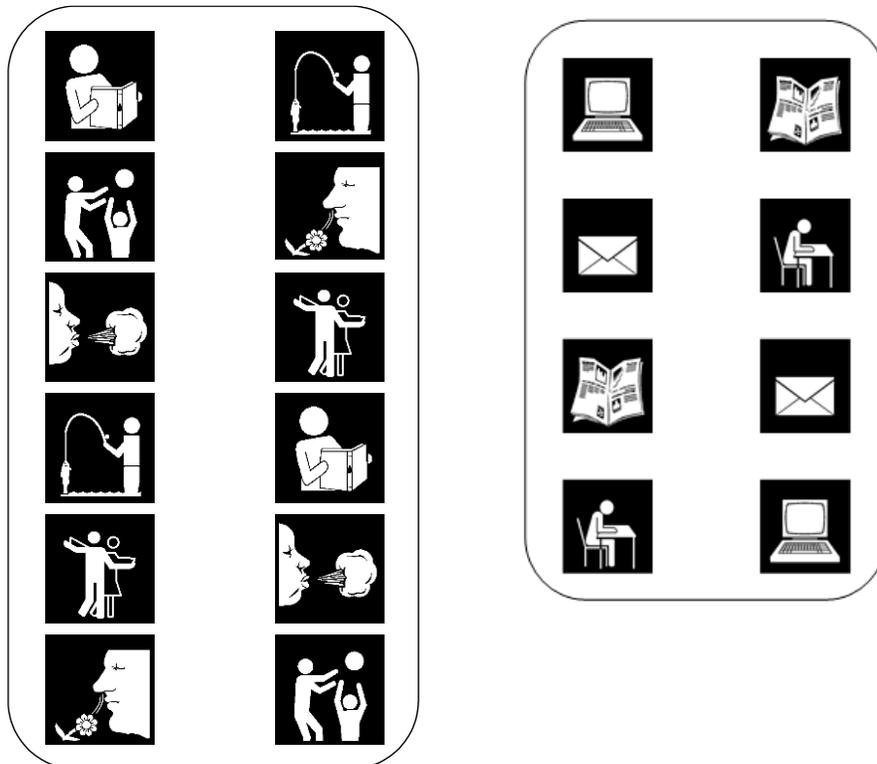
CREATING WORKSHEETS

Use Pictogram Symbols to create worksheets for Matching, Categories, Association and teaching Basic Concepts. These activities are described in the Speech and Language Section.

1. The worksheets may be created by the Teacher or by a student or with some assistance by the student.
2. They may be a random selection of symbols for a Matching activity grouping
3. Worksheets may be printed specifically for a student as an assignment or for a class assignment.
4. Students from a senior grade may prepare a language arts activity for use by junior grade students.

This *Matching* activity requires a pen or a marker to indicate the pair and the other that requires

The printed sheet can be placed in a plastic cover and a coloured marker can be used to make the Matching and subsequently erased and it is ready for the next child/student to use.



This activity requires the placement of the symbol with the matching symbol on the board. This arrangement allows for learning and consolidation through trial and error

PREPARING A SESSION PLAN

Programming has been most successful when the 'communication task' is applied within a craft activity, a game, reading a book, or playing with toys. The action-based activity engages the child/student and allows for spontaneity which may be an avenue to explore.

The plan may be structured for twenty-five to thirty (25 to 30)-minute sessions depending on the tolerance of the child and the time allocation with multiple activities.

Generally the sessions are designed for sixty (60) minutes. A typical session includes multiple activities and the activities are varied from session to session so as to keep the sessions interesting and interactive.

It is important to determine the activities and games the child/student enjoys prior to beginning the program. This is obtained through observation and from the parents/caregivers. The inventory of activities will assist in preparing sessions that are varied and motivational for the child/student.

An equally important factor is the neutrality of the work area. Highly stimulating wall decorations or a cloistered space may have a negative influence on attention and learning.

The examples provided are 30-minute Session Plans for a young child where the Goals and Objectives are 'giving and taking' and identifying photographs.

It is beneficial to begin a session with an engaging activity. This encourages participation and is an excellent Ice-Breaker.

Activity Number	Time in Minutes	ACTIVITY	MATERIALS
1.	10	Music	Drum & Sing-along Tape
2.	5	Puzzles	Puzzles with Grasp-Tab
3.	5	Photo Identification: Goal 2	Photo Album
4.	10	Reading	Touch & Feel Books

Notes are recorded after each session so that the child's/student's interest and performance on different activities can be estimated. Some pre-selected activities may no longer hold the interest of the child/student and are shelved.

Activity Number	Time in Minutes	ACTIVITY	MATERIALS
1.	5	Water-Play	Ball & Toy Boat
2.	5	Giving & Receiving: Goal 1	Comb, Ball & Marker
3.	10	Craft: Finger Painting	Paper & Paints
4.	5	Exploration & Description	Things in the room

This is a sample of a 60-minute session. As a relief the session is designed into two 30-minute sessions with a snack break between sessions.

Activity Number	Time in Minutes	ACTIVITY	MATERIALS
1.	5	Music	Drum & Sing-Along Tape
2.	5	Puzzles	Puzzles with Grasp-Tab
3.	5	Photo Identification	Photo Album
4.	10	Reading	Touch & Feel Books
5.	5	Snack Time	Snack from Home
6.	5	Giving & Receiving	Picture Cards
7.	10	Crafts: Finger Painting	Paper & Paints
8.	5	Puzzles	Puzzles with Grasp-Tab
	10	Exploration	Things in the room

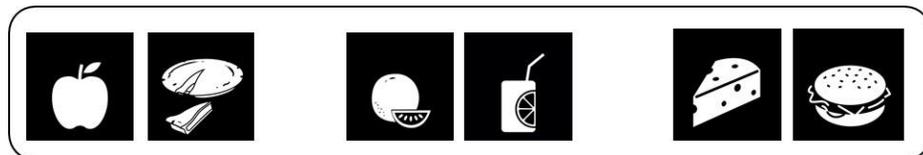


INITIATING SOUND & SYMBOL COMMUNICATION

Communication Books

Creating books with symbols/pictures the child/student knows is a positive approach to get the child/student to start and oral vocabulary or begin using symbols and pictures for communication.

It is expedient to paste one picture per page and initially on the right-hand page of the book so that the child/student has one item to focus upon. As proficiency is observed two symbols may be pasted on the page to create word/symbol combinations.



Apple pie

Orange Juice

Cheese Hamburger

The combinations can be expanded into phrases and sentences, e.g. *Mom, orange juice* or into a complete sentence; *Mom I want a cheeseburger*.

Communication Cards

The symbol-combinations can be made into cards for greater efficiency.

Communication Boards

For the child/student who requires a visual strategy for communication these elementary combinations may be the precursor to a more encompassing Communication Board.

SYMBOL GROUPING

If the child/student has a large number of photographs, pictures and Pictogram Symbols then arrangements in groups has to be considered, e.g., food items, symbols for education, personal hygiene symbols, leisure, activities, etc.

The groups of photographs, pictures and Pictogram symbols may be organized in Communication Books, Boards or Cards.

The choice for the symbol display will depend on the manual dexterity and ability of the child/student to handle the item.

Opening a book may be frustrating for some children/students and a board or a card may be more appropriate while others may use the Communication Book effectively.

Note:

It is important to keep the Communication Books separate so that the child/student does not have to page through a 'hefty' binder looking for the section and then contemplate the selection he/she wishes to make.

Colour coding sections in large binders may have an advantage for seasoned AAC users; however, this strategy is not suggested for the child/student who is being introduced to 'communication with symbols'.

It is better to have a few symbols that the child/student can use than to have many symbols that confuse and frustrate the child/student.



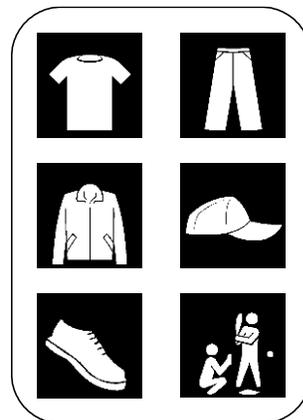
"Qualitative and not Quantitative".

Examples of Pictogram Symbol Boards:

Leisure Activities



Clothing



EMERGENT SPEECH & LANGUAGE

Very young children are not willing to participate in tests. A significant amount of the child's communicative behaviour is obtained from the parents/caregivers and from observation.

Communication-Activity Profile

Parents/caregivers provide information that may not be observed in the clinic or classroom and observations that are made in the clinic or classroom may support the development of goals and objectives for the 'Speech-Language Program'. The roles of both are compensatory.

The family and the environment will dictate the words the child uses and wants to use. While many words may be common to children in urban and rural settings - words that relate to food, shelter and clothing - there are significant influences from each setting that create the uniqueness in vocabulary and oral expression.

The Communication Profile (Appendix F) is used gather information about what the child/student is saying and trying to say. An activity page is included to determine what games, books, shows, etc. the child likes. This information is used to develop a 'customized' program for the child. There are three parts to this Profile:

PART I:

Words the Child can Say Clearly.

The list of words and phrases the child says 'clearly' is recorded by the parents/caregivers. At the preliminary level the words may include; Mom, Dad, puppy, kitty, etc. This is an inventory of the growth of the child's/student's vocabulary from which word combinations and language sequencing can be developed.

PART II

Words the Parents Understand

The parents/caregivers are also asked to record words and phrases that they understand due to a familiarity with the child's speech pattern. The words may be: 'wa-wa' for water; 'du' for juice; 'che' for cheese; etc.

These words and phrases may not be readily understood by a listener who is unfamiliar with the child's speech pattern but they are the child's/student's vocabulary and the most important words in his/her world.

PART III

Activity Profile

The parents/caregivers provide information regarding the child's preferences in books, TV shows, games, etc. This information is used to create learning opportunities with information the child understands and uses.

LEARNING TO SPEAK

The child/student who is learning to speak will experiment with the pronunciation of a word and the use of the word within the context of language expression. He/she needs to hear the concept or the label before an attempt will be made to use a word spontaneously. It is the continuous 'hearing and saying' that strengthens the child response and progresses it to intelligible speech and 'understandable' communication.

The 'words the child/student can say' are used to reinforce, stimulate and motivate the child to use the words in conversational situations, even if the responses are limited to 'Mom, Dad, Hi, Bye... etc.

The process is to consolidate and build the child's/student's vocabulary skills and encourage him/her to use the words to develop language sequences and structures for oral expression. The development is as follows:

Vocabulary

A Vocabulary Book is developed using photographs of Mom and Dad and Pictogram Symbols are gradually added to the photographs, e.g., 'Hi Mom; Bye Dad; etc.

The words the child/student is trying to say or the recognition of animals (through sounds made) are included in the Vocabulary Book, 'u-ee' (cookie); 'wa' (water); 'ah' (apple); 'woof' (puppy); 'meow' (kitty); etc. and the child is prompted with the correct word and reinforced for producing a response. The correct response is written below the picture, e.g., 'woof' is for 'puppy and not dog'; 'meow' is for 'kitty and not cat'; etc. A focus on the words the child/student can say or is attempting to say

The visual cues become the central point in the initiation of communication skills or in expanding communication skills. Children enjoy making this Vocabulary Book and generally there is a strong feeling of ownership if the child has participated in cutting and pasting the symbols/pictures in the book.

The Vocabulary Book encourages the child to respond to the visual cue spontaneously. Once this spontaneity is achieved, even with very few words, the foundation for language can be initiated with primary word-combinations

Language

The simple word-combinations are developed into longer and more complex language structures.

Articulation

While the correct production of a word is modeled and prompts provided when the child/student says the word, the focus on speech-sound skills is introduced only when the child/student appears to be confident in his/her speech-language skills and is more receptive to making speech-sound changes.

VISUAL SUCCESS

Success builds confidence and when the child/student is confident that he/she can accomplish the task learning is achieved. The child/student as the recorder is integral to participation and success. It builds upon focus and attention to task and reduces distractive behaviours.

The program must include activities the child/student likes; the songs and rhymes the child is familiar with; and the names of the child's/student's friends are used in the program - this is the child's program. Imposition of activities, vocabulary or expressive language may frustrate the child/student and defeat program objectives.

During the initial stage objects, pictures and symbols are extremely supportive in understanding the child's/student's communicative expressions. This does not mean that the child will have to use objects, pictures or symbols as his or her main means of communication, but it is an important and an integral part of the child's/student's learning and using oral language.

Each child will produce the words and word-combinations at his or her own time and we can encourage the process through play, reading and interactive games. The trials and success of saying the same word or words over and over again is occasionally frustrating for the child and the adult; however, the learning of language and using oral communication has the same tediousness and exertion as if one were teaching a child to figure skate. To become a good figure skater practice is essential; to become adept at using language skills practice is essential.



Create a program that fits the child and not try to fit the program to the child.

DEVELOPING GOALS AND OBJECTIVES

GOAL: *Developing Receptive and Expressive Vocabulary*

To develop _____ receptive and expressive communication skills using pictures, photographs and symbols.

	Objective
√	1. To create a Vocabulary Book and to encourage the individual to use the pictures, photographs and Pictogram Symbols for communication.
√	2. To focus on the inclusion of functional words from daily interactions. These words may be drawn from categories such as: Food drinks dessert clothing body parts grooming Activities games places to go names of family members & friends

Result

- a) Excellent progress has been noted. _____ is using all the photographs-pictures-symbols for communication and interaction.
- b) Some progress has been noted. _____ is using some of the photographs-pictures-symbols upon request for communication.
- c) Some progress has been noted. _____ has shown gains in areas of attention to task and following directions. He/she will point to a picture, photograph or symbol in the Vocabulary Book only when prompted.

SESSION ACTIVITIES

The goals and objectives of the program are interwoven with the activities and games the child/student likes to play.

Strengths

These games and activities are the strengths of the child/student and are used to develop positive responses during the program session and to create 'real learning' opportunities.

Successes

The positive responses are the ‘successes’ achieved and thus, a strong bond between ‘strength and success’ is established to expand and enhance program goals.

“Hundred Percent Solution”

The successful completion of an activity or task, no matter how small, is an accomplishment. The Hundred-Percent Solution requires:

1. That all stages for the completion of an activity or a task be adapted to the ability of the child/student
2. That only what the child/student can perform is requested during the activity/task to generate ‘successes’.
3. As the child/student becomes comfortable with the process of the activity/task then other elements are added to what can be achieved.

The activities are generally listed prior to beginning the program and for many children/students this may include:

Reading Animal Toys Drawing & Colouring Action Songs
 Rhymes Play Doh Building with Blocks Cars & Trucks, etc.

A SESSION PLAN : Emergent Language

This example illustrates a plan for a very young child/student where the Goals and Objectives focus on attention to task; following directions through activities and developing a speaking vocabulary

Activity Number	Time in Minutes	ACTIVITY	MATERIALS
1.	10	Show & Tell	Item/s from Home.
2.	5	Matching	Picture/Symbol Cards
3.	10	Craft: Finger Painting	Paper & Paints
4.	5	Snack Time	Fruit & Juice
5.	10	Bean Bag Toss - “Say the Word”	Bean Bag & Picture Cards
6.	10	Reading	Books in the Box
7.	10	Review: Vocabulary Book	Vocabulary Book

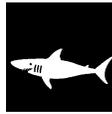
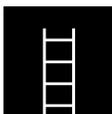
Notes on progress, performance on activities, responsiveness and interaction are recorded on the Session Plan Sheet. This information provides a guideline for future goals and objectives and for report writing.

ARTICULATION

PICTOCOM *Merit* contains over 2500 symbols and it is easy to select and print 5 to 10 target words for a session. The symbols are arranged alphabetically to facilitate location and selection and creating Articulation Cards for 'Teaching and Testing' quickly.

The easy access to the PICTOCOM Symbol Library can rapidly change speech-sound focus and allow for the selection of symbols that are within the grasp of success. That is, selecting and including the symbols-words that have the highest potential for success.

The children/students could be encouraged to select the words they wish to 'work' upon during the articulation session.

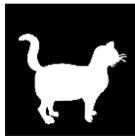
Initial	/k/	/r/	/sh/
			
			
Final	/k/	/er/	/sh/
			
			

Initial	/s/ blends	/r/ blends	/l/ blends
			
			
			

STUDENT ACTIVITIES USING Pictogram Symbols

Articulation in Rhyme

The Cat



The cat combs his hair
 And rides in a car.
 He eats cake and cookies
 The cat's a movie star

The cat has lots of friends
 Who come to see him in the night.
 The cat's my number one buddy
 After he's had a cat-fight.

Sunday

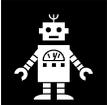


Hot, hot sun
 On a sunny Sunday.
 When it's a sunny Sunday
 I go out to play.

Sitting in my sandbox
 Or sitting by the sea
 A sunny Sunday
 Is a fun day for me!

Articulation Story

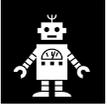


“Have you heard the news?” said the  robot. “The  

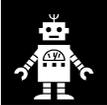
race cars will be on the  road.

“I didn’t hear that!” said the  rabbit. “A race, a car race with 

 racing cars?” asked the  rooster.

“Yes!” said the  robot, “I heard it on the  radio”.

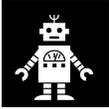
“But if it  rains... there will be no race today and we will see the 
reindeer run on the  road” said the  rat.

“I don’t think that it will  rain today” said the  robot.

“We must warn the  reindeer not to run on the  road”.

I will tell the  reindeer not to run on the  road!” said the 

rooster.

"I will run and tell them that the   race cars will be on the 
 said the  rabbit.
 "Quick, go quickly!" said the  robot. "We don't want the 
 reindeers running into the   race cars".
 "I think it's going to  rain," said the  rat and he ran home.

ARTICULATION-LANGUAGE WORK-BOOK

The program symbols are pasted in the Workbook for both learning and tracking. The criterion for success is established at the beginning of the program. As each word is learned correctly it is used to initiate a phrase, it is embedded in a phrase, it is used in sentences, and in games for inclusion into conversational speech.

1.	Sound in Isolation	<i>Sound</i>
2.	Target Word in Isolation	<i>Word</i>
3.	Target Word Initiating a Phrase	<i>Phrase</i>
4.	Target Word Embedded in a Phrase	<i>Embedded In Phrase</i>
5.	Target Word in a Sentence	<i>Sentence</i>
6.	Target Word in Conversational Speech	<i>Conversational Speech</i>

The Learner is the Evaluator

The child/student is both the 'Learner and the Evaluator'. He/she is encouraged to evaluate his/her production and if the target word is said correctly (reasonably successful) then, the child/student places a check mark  a rubber stamp or a sticker next to the symbol to indicate success. The child/student decides whether the production was accurate/reasonable and whether a recording should be made.

LANGUAGE ARTS

Creating Worksheets

Many Language Arts activities such as, Matching, Categories, Association and Teaching Basic Concepts, etc., can be prepared quickly for the whole class using PictoPrint Merit . The software is *Easy to Use and Easy to Print* and can be taught very easily to young children and students.

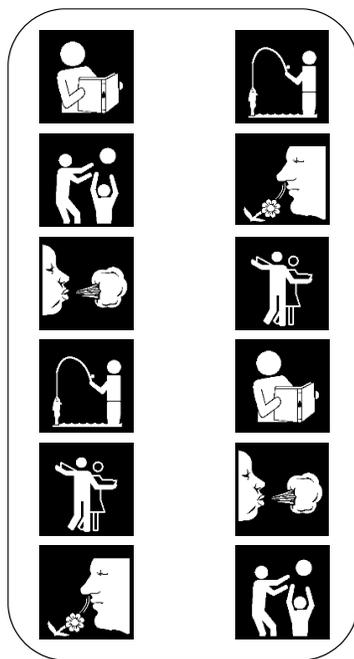
The Teacher/Instructor has multiple options to enhance the learning process.

1. The worksheets may be created for the child/student by the Instructor.
2. The child/student may assist the Instructor create a worksheet.
3. The child/student may create a worksheet independent of the Instructor.
4. Worksheets may be created as a class activity.
5. Worksheets may be created as a language arts activity by a senior grade of students for use by junior grade students.

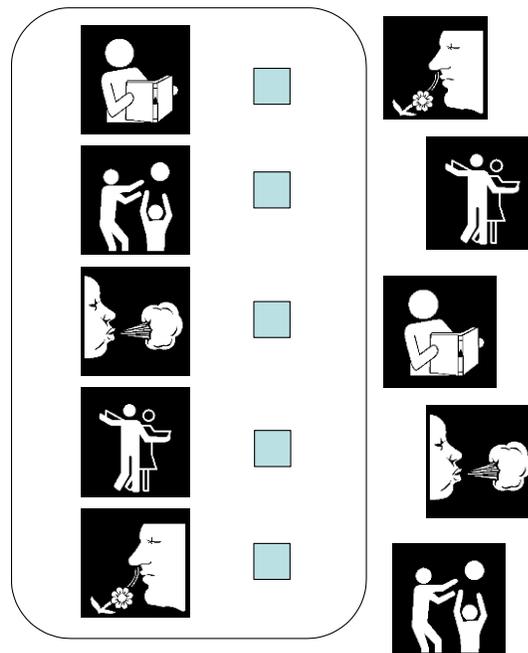
Building Vocabulary and Language Skills

Create a paper and pencil activity or a Matching Board to *Teach and Learn* new vocabulary words and develop language sequences.

Multi-Symbol Matching



Symbol Matching Board



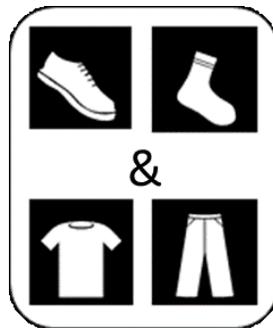
Association

Activities to develop associative skills can be prepared as worksheets easily and rapidly - and for the whole class.

This activity can be adapted for use with the Training Board so that symbol positions can be changed to sustain interest in the activity and avoiding rote learning.



Multi-Symbol Association



Introducing the concept *And*

Grouping

1. Pictogram Symbol of related and unrelated items are arranged around a central concept and the student may be asked to 'mark the items the girl can play with' and then engage in a class discussion if separate sheets are printed for the students.
2. A central symbol is pasted on a board. The child/student is given a number of Pictogram Symbols and he/she has to select the ones that relate to the central symbol.

Grouping activities may include:

Items the girl/boy may wear!

The food the girl/boy may like to eat - fruit, vegetables!

The things a baby needs!

Items for the kitchen, the bedroom;

The living room; the bathroom!

Parts of the body!

Vehicles!

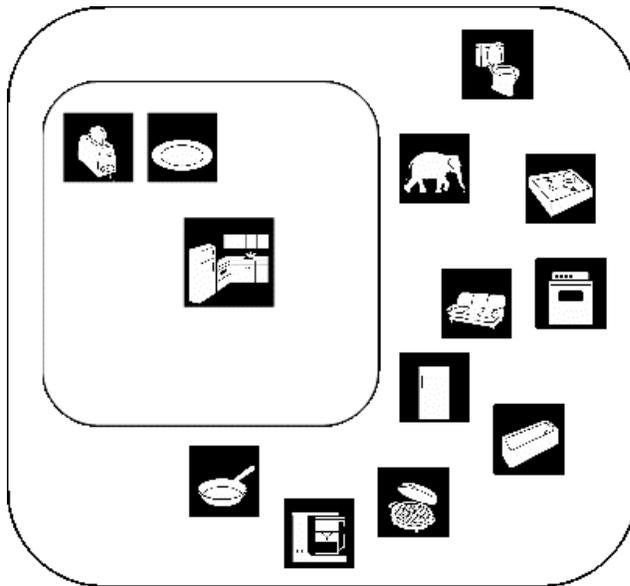
Activities I like!



In this example the child/student identifies the items the girl can play with and item which are not to play with.

Categorization

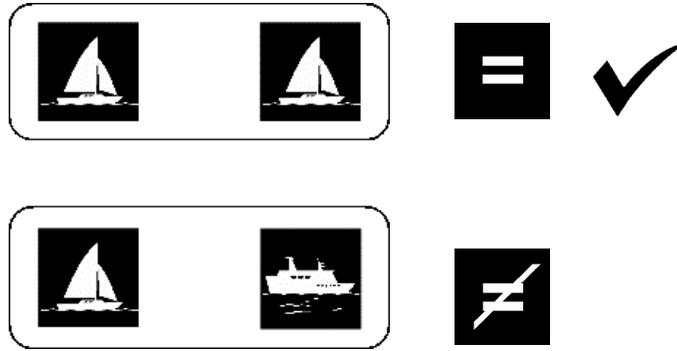
This activity is very similar to the 'Grouping Activity' except that the central symbol identifies the items that are a part of this category.



Same - Different

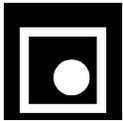
Create activities for teaching 'Same & Different' by marking or colouring the items that are the same or the item that is different. Use new symbols for each session for 'Teaching and Testing'.

The symbols for 'same' and 'different' can be taught and used as responses to questions in other activities.



Prepositions

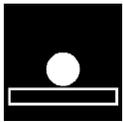
Provide a visual cue to relate the concept to the action.



The ball is in the box
The ball is inside the box



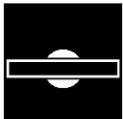
The ball is on the box
The ball is upon the box



The ball is above the book

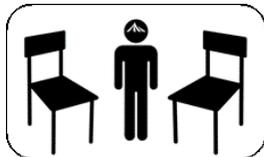


The ball is below the book
The ball is under the book

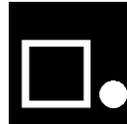


The ball is in behind the book

Demonstrate prepositions in the Classroom

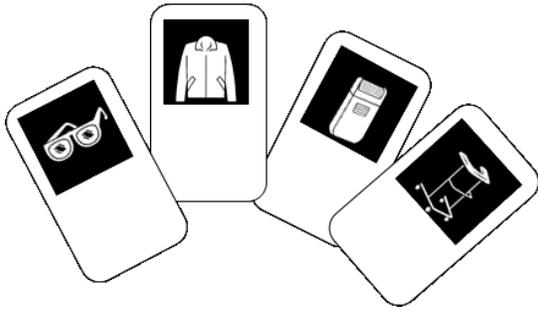


The boy is between the chairs



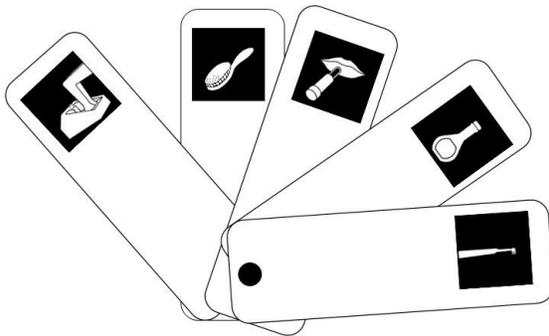
The boy is beside the chair

PictoCards



Pictogram Symbol cards are used to indicate a request or a response to a question. This approach works best if there are few symbols that are being used for communication.

PictoFan



Make a PictoFan with cardboard or plastic strips and paste Pictogram symbols to one end and join the strips at the other end with a round pin so that this item can be opened like a “fan”. The user identifies the Pictogram for a request or a response to a question and then closes the ‘fan’ for easy storage in a pocket or a purse.

Pictogram Symbols have been used to support learning from the elementary level to the adept use of the symbols for communication and interaction. This is a summary of the application of the symbols.

Emergent Language	Vocabulary Building
Language Development	Connecting concepts
Language Stimulation	Grammatical Structures
Literacy	Reading & Comprehension
Creative Endeavours	Visual-Text Writing
Articulation	Speech Sound Correction
Low Vision	Clear, Crisp, Bold and Graphic Symbols
Learning and Additional Language	TESL / TEAL
AAC	Visual Symbol Communication



LEVELS OF SYMBOL COMMUNICATION

Three (3) broadly described levels within a continuum of strategies are identified for communication with symbols.

Primary Level

At a Primary Level the use of printed communication boards or cards initiate the communicative process. Whether this means the use of a few symbols or a host of symbols will depend on the competency of the user. The symbols indicated are Pictograms; however, symbol preferences may vary but the communication intent remains the same.

It is significant to understand that the symbols are a visual cue to a descriptive speech presentation and that the forced-creation of symbols to synchronize with the natural-native-language is onerous and may extend beyond the ability of the user. Furthermore, the creation of abstract symbols may have the opposite effect and create learning-confusions and defeat the purpose of the strategy.

The intent at the Primary level is to maintain simplicity and to establish the communication-interaction process. If there is a need for advancement then considerations should be given to strategies at the Intermediate Level.

The Primary Level may begin with one symbol on a Communication Board or a Wheelchair Tray and preferential symbols may be added as the need is indicated.

SYMBOLS ON A COMMUNICATION BOARD

Initiating Symbol



For a young child/student a single compound- symbol for *snack* may be the initiating symbol.

For another it may be playing on a *swing* or the *slide* or a specific food item, in which case a *photograph* or the *label of the item* may become the initiating symbol



This symbol indicates “coffee”; however, with the picture or logo of a specific establishment the specified beverage is indicated.

Adding Preferential Symbols create a customized board and each board will be different from other users. The board is the users identity.

Some symbols may be basic for multi users and although they may be placed in different positions on each child’s/student’s board, the standardized symbols are recognized and the process of child-to-child and student-to-student communication begins.

SINGLE SYMBOL COMMUNICATION

A single symbol may be used to express multiple intentions or requests and this may be on a Communication Board, a Book, a Card or a Communication Device.

Cards with a single symbol may be used when very few symbol are being used for the program or when the AAC user is and the ‘viewer-listener’ understand the full test of the message behind the symbol.

Example:

The symbol of a person seated at a desk may have one or all of the following messages and is applied situationally.

Student

“I want to work at my desk!”

“I want to sit down!”



Teacher

“Work at your desk!”

“Please...Do your homework!”

“Be seated at your desk!”

MULTI-SYMBOL COMMUNICATION

Multiple symbols including photographs can be used to accentuate statements.



“My mother is a school-teacher”

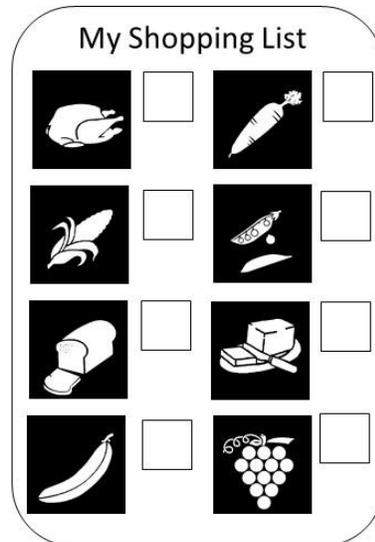
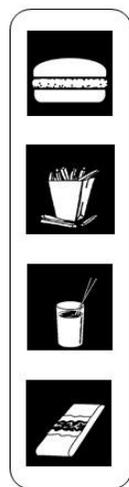


“Grandpa works downtown!”

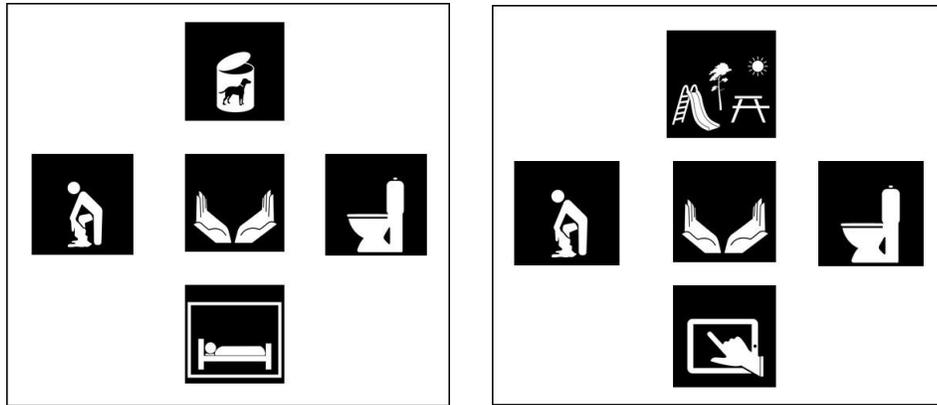
A Pocket-Strip of symbols for a specified situation can benefit some individuals, e.g. encouraging independence when ordering a meal or through the creation of a shopping list for the non-reader.

Such items can be instrumental in stimulating and engaging adults and seniors in advancing their communication endeavours with the possibility of embarking into the world of technology.

Pocket Strips and situational symbols on cards have a significant place for very young children who are beginning a journey using an AAC strategy. and with seniors who are not ready to



In the samples below the two Communication Boards have some common symbols and some different symbols; however, both boards have *want* as the central symbol with *toileting* and *dressing* in common. The difference is that one child/student wants to *feed the dog* and requires to *go to bed* frequently. The other student may be more robust and wants to *go to the park* and *play on the iPad*.



Boards to Books

As the child/student adds to his/her symbol repertoire the will be the need for more space on the board and although multiple boards may be the answer, the rate of learning may require the transference of the collection of symbols on boards to a book or a binder.

The transfer of symbols may be arranged in a variety of formats based on categorization, frequency of use or communication sequences. The arrangement will depend on the child/student.

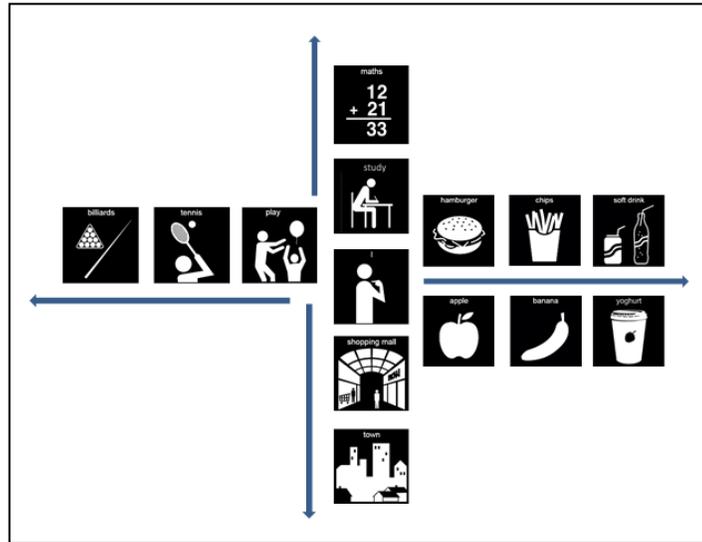
Pictogram symbols are arranged into twenty-three (23) categories; however, the strategy advocated is the arrangement of pages for communication efficiency and expediency.

Concept Clusters

The first application of concept clusters with Pictogram Symbols was in 1978 where the 400 initial symbols were arranged in 'clusters' to facilitate the communication process. This was a significant break from the traditional placement of pictures and symbols within grammatical classes, e.g. nouns, verbs, pronouns, prepositions, etc. and arranged in distinct rows or sections on a board.

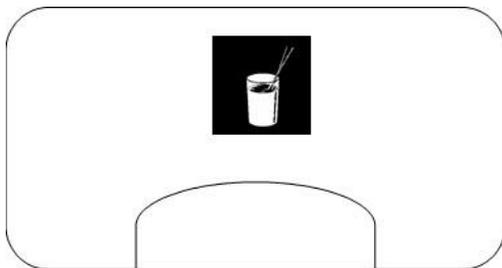
Clusters disregarded the 'grammatical designation of speech' to generate 'communication flows'.

The major consideration was for customization and the unique character and personality of the individual. Thus, the boards may appear different in design, but the symbols are standard easily recognizable which enhances communication and interaction time.

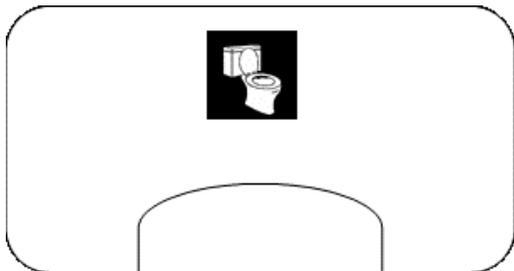


SYMBOLS ON WHEEL-CHAIR TRAYS

Pictogram symbols have been used effectively on wheelchair trays to initiate communication.

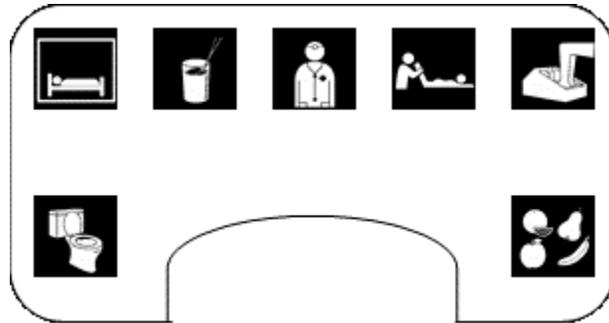


For some children/students a single symbol may initiate a communication process, e.g., the symbol for 'drink'.



A single symbol for 'toilet' has been used to maintain dignity, sensitivity and self-respect.

Multiple symbols may be used to provide relevant communication needs which can be expanded through Communication Cards, Books and Boards.



The use of Pictogram Symbols is left to the imagination of the tutor and the customized need of the individual. The important aspect is not to create a multitude of images when one image can express the communication intent.

Example: It is not necessary to sequence *I want an apple* with 3-images when a single image of the *apple* expresses the intent.

However, it may be necessary to use the 3-image set if the objective was to focus on language development and language skills.

Intermediate Level

This application may be through print or a speech generating device (SGD) or a combination of both.

Primary level communication items like communication cards and boards have benefited from the development and sophistication of hardware and software.

The creation of the Compact Disk (CD) and Flash Drives meant that large amounts of information could be stored and transported easily. Scanning techniques allowed symbols, pictures and photographs to be copied and sent to a computer screen for viewing and recording.

The design and development of Pictogram Manager (Sweden) in 1999 expedited the process of creating boards and cards for communication and interaction. The software was 'consumer-friendly' and has played a significant role not only as an AAC strategy, but as an educational tool within the school program.

PictoPrint was developed in Canada in 2004 with the design motto – *Easy to Use and Easy to Print* and was adapted for use in Japan.

There has been an abundance of software that fit into this level; however, it is a spectrum that floats from the application of a few symbols with voice output to more sophisticated software with human voice outputs.

The first attempt to include an audio output was a pilot project developed by Drs. Alan Law and Brien Maguire from the University of Regina. This was the early 1980's and both visual and audio quality was limited. The sound production was robotic and unpleasant.

PICTOCOM SE (Symbol Expression) was designed in the mid 1990's with recorded human voice output. The software included the linkage of items to produce complete sentences and phrases. The software was trending upwards; however, the hardware, the bulky screens and keyboards limited the placement at a single-station. Touch screens were added to facilitate communication; however, this did not reduce the movement difficulty to multi-station usage.

Digitization opened a new world for users of visual symbol communication. Software had advanced to include human-voice output as well as high-quality computerized voice production and hardware became more potable.

In 2016 the PICTOPAGE software was launched as a collaborative project with the George Reed Foundation and the University of Regina.

PICTOPAGE is an iPad App that enables users to create, share and interact within the social environment through the use of Pictogram Symbols. The key features of the software were the versatility in creating and managing the program with a Pictogram Library of over 2,000 symbols arranged in 23 categories, in addition to 75 animated Pictogram Symbols developed by Mr. Hayashi.

The advantage of the program is that it incorporates human voice and, thus it can be formatted for any language without the need for selective platforms.

PICTOPAGE is a versatile software for children and adults and the symbols provide a level of dignity and sensitivity. The App can be used for all ages:

- Vocabulary expansion for the preschool child;
- Building language skills; Articulation;
- Nonverbal communication (AAC);
- Low vision – clear white symbols on a black background;

- Support symbols for Deaf/hard of hearing;
- Teaching English or any Language to both the student & the parents

Pictogram Symbols have been used to create materials for Classroom Activities and as a communication strategy for individuals with: Cerebral Palsy, Downs' Syndrome, Autism, Individuals with Cognitive Disabilities; Individuals with Stroke, Alzheimer's, Dementia and Individuals who are Deaf

"The Symbol is the Communicator" ©

Communication Devices have opened an interactive world for the nonverbal individual. This is a major shift from the static pictures, photographs and symbols and yet to maintain this interactive and 'auditory dialogue' the user needs pictures, photographs and symbols as cues for responses.

Many communication devices and programs fall within the Mid Tech Zone. They are neither 'pencil, paper or print' based items, nor do they function within the complexities of technology.

In the early applications the symbols were used in small communication devices with pre-recorded responses. Computer-based software allowed for the customization of responses with computer generated outputs. As technology progressed so did the voice quality and as technology miniaturized so did the communication devices.

Some devices are easy to operate and messages can be rapidly created or - pre-recorded using computer generated speech and with a single visual cue these messages can be accessed and presented in rapid succession to maintain the flow of 'conversational speech'. There are devices that can provide a pre-recorded response for one symbol or multiple symbols and then there are some devices that can cover a broad spectrum of the individual's communication needs. At a premium level the individual may use text to generate dialogue.

The application of 'speech' means that the symbol is a cue on the device for the user and the key when depressed provides the pre-recorded word or statement. Thus, the symbol for 'coffee' may have a recorded message that states; "Coffee Please" or "I would like a cup of coffee!" or "Would you like a cup of coffee?" or "Please join me for a cup of coffee'.

The advances in computer generated speech have made listening and comprehension much easier and the concept of creating 'human-like' speech with its rhythms and nuances is the challenge for software developers.

Communication devices may also be graded within the Intermediate Level as *initiators* with a limited number of symbols and limited speech output; while other devices with a large array of symbols function as *communication intermediaries*.

It is imperative to note that while the hardware is important for the technological transfer of information, the symbols are equally important in a psycho-social evaluation, consumer perception and aesthetics. Pictogram symbols provide the dignity and sensitivity for the child and the adult and the use of the symbols are seamless as the child matures into an adult.

When the 'voiceless' have no choice in the selection of hardware, software and symbols for their use, it is up to the professional to explore, seek and engage the best option that is available to expand communication boundaries.

Composite Level:

While we feel the sensations of seeing (wonderment) and listening (locating and comprehending) and reflect our emotions through facial expressions and gestures, the future may provide the congealing of multi communication channels through technology.

We are in the midst of phenomenal advancements in artificial intelligence and space age endeavours. While this may seem remote at this time there is a strong possibility that our space exploration and land-based science will add to the knowledge and development of devices that can interpret thought and transfer images with meanings through speech with no hand application.

We have already seen the benefit of Deep-Brain Stimulation to enhance mobility for patients with Parkinson's disease and images for visually impaired individuals through implants and monitors.

It may take time but the curiosity is there. The human mind is bound to look for a resolution that would give non-verbal individuals the opportunities to express thoughts into action visually or in combination with speech.

The future is in the stars above us and the connection of the human mind to technology to translate mind-visions into external visual formats, although science fiction today, is the hope for tomorrow. This may be a screen or some device that can interpret the human-mind image into a digital image. Speech may be secondary as an interpretive or explanatory means to convey the intent of the visual image or images.

If this is the future reality, then we will discard the two-dimensional printed images and the animated images for a new selection of tools to facilitate the communication and integration of nonverbal individuals.

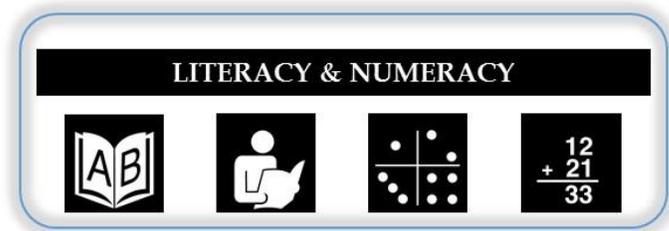
Speaking may become secondary to the expression of conceptual visualization and if this materializes communication may become telepathic in a new world.

What is envisaged as communication into the future may be expressed as follows: We may talk about 'the white sand beach with emerald-green water' to create an image of sand and water and arouse the sensation of vision and smell by describing the air, the shoreline vegetation of trees and the colourful flowers, but the words fail to capture the intensity of the experience.

Connecting technology to the human mind creates the possibility of expressing the visual images on an external format and present the real visual and emotive experience with supported speech.

We have witnessed the connection of the mind to the prosthetic hand where thought can initiate action. This is the start for other endeavours and the thought is that the beginnings of change may come not from engineers committed to artificial intelligence or those who are invested in designing and developing communication devices but from the gaming industry.

Video games are robust and require focused attention and intuitive motions, I feel that there are software engineers who are contemplating the transference of thought, an no paddles, to screen motions. This may be the start of a new revolution, and a generation to come will be the recipients of mind-directed visual communication.



LITERACY

Pictogram Symbols are valuable cues to learning alphabets, words, spelling, reading and writing. Changing the symbol and text positions on the page from session to session encourages cognitive learning rather than rote memorization.

The advantage of using Pictogram Symbols is that worksheets can be created easily and customized for the child/student or for a class of students and can be used effectively to 'Teach and Test'.

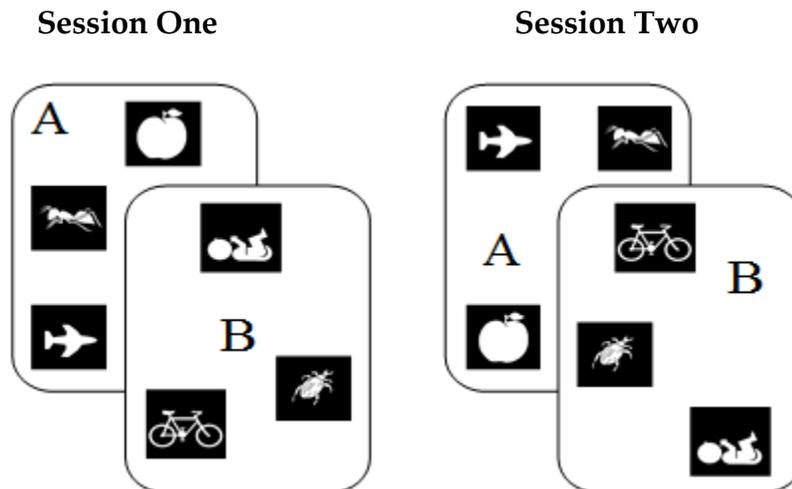
The strategies described in the section can be readily applied to:

1. Teaching English as a Second/ Additional Language (TESL - TEAL)
2. Learning a Second Language

Pictogram Symbols have been translated into many languages and are available through the Swedish Pictogram software

The Alphabet

Arrange and re-arrange the symbols on the page from session to session to teach the alphabets and words beginning with an alphabet cognitively. This process is an effective way of 'Teaching and Assessing'.



Vocabulary

Pictogram Symbols can be used effectively as visual cues to develop receptive and expressive vocabulary for functional items. Select items from the symbol bank to create visual-text stories.

Action Symbols



Animals & Insects



Appliances & Tools



Bathroom Items....

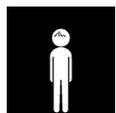
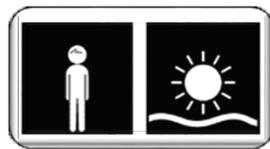


Large cards can be used for group or class activities. Vocabulary items are used for discussion, association, categorization, for a writing assignment or for an art or craft display. Students can use *PictoPrint Merit* to select symbols and prepare them for the vocabulary session.

Vocabulary through Stories

Create stories using Pictogram Symbols that are age appropriate. For the young child the words may be functional while for the older student the story may focus on a theme.

A Long Day



Billy lives with his

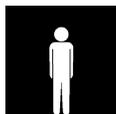


Mom and



Dad.

His



Dad works in an



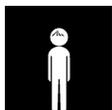
office and his Mom

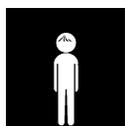
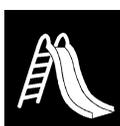


is a



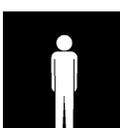
nurse.

 Billy has a dog called  Tex and they like to play at the park 

 Billy plays on the  swing, on the  slide and

 on the sand pile.

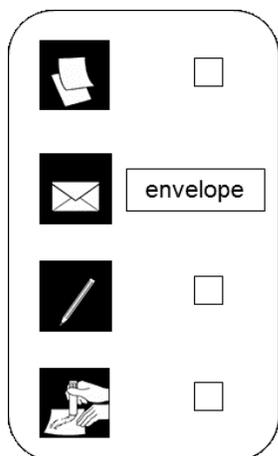
During the day  he goes to  school and plays soccer 

After  school his  dad helps him with his homework

 At night his  Mom  reads stories to him and he

goes to  sleep.

Word Recognition – Sight Vocabulary



pasting

paper

pencil

Use the Training Board and place target symbols beneath the plastic sheet. Give the child/student the printed words and ask him/her to match the word to the symbol.

The symbols can be re-positioned for each session to assess 'Learning and Assessing'.

The objective is to have the child/student match the word with the symbol. A record may be maintained to determine whether learning has taken place and, on the basis of a set criterion - 5/5; 7/7 or 8/10 - word recognition is assessed.

Note:

By changing the position of the symbols on the Training Board or if worksheets are created for each session the 'Teaching & Testing' focuses on cognition rather than rote memorization.

Reading

Use Pictogram Symbols as visual cues to develop reading skills. Once the child/student is able to recognize some words and Pictogram Symbols, then two (2) symbol combinations for reading may be initiated.



Creating Phrases



Building Sentences



Visual Spelling

Providing a visual cue in addition to the spoken word may assist some children/students who are visual learners and students who are learning the written word of a 'new language'. An adapted 'Cloze Method' of testing learning is a positive way to develop spelling skills.

Creating worksheets on the computer is fast and effective because the spelling exercise can be customized for a particular student or for all the students in the classroom.



b	o	o	
---	---	---	--

Activity 1



b	o		
---	---	--	--

Activity 2



b			k
---	--	--	---

Activity 3



--	--	--	--

Activity 4

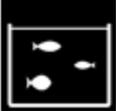
The Adapted Cloze Method

The student fills-in the alphabet or alphabets that are required to complete the word until he/she is able to write the whole word independently either with the visual cue or the spoken word.

Writing and Spelling

Using a cue-card to 'Practice Writing and Learning' is a significant strategy for the visual learner. Writing reinforces word recognition and the recognition of alphabet combinations.

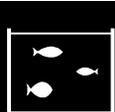
The activity can be converted to the Adapted Cloze Method and learning can be tested using the same format.

	A	q	u	a	r	i	u	m	
	E	x	c	a	v	a	t	o	r
	M	e	d	i	c	i	n	e	
	J	u	s	t	i	c	e		
	E	l	e	v	a	t	o	r	

Part-Word Spelling

After the child/student has practiced wiring the word a number of times is to provide him/her with the same visual-word format but with some of the letters missing. The child/student has to remember the letters to complete the word.

Test 1

					r	i	u	m
---	--	--	--	--	---	---	---	---

Test 2

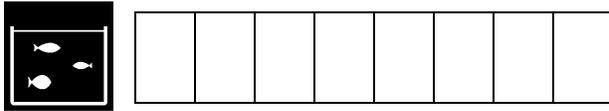
a	q	u	a				
---	---	---	---	--	--	--	--

Test 3

a	q					u	m
---	---	--	--	--	--	---	---

Complete-Word Spelling

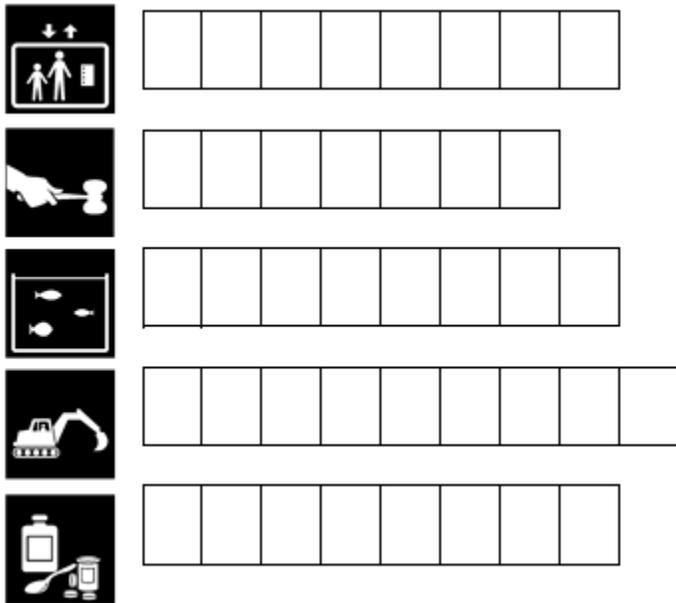
At this stage the child/student is ready to write the word from memory; however, the text format is provided to assist the remembering the sequence of letters for the word.



The final stage is when all cues are removed and the student has to rely on his/her own ability to recall the spelling of the word.

The Test Format

Re-arrange the position of the symbols and the text spaces on the page so that there is still the basic visual support but the changed positions of the symbols require some level of recall and cognition.



Students are creative and technologically competent and pairs of students can create 'spelling worksheets' for other students in the class or one grade may prepare the work sheets for another grade once the spelling words are identified. This is a positive experience in 'active learning'.

Visual Spelling Worksheet

Most of our learning is visual and for some students visual learning is the prime channel for learning. Creating visual images supports learning and remembering and an activity which provides the visual cue and the spacing for the number of alphabets for the word assists the learning process.



--	--	--	--	--	--	--	--



--	--	--	--	--	--	--	--	--	--



--	--	--	--	--	--	--	--



--	--	--	--	--	--	--	--



--	--	--	--	--	--	--	--

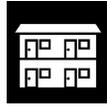
Spelling with Options

The 'Friday' Spelling Test

This approach is to provide the child/student with a visual cue and two or three spelling options. The test is to recognize the correct spelling after a period of learning through a "Word Recognition" strategy or through the "Adapted Cloze Method". The test sheet would look like this:



adress address addres



apartment apertment appartment



beddroom bedruum bedroom



blamket blenket blanket



clothes closes cloths

Crossword Spelling

This is a challenging and 'creative' activity for the Instructor or it can be both a creative and learning experience for the student or student groups. Within a class student groups can create crossword spelling worksheets and the sheets can be used for 'Learning and Testing'. Students from a higher grade may create these worksheets for a junior grade and it becomes a learning experience for both grades of students.

Two examples of what a Crossword Worksheet may look like are presented:

COMPREHENSION

Cat & Dog

It was a sunny day  and Mandy  took her cat  Misty

for a walk. Suddenly, a huge dog  came running and barking into the

yard. It frightened  Mandy and she ran into the garage  and closed the door.

Then she thought about Misty,  “Where’s Misty, Where’s Misty”, she cried out aloud. The barking continued and then it stopped  Mandy opened the door slowly and she saw a man  putting a leash on the dog, but there was no sign of Misty.

Mandy’s mother  came running out of the house  to see what the noise was all about.

“Hi Mrs. Harris”, said the man  with the dog. “Hello Mr. Bell”, said Mandy’s mother.

“Where is  Mandy and what was all that barking about?”

 Mandy heard her mother’s voice and came out of the garage.

“Where’s  Misty?” asked Mandy and  Mr. Bell explained that

his dog  Max had frightened  Misty with all his barking and 

Misty climbed up the tree  and was safe.

“I will get a ladder  and bring  Misty down!” said Mr. Bell.

 Mandy called and tried to get  Misty to come down from the 

tree, but the  cat was still frightened of the  dog.

 Mr. Bell placed the  ladder against the tree and climbed up but

when he tried to reach  Misty, she got very frightened and climbed higher up the  tree.

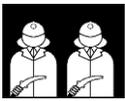
“I can’t climb any higher”, said  Mr. Bell. “I think we will have to call

the firemen.  They have trucks  with long ladders.

I am sure they will be able to bring  Misty down.”

“I will telephone  for a fire truck”, said Mandy’s  mother and she went into the  house.

Mandy heard the siren of the fire truck  and there it was. The firemen

 raised the  ladder and one  fireman climbed up

the  ladder and brought  Misty down.

 Mandy and her  mother thanked  the firemen 

for rescuing  Misty.

 Mr. Bell was really sorry that Max  had frightened Misty 

and said that he would make sure to keep the  gate closed when 

Max goes into the yard.

QUESTIONS



What was Mandy's cat's name?



What was the dog's name?



Why did the cat climb the tree?



Where did Mandy hide when the dog came into the yard?



Who telephoned for the fire truck?



What did the fireman use to reach Misty?



What was Mr. Bell going to do to keep Max in the yard?

Use Pictogram Symbols to consolidate “Questions” for verbal and nonverbal students. The symbol may be used as a focus point for a response.



What happened?



When did it happen?



Where did it happen?



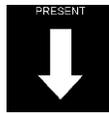
Why did it happen?



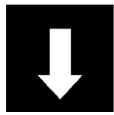
Who was involved?

TENSES

The three dimensions of time, Past, Present and Future, can be indicated through the use of arrows with the Pictogram Symbol.



Present Tense



I am reading.

Past Tense



I finished reading the book.

Future Tense



I will read the book tomorrow!

AUXILIARY VERBS

Is - Are



The book is new.

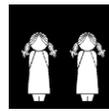


The books are new.

Was - Were

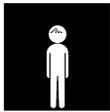


The girl was here.

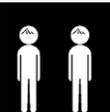


The girls were here.

Has - Have



The boy has a book.



The boys have



books.

SUBJECT - VERB AGREEMENT

Comes - Come



The girl comes home



from



school

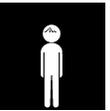


The girls go home



school

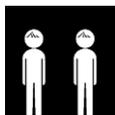
Goes - Go



The boy goes to



school.



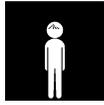
The boys go to



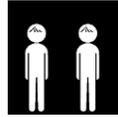
school.

SINGULAR & PLURALS

/s



boy



boys



book



books

/es



bus



buses



glass



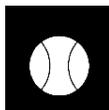
glasses

PRONOUNS

I - You



I have a



ball

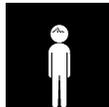


You have a



kite

He - She



He has a



book

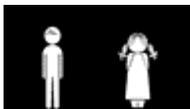


She has a



pen.

They



They have



books and



pens

NUMERACY

For young children learning to count is a game and this learning comes through stories like, “The Three Little Pigs”, or rhymes – “One, Two, Buckle My Shoe...” The smaller numbers are easier to comprehend and express thus, one and two are commonly known by two to three-year old children and as they mature the numerical sequence is learned. The process is not always even in the learning of numbers and many children rely on visual strategies to learn the sequence and relate to it successfully.

The Foundation

The foundation for numeracy is the solid understanding of the base numbers and the application of the numbers into the complexities of addition, subtraction, multiplication, division and then into the advanced forms of algebra, trigonometry and geometry.

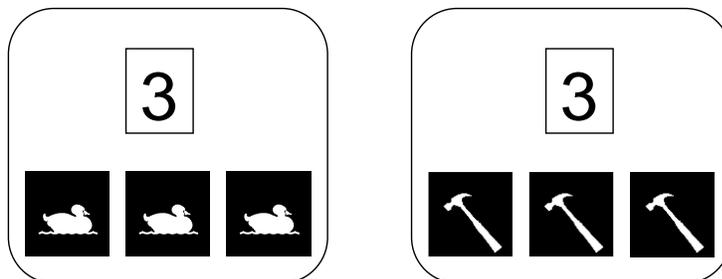
At the functional level the concepts of addition and subtraction are basic to all our transactions and the solid comprehension of these two elements assist in our grasp of higher arithmetical and mathematical endeavours.

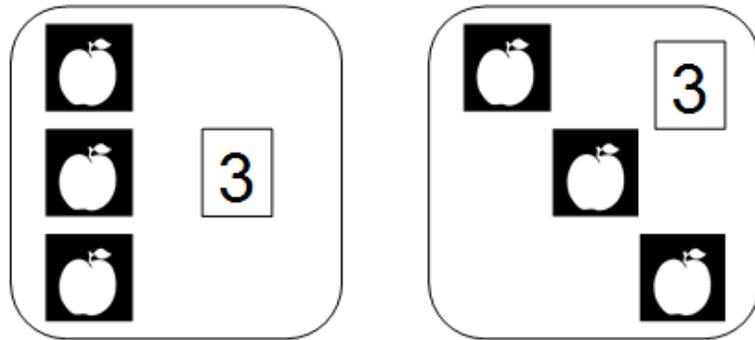
Pictogram Symbols can be used to illustrate the concepts of addition and subtraction in a concrete manner for children/students and ‘Teacher Prepared Materials’ can be customized for specific students or for all the students in the class.

The symbols can also be used to illustrate multiplication, division and fractions.

Sequencing

Pictogram Symbols can be used expediently to teach number sequencing that is understood and can be applied by the child/student in daily interaction. The symbols can be changed from session to session and the configuration on the page changed so that learning is ‘cognitive-based’ and not a rote task.





ADDITION

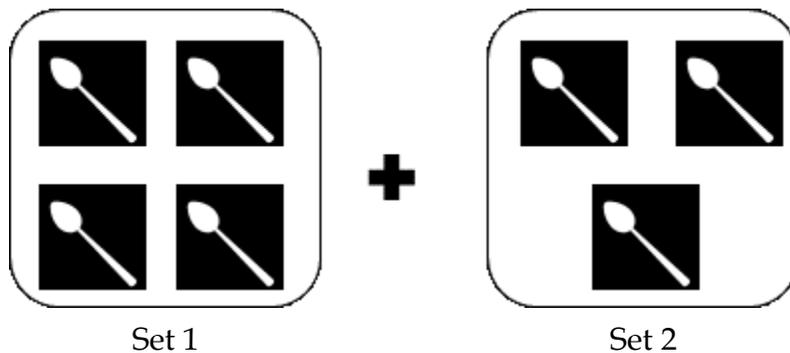
Setting-out concrete examples for addition with a variety of symbols and a variety of configurations reinforces the learning process. PictoPrint is easy to use and the child/student can use the computer to create his/her own worksheets which reinforces learning and competency for simple addition. The worksheets may be used for a class activity or for students in a lower grade.

Demonstration

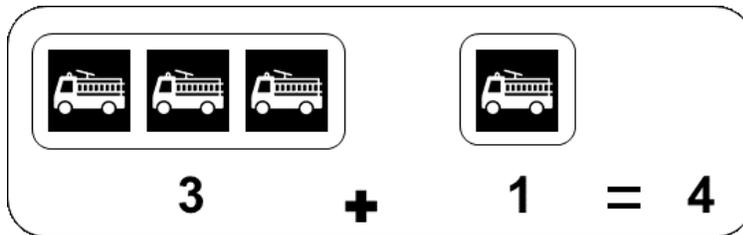
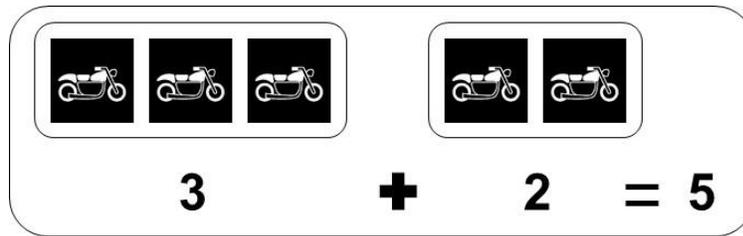
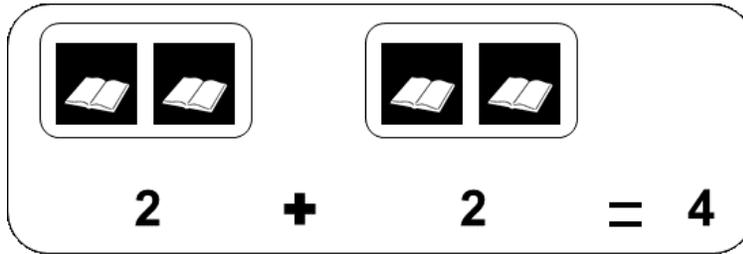
Place the selected number of symbol cards (set one) before the child/student and then place the second set of symbols separate from the first. Ask the child/student to count the number of symbol cards in the first set and then in the second set and then by combining the two sets the child calculates the total number.

Example:

$$4 + 3 = ?$$



Worksheets



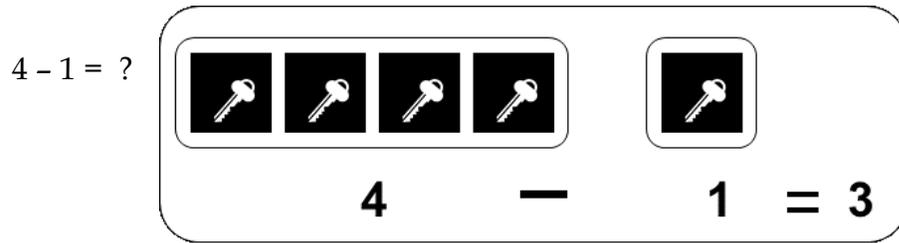
SUBTRACTION

Addition and subtraction are the two basic transactions for education and interaction. A solid foundation equals success and success develops strength. Once more, the child/student can create his/her own worksheets using PictoPrint and these worksheets may be used for the class or for a junior grade.

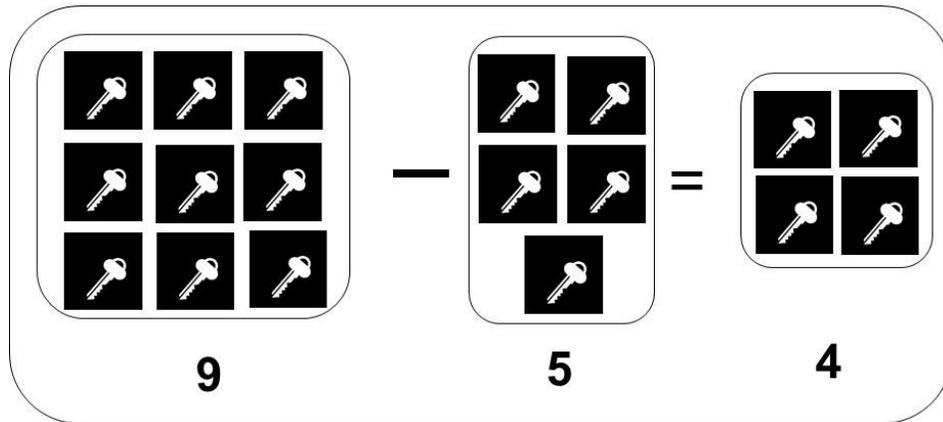
Demonstration

Place a selected number of symbol cards before the child student and ask him/ her to count the number of cards. Then take away a selected number of cards and ask the child/student to calculate how many cards are left.

Example:



$9 - 5 = ?$

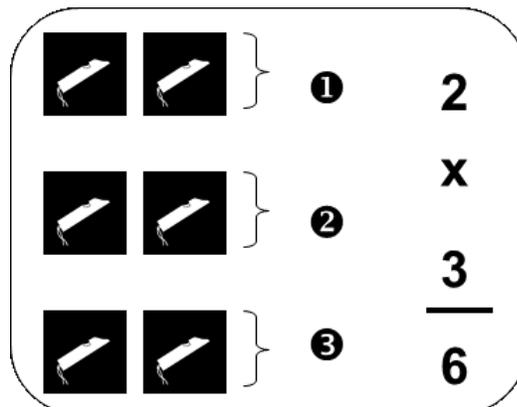


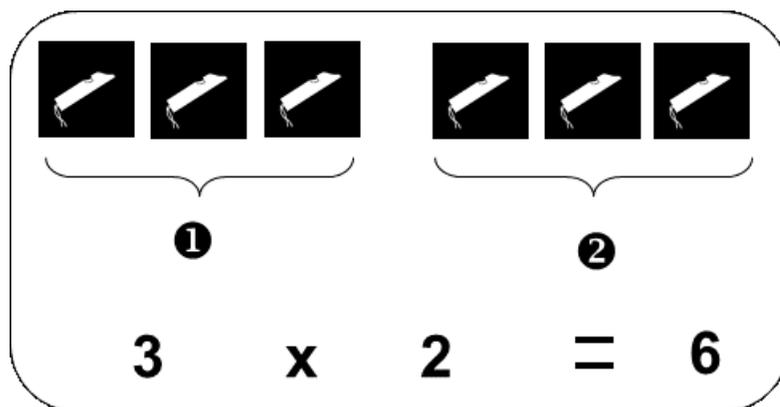
MULTIPLICATION

Multiplication can be expressed through demonstration or through the preparation of worksheets.

Demonstration

Make Pictogram Symbol cards and arrange three-sets of two to demonstrate the multiplication of 2 by 3.

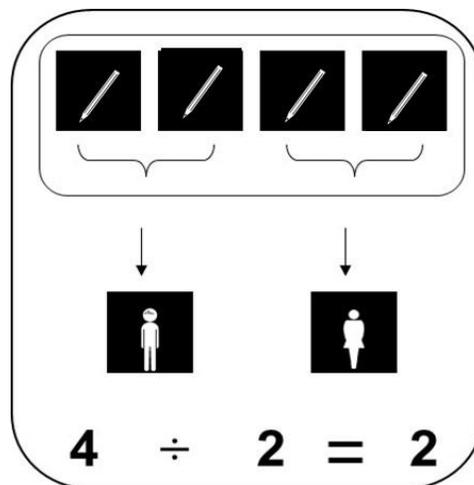
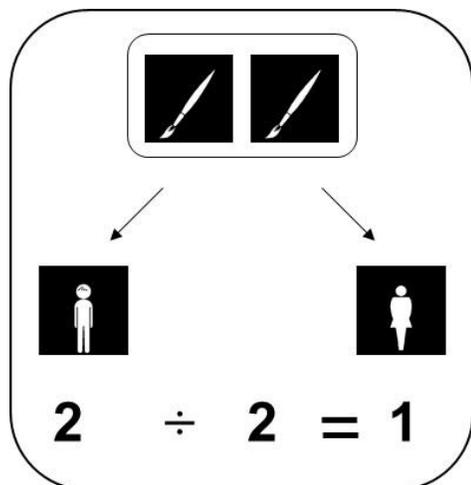




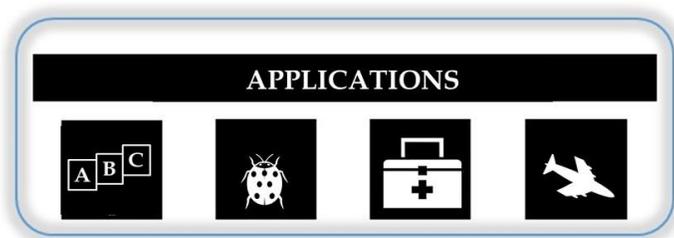
SHARING

Use Pictogram Symbol cards to demonstrate the concept of sharing/ division

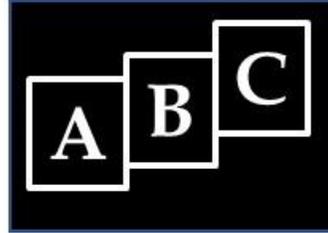
Example: "There are two paint brushes. How can we share them with the boy and his Teacher?"



If the teacher had 4 pencils and wanted to share them equally- How many will she give to the boy and how many will she have?



Alphabet Rhymes
with
Pictogram Symbols



Z says ZOO



The zoo is a fun place to go
There are so many animals to see.
I like the tigers with their stripes
and the monkeys climbing trees.

The elephants and the crocodile
and the lion in his cage.
You have to see the big white bear
who thinks he's acting on a stage.

The zoo has birds and ducks and snakes
and so much more to see.
So many, many animals
to keep you company

Subhas C. Maharaj

Using Pictogram Symbols to create Daily/Weekly Schedules.

Elementary School Student

Bus 	School 	Bell 	Classroom 
Addition 	Reading 	Recess 	Writing 
Gym 	Lunch 	Craft 	Music 
Bell 	Bus 	Home 	

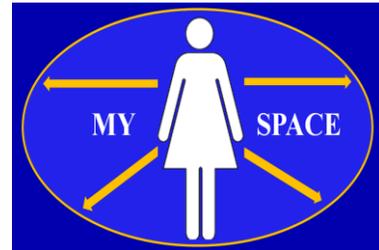
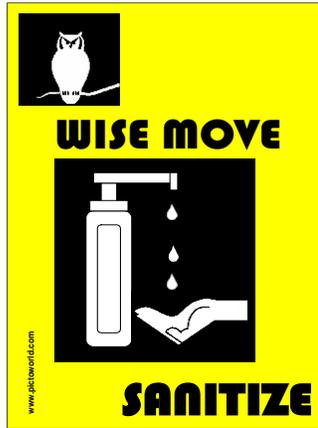
Junior School Student

Classroom 	Math class 	Focus group 	Computer class 
Lunch 	Literature class 	Laboratory 	Music class 
Bus 	Home 	Homework 	Martial arts 

COLOURING PAGES

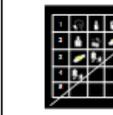
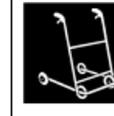


DISTINCTIVE POSTERS



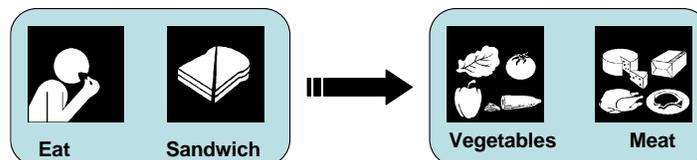
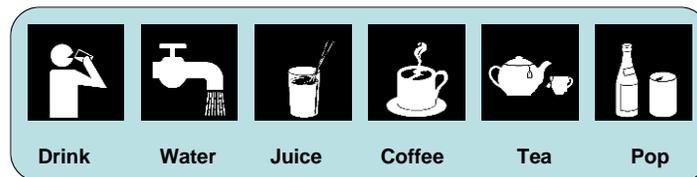
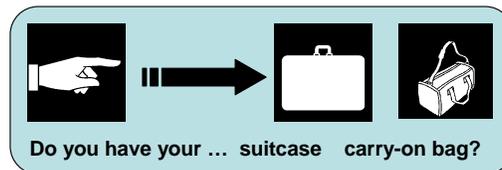
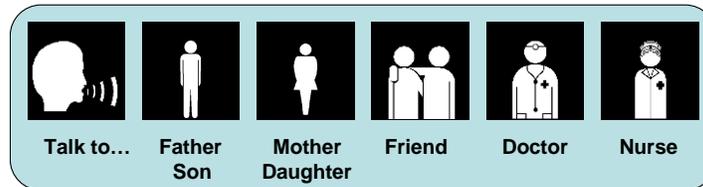
IN-HOSPITAL CARE PLAN

The IN-HOSPITAL CARE PLAN was designed to inform the patient and family regarding the procedure and process during the hospital stay. This is also a step-by-step explanation during the family and staff conference and the use of the document maintains the formality of the conference so that no information is overlooked or confused with another treatment procedure.

	Nutrition	Hygiene	Wound Care	Medication	Activity	Discharge Planning
Day of Surgery	 Intravenous	 Assistance	 Dressing Checked	 Given Regularly	 Deep Breathing	 Communication Board
Day - 1 Post-Op	 Fluids Only	 Basin	 Dressing Changed	 Oral Pain Medication	 Sit - Stand with Assistance	 Discharge Planning
Day - 2 Post-Op	 Regular Diet	 Wash at Sink	 Dressing Changed	 Oral Pain Medication	 Seated for Meals	 Questions about Medications
Days 3-5 Post-Op	 Regular Diet	 Shower or Wash at Sink	 Dressing Changed	 Ask Questions about Meds	 Walking & Climbing Stairs	 Out-patient Physio
Discharge Goals	 Regular Diet	 Shower	 Home Management	 Medications	 Mobility	 Home

INFORMATION AT AIRPORTS

This request was made to establish initial contact with a traveler to a foreign country and who does not speak the language. Immigration difficulties may cause delays and anxiety for the traveler. Pictogram symbols can assist in obtaining pertinent information and a drink or a snack may calm the person.

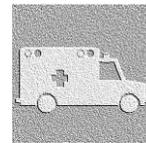
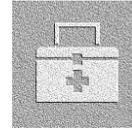


PictoSho[®]

Visual Symbol Communicator

A quick and effective 'Communication Partner'
when the patient has difficulty speaking

- ❖ When the patient is -Deaf or Hard of Hearing.
- ❖ When the patient:
 - has had a stroke
 - has been in a vehicle accident and cannot speak.
- ❖ When the patient -
 - is overcome with smoke inhalation and cannot talk.
- ❖ When the patient -
 - does not speak English.



PictoSho[®] is a Visual Communicator that can be placed in -

Ambulances
Police Cars
Firetrucks
Hospitals
Health Centres
Medical Clinics

Each page identifies a QUESTION
and OPTIONS for a RESPONSE.

Each page is LAMINATED
on both sides.

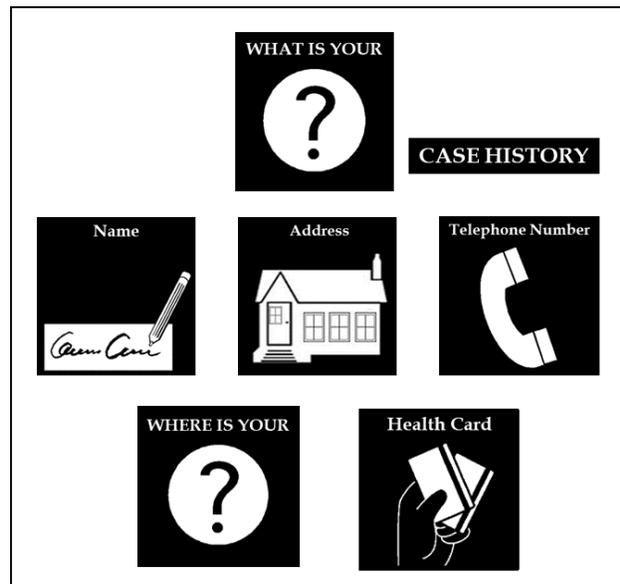
"Write & Wipe" for easy use.

Profile a CASE HISTORY

Initiate an ASSESSMENT

Implement the TREATMENT - MEDICATION PLAN

Initiating a Case History



**GERMAN - ENGLISH
SPEECH LANGUAGE EVALUATION**



This is a
Dos is a

Baby

On my bed I have a
Da kind hodt a

Duella

This is a big
Dos is a grosser

Fisch

My mother is in the
Mei mutter is in

Garten

Tell me something about the two pictures!
Sog mir vos fu dae zwa picture!

Bly

Bichella lesson

Kampel

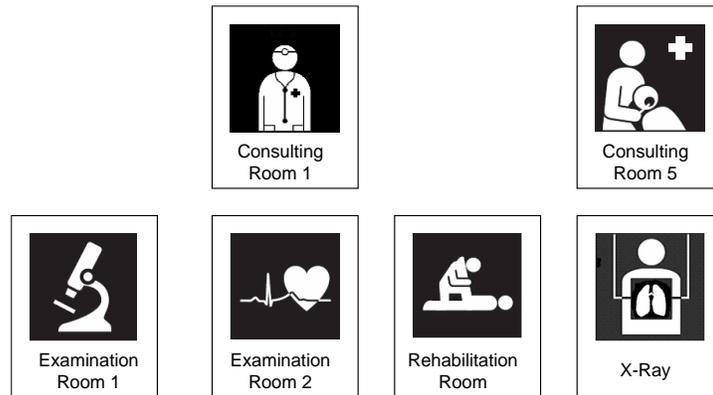
Hoar

Page format for language skills

Example:

The child/student may say:
"I write with a pen in a book"
in German and it is translated into
English and language structures can be
assessed.

Rooms and Department Identification – Sukuyoka Building Osaka, Japan.



	Passport Number
	Drivers Licence
	Address
	Telephone
	Vehicle: Year, Make & Model
	Licence Number
	Are You the Driver? YES <input type="checkbox"/> NO <input type="checkbox"/>
	Number of Passengers
	Where are You Going?
	How Long?
	How much Money are you Carrying?
	Shopping: \$

	Drugs YES <input type="checkbox"/> NO <input type="checkbox"/>
	Weapons YES <input type="checkbox"/> NO <input type="checkbox"/>
	Animal Products YES <input type="checkbox"/> NO <input type="checkbox"/>
	Fruit YES <input type="checkbox"/> NO <input type="checkbox"/>
	Vegetables YES <input type="checkbox"/> NO <input type="checkbox"/>
	Jewellery YES <input type="checkbox"/> NO <input type="checkbox"/>
	Electronic Goods YES <input type="checkbox"/> NO <input type="checkbox"/>
	Are you going to work in the USA?
	Do you have a Work Permit?
	Do you have any previous convictions?
	Additional Information

Side 2

VISITOR INFORMATION

Requested by USA

PICTOVIEW

A Practical Option for the Non-Reader

PICTOVIEW is a functional display of 'activity sequences' for individuals who may not remember information or are unable to recall activities for the day.

Communication boards, picture boards, photograph boards and text-boards are commonly used in long-term facilities to indicate birthdays, special occasions and daily activities. The board location becomes the hub for staff and resident interactions and is generally located in an area that is easily accessible within the facility.

This strategy may be termed 'collective communication' and in some instances may become the gravitating point for information dissemination.

PICTOVIEW creates 'time-frames' for the day within the 'community of the facility'.

The photographs below illustrates the PICTOVIEW Board and the location of the Board in one long-term facility.



The plexiglass pockets allow for the ease in changing the visuals.

There are over 2400 Pictogram Symbols which can make this information board extremely versatile and visible within the facility. PictoView gives the non-reader the sequence of events during the day.

RESTRICTED FOODS



These symbols can be used to identify restricted food on the dietary plan.



*Pictogram Symbols Create a Pictorial Language
and
a visual supplement to natural spoken languages.*