**Sitting position**

Children with CP suffer often from abnormal muscle tonus and uncontrollable reflexes in addition to distortions, and they may need extra support for safety and security.

The sitting position influences all the other body movements. If a lot of strength and energy is spent on just sitting, it is not easy to concentrate on exercises and even more difficult to use the hands to do things, such as writing.

**Problems:**
- Abnormal muscle tonus, etc. can make it difficult to bend at the hips,
- the pupil may easily slide forward on the seat.
- Their legs often cross involuntarily, which makes it even more difficult to keep the balance.
- Head and shoulders are pressed backwards and it becomes difficult to use the hands.

**What to do:**
- The sitting position should be as symmetrical as possible.
- Correct seat depth and height is important.
- The legs should get good support on the floor or on a foot rest.
- Support at the hips and sides is often a valuable help.
- If a head rest is necessary, it should not be angled to such an extent that the head is leaning too far backwards.
- Seat belts and safety harnesses are often necessary.
- A good sitting vest helps the child to sit more upright in the chair.
Alternative sitting/lying positions

Even if a functional working position is found for the pupil, he/she should not be left sitting in that position all day long. It is necessary to change the sitting position frequently in order to stimulate development and avoid distortions.

Some kind of sitting bag - filled with polystyrene pellets - is excellent for relaxation, and may be used when resting in the prone position on the floor.

A wedge shaped pillow is another good support when lying on the stomach. Such a wedge may be made of wood padded with foam rubber, and must be high enough to enable the child to support himself on the elbows.

Standing positions

Various tilting boards and standing boards may be useful, helping to stretch the body and transfer weight to the feet and legs. The pupils may well be activated in this position, too. For those with lesser functional handicaps, a strap around the bottom may be all that is necessary to keep them safely in standing positions, without fear of falling.

5 . Working desk or table

The table is another element which influences the working position.
- Correct height is very important;  
  - Not too high, causing the shoulders to rise,  
  - Not too low, causing the back to bend.  
- The pupil must sit comfortably;  
- Close to the table to get as much support as possible.  
- The angle of the table will depend upon the child's vision. Some children with CP will need to have toys, books and paper placed in special angles in order to make the utmost of their vision.  
- An angled table or work top may however often be advantageous. The angle of vision will be straighter and the pupil needs not bend forward to read.  
- A cut-out semicircle in the table for the torso allows a secure position, at the same time giving good support for the forearms when writing.

6 . Attachments

Pupils with CP often suffer from involuntary movements and may experience problems because materials, etc. are not lying still. A variety of non-slip supports or pads is available, made of rubber, foam-rubber, plastic, etc. Other objects may be taped to the tabletop, clamped down with small clamps, clothes-pegs and clips, or
weighted down with sand bags, weights and stones.

An edge around the tabletop may also stop things from sliding off the table.

7. Writing utensils

The simple act of writing with a pencil incorporates a variety of skills or characteristics. Most important is a good sitting position, as mentioned previously. In order to manage the delicate movements of the wrist, shoulder stability is necessary, as well as a good grip. The sheet of paper or book must be held steady with the one hand, while the other writes, and eye/hand co-ordination is essential. The brain damage makes all this nearly impossible for many CP-children.

- Chunky, fairly soft pencils are preferred. (Soft to avoid having to press hard against the paper and chunky for easier gripping.)
- Pencils with extra thickness are useful for many categories. The extra thickness may be achieved by padding the pencil with soft rubber, plastic, cork, etc.
- Others may need more specialized writing aids.
- A cross-grip allows the hand to work in a more functional position.

Writing with a pencil may be quite impossible for some pupils, and we don't want pupils to struggle hard in order to produce a more or less unintelligible handwriting when there are so many aids available. Such aids may save a lot of energy in the act of writing, channelling it into more constructive schoolwork.

- An electric typewriter will greatly facilitate the writing effort for many pupils, and various extra aids make that tool available for many more.
- A large, wooden plate to support the forearms, with a cut out in the table for the torso, gives stability and rest for the arms, and makes it easier for the child to use his fingers.
- A special keyboard-plate of metal or plastic prevents the pupils fingers from hitting two keys at a time, simultaneously giving support to the fingers.

For pupils with more serious disabilities, there are remote-controlled typewriters and computers with special programmes which may be operated by only one or more keys or switches. The switch is positioned to enable the pupil to use that particular part of the body over which he has the best possible control - finger, palm, foot, head, etc.

If the pupil is at all able to learn reading and writing, there is nearly always a technical solution to the writing problem.
Pupils who really need a typewriter usually have very poor finger motor, seldom using more than one or two fingers. The pupil must learn to operate the machine, become familiar with its functions and where the letters are placed and find out how to hit the keys before demands are made on the quality of the writing.

8. Reading aids

CP-children have often problems following a line when reading.
- With the simple aid of a ruler underneath the line, this problem may be overcome.

A support for the book improves the angle of the book and makes it easier to read. If the support is adjustable, the angle may be varied according to individual needs.

Another problem which is frequently experienced, is turning book pages. Some pupils may benefit from the use of a finger stall; others from a stick, etc.
Books with thick pages and room between each page are the easiest to handle for pupils with poor finger motor. Large paper clips or clothes-peg may be placed on the pages (stiff paper), or Books may be prepared with a piece of plywood, plastic or wooden beads between the pages.

9. The arts

Activities that promote creativity are important for all people in all ages. For most pupils it is more important to be allowed to create something of their own than to make something nice with a lot of help. Small, practical aids may however make it easier to accomplish this. In addition most of these activities also indirectly add to the development of motor skills.

Choose activities which can easily produce results and which the pupils can manage without too many problems or extensive assistance. This will promote the pupil's experience of mastery and encourage for new ventures.

Pencils and colours

Thick pencils and brushes are very suitable (see Writing aids) and paint boxes with large colour areas are relatively easy to handle. The water jar must be stable to avoid overturning, fairly wide at the base and only half-full of water.

Scissors

Using scissors is difficult as it demands delicate movements of both hands simultaneously. A pair of scissors with large hoops is easier to handle if such is at all available. Ordinary scissors fitted with extra handles and fastened to a wooden plate can make this operation possible for many pupils.

Scissors for the left-handed are available.

Embroidery

Embroidery on coarse material with a large needle is a good activity. A large embroidery frame fastened to the table may facilitate this operation.
10. School garden

Nature is a great teacher, and a garden may be utilized to give the pupils training and experiences, in different areas as well as a lot of pleasures. A multitude of activities may be performed in a garden; activities which offer training of senses, perception, motor functions such as co-ordination and balance, as well as testing the understanding of concepts and the ability to function socially.

In order to enable pupils who are unable to walk, or the users of wheel chairs, to enjoy the garden, it must be specially adapted to allow the use of various aids. Crops must be grown in boxes, frames, barrels, etc. which are high enough to be reached from wheel chairs or a standing position. Plants can be planted in such a way as to enable the pupil to lay on the ground while attending to the plants, touching and smelling them.

Other pupils may be able to work sitting on the ground if they are supported by an angled seat, etc. Still others must be in the prone position, aided by wedge shaped pillows, or lying on the side, but the latter position offers only limited work radius.

11. School kitchen

Garden products are an excellent basis for training in the school kitchen.

Tables or work benches of a suitable height are prerequisites for this kind of activity. Specially prepared kitchen utensils may also necessary.

Some examples of well-appointed utensils, particularly suited for pupils capable of using only one hand:

Wooden board with nails to fasten things to be cut (vegetables, meat, etc.).

Board for buttering.
12. Aids for pupils without the ability to use their hands

Some pupils are not able to use their hands, but may have control over their feet and can do simple things with them. Others have better control over the head movements, and some may even be able to use a mouth stick or a stick fastened to their forehead.

A mouth stick
A mouth stick can be very simple:

- A mouthpiece which they can clamp their teeth around and which they may point or write with.
- The mouth stick can be stored in a special rack or stand, enabling the pupil to get hold of it unassisted.
- The advantage of a mouth stick is that it is easily portable, and that the pupil in most cases can put it in the mouth and take it out again without assistance.
- The disadvantage is that it prevents talking when in use, and demands good mouth motor and head control.

A forehead stick

- A forehead stick demands less head control, but the pupil needs assistance in putting it on and taking it off.
- When it is not in use, it frequently gets in the way of other tasks.
- A forehead stick can for instance be fashioned with the aid of a bicycle helmet.
- It is essential that the helmet is a tight fit, preventing it from sliding off when the stick is being used.
Various games are suitable for practising the use of mouth or forehead sticks. A good idea is to fasten a small magnet on the end of the stick, using pieces with paper clips or other small metal objects glued on. A painting brush or pencil may also be attached to the stick, enabling the child to paint or draw, etc.

Again, a good working position is important. When the rest of the body is stable and relaxed, better head control is achieved. Spend some time trying out various angles and stick lengths to find the optimal solution. A slightly tilted tabletop or work surface may improve results.
QUALITY OF LIFE: THE ARTS AS A TOOL FOR SELF-AWARENESS, SOCIAL INTERACTION, EXPERIENCING, EXPRESSING AND SHARING FEELINGS
Miriam Donath Skjøtten

WHAT DO WE MEAN BY QUALITY OF LIFE?

Quality of life includes the fulfilment of basic needs like physical comfort as housing, food, hygiene and medical care, social and emotional awareness and interaction and access to knowledge.

It is rewarding to see children with handicap increase their knowledge and overcome some of their functional problems. However, the question may be raised whether training of functions often overshadows the needs for social and emotional awareness and interaction.

The aim of this chapter is to share some thoughts about how one can increase the social and emotional awareness and interaction of severely handicapped persons - both children and adults.

The word "child" will be used throughout the chapter; however, the chapter also applies to adults.

The basic things to remember are:

- A person with handicap should first of all be considered as a person, as a whole individual with physical, social, emotional and intellectual needs and capacities and not as an amalgam of independent special problems that need treatment.
- Children with handicap are individuals with needs that are personal and the fulfilment of these needs should be adjusted accordingly.
- Children with handicap should be encouraged to be active, to interact and to communicate and therefore to take initiative (see also chap. II).
- Children with handicap must be given the time needed to develop awareness so that they may experience emotions, social belonging and interaction.
- Children with handicap must be given the time needed to develop tools to express emotions and actively interact with the people around them.
- Children with handicap must, like other children, have the opportunity to influence their lives and to manipulate their physical surroundings.
Children with handicap should, side by side with their growing awareness of mastery and competence, also become aware of their weaknesses and the possible help they may need in mastering their lives.

WHO CAN CONTRIBUTE TO THE QUALITY OF LIFE OF CHILDREN WITH SEVERE HANDICAP?

Generally speaking one can say that a country’s laws, legislations and economic policy will be fundamental for the quality of life of all citizens, including the handicapped. However it may prove to be important to make special efforts in order to increase the quality of life of children and adults with handicap. Parents, teachers and psychologists should agree upon and share the attitudes needed in order to do so. It will also be of great help if health personnel will not only focus on needed treatment but take into consideration the whole person and this person’s whole life situation.

Those who can contribute most to the quality of life of children with handicap, and especially those with severe handicaps, will be parents, siblings, and teachers. They are the ones who spend the most time with those children, know them best and are in the best position to interpret and understand them, interact and communicate with them and develop empathy with them.

HOW CAN WE IMPROVE THE QUALITY OF LIFE OF PERSONS WITH SEVERE HANDICAP?

We always think that knowledge and better performance will result in a better quality of life of individuals, groups and nations. This is true if in the process of sharing knowledge we also promote emotional, social and cultural values. This is important if new knowledge is to become integrated within the person and stimulate to creativity rather than result in mechanical behaviour.

The emotional and social values are strongly bound to culture. When sharing one has to be careful with the integrity of those one shares with. Existing cultural values must be supported and promoted. Sharers must be careful not to impose their cultural values on those who are receiving help.

The cultural values are found in different aspects of life, in religion, in the ways of building houses, in the ways of preparing food, in clothing and what we call the arts, traditional and modern.
Children with severe handicap have for years been taught and trained to give expression to some of their basic needs. This is very important. However, time has come to discover in which ways these children also can become aware, differentiate and communicate their emotional needs and experiences. This may increase their sensitivity and give them the possibility to develop empathy, which will give them greater capacity for interaction and mutuality.

1. The arts as a tool for experience, interaction and communication

It is presupposed in this chapter that severely handicapped children receive correct and sufficient nutrition as well as physical comfort, socio-emotional attention and medical care.

I am going to explain and give some examples of how teachers (parents or siblings) can help to improve the quality of life of children with handicap through activities. However, good activities provide only a structural frame to help mobilize one's personal inner resources and involvement.

Whether or not a child learns verbal language, non-verbal elements of communication will always play an important role in interaction and communication, creating important nuances in all communication.

Every means or form of expression has some possibilities that are unique for that specific form. This is one of the reasons why the different art forms, dance (movement), music, painting, sculpture and traditional crafts, are all important for us. This is why these ways of expression, and not only verbal language should have an important place in the education of the all children, especially of children with handicap.

Non-verbal forms of communication, as manifested in the arts, are particularly important for children with handicap because they add to and fill in existing verbal language or substitute for its lack. It will also offer the child impressions he otherwise will not have the opportunity to experience.

Through the arts, consumed actively or expressed, a person may receive: a variety and richness of all kind of experiences, a variety and richness of emotional and social experiences in particular, inspiration for thoughts and fantasy, possibilities for expression and possibilities for self-realization.

What is special about the arts?
Arts such as dance, music, painting, sculpture, crafts can: preserve cultural heritage; create, redeem, abstract, give structure and form feelings and thoughts; integrate feelings and thoughts; unite movement, rhythm, sound and form; unite movement or sound on the one hand and stillness on the other one; unite tension and relaxation; unite space, time, force and flow; integrate body and soul; unite play and ritual; unite truth and fairy-tales, unite fact and fantasy or dream; and unite what is of individual and what is of common interest.

I have chosen dance/movement and sound/music activities to show why and how one can help to enrich the soci-emotional awareness of severely handicapped persons. I have chosen dance/movement and sound/music because they are always available to us and can be independent of facilities.

2. Movement and sound qualities

Planned as well as impulsive use of movement and sound activities can add to a child's social interaction and development of mutuality as well as emotional and social self-realization and expression. These are important elements if we want to increase the quality of life of all people and especially of people with handicap.

If we want to achieve this, we must put the emphasis on interaction rather than on performance. The tool for interaction will be movement accompanied and/or inspired by sound, or we may call it dance and music.

I would like to clarify the following concepts as used in relation to the purpose of this chapter.

Movement is change between tension and relaxation with an extension in space and time.

Dance is movement used as a non-verbal tool to express or describe emotions, states of mind, thoughts, ideas, situations.

Sound is any sound created through the use of body parts, things in the environment, musical instruments as well as sound appearing in nature.

Music is sounds organized in some way or another used to express or describe emotions, states of mind, thoughts, ideas.

By moving or producing sounds we express ourselves. We may do this on purpose, we may do it without planning but be aware of it and we may do it not being aware of it.

I would like to point out that most forms of expression will directly or indirectly include body movement and the quality of this movement will be an active part of the expression. This will also be true when talking, singing, clapping hands,
shaking a rhythm instrument, playing the drum, playing a string instrument, etc.

Movement qualities
People differ from each other in many ways, including movement quality. We can recognize people by the way they move. A person's muscle tone (muscle tensions), the way the body is built and body size as well as the person's state of mind and emotional experiences will all influence movement quality.

Interaction through movement will require knowledge of the communicative elements of movement. Changes in these elements will result in changes in communication.

The main elements that influence movement quality can be described as follows:

- **Energy**
  The main question is whether one uses much or little tension/energy when moving:
  - does one use a lot of tension or little tension in an expressive movement?
  - what is one's relation to gravity?
    - does one give oneself to gravity?
    - does one give up to gravity in resignation?
    - can one overcome gravity?
    - does one fight gravity?
  - does one use strong movements?
  - does one use gentle movements?

- **Space**
  The main questions are a matter of:
  - size: large and small movements
    - does one use much space or little space?
    - are the separate movements large or small?
  - shape
  - direction of movement
  - linear or three dimensional
    - does one move through space directly or indirectly?
    - are the movements one makes:
      - round patterns?
      - straight patterns?
      - angular patterns?
Time
The main questions are a matter of:
- speed
- rhythm
  - does one move quickly?
  - does one move slowly?
  - does one use sustained movements?
  - does one use short lasting movements?
  - is there a rhythmical pattern to the movements?
- how are the pauses, or what is the rhythm between movement and stillness?

Flow
The main question is how energy, space and time interact:
- is the flow of movement free?
- is the flow of movement controlled?
- is the flow of movement uncontrolled?
- is the flow of movement over-controlled?

It is important to note that it is difficult to separate these elements from each other. When actually moving, these elements will integrate and expression and movement quality will be manifest. Changing one of the above-mentioned elements may result in a change of quality and may therefore give movement a different meaning.

Sound qualities
We can find parallels between the elements of movement qualities and sound qualities. As people differ from each other in movement quality, their voices will have also different qualities.

We can recognize people by their voice. Voice may also tell us about a person's state of mind. We produce also sound when moving. This sound will also change when the movement is changing.

Using sound and music together with movement in an activity of interaction will also require some knowledge of the communicative element of sound. It is difficult to separate these elements from each other.

There are parallels and differences between the the elements of movement and sound qualities.
Energy
The main question is whether there is a lot or little sound:
- is there only one sound?
- are there many sounds?
- is the sound loud?
- is the sound quiet?

Quality of sound timbre, sound colour
The main questions are:
- what sounds do appear at the same time?
- what is (are) the source(s) of sound?

Time
The main questions are:
- speed
  - rhythm
    - is there an underlying pulse?
    - if there is, how fast or slow is the underlying pulse?
    - is the sound sustained?
    - is the sound short lasting?
    - is the sound short lasting and sudden?
    - is the sound organized in quick rhythmical patterns?
    - is the sound organized in slow rhythmical patterns?
    - is the sound organized in even rhythmical patterns?
    - is the sound organized in uneven rhythmical patterns?

Flow
The main question is what kind of flow there is in the music:
- is the flow of sounds free?
- is the flow of sounds uncontrolled?
- is the flow of sounds controlled?
- is the flow of sounds over-controlled?
- what sounds follow each other (are they jumpy in range or do they follow in a sort of a scale)?
- is the sound range large or small?
- does one use the sounds in an order that can be related to a scale or does one use one sound here and one sound there?

Interpretation of movement and sound qualities
The same movement and/or sound qualities may have different meanings for different individuals. Grown ups may express themselves differently from children;
this may be due to a general maturity as well as specific maturity and/or stagnation. Women may have different ways of expression from men or women's movement qualities may be interpreted differently than those of men.

People from the countryside may express themselves differently from town people, and people from one ethnic culture may express themselves differently from people from another ethnic culture. Religion and other traditions may also result in different use of movement and therefore interpretations.

The use of energetic strong movements may be looked upon as constructive and positive in one culture and be seen as unacceptable and destructive in another; or they may be related to men rather than to women.

However, we can find qualitative elements which are universal, such as the fact that a slow swinging continuous movement and/or monotonous, quiet is soothing and comforting to most children and adults.

Movement/dance and sound/music integrate naturally into one activity, supporting and completing one another. The rest of this chapter will discuss movement and sound as one unit.

3. Movement and sound and children with CP

It is important to remember that children with CP, especially the severely handicapped, lack movement experience and therefore their movement communication will also be poor. But, these children, like all children, have a basic enjoyment of movement and movement also for them is an elementary tool for communication.

One must also note that children with CP have a basic enjoyment of touch, but may have over-sensitive skin, resulting in discomfort when touched.

There are many things the teacher should know before starting to plan activities. Often one also must observe or investigate while carefully doing some activities. Some of the information one must have includes general knowledge about the child, some of which will concern specifically dance and music activities.

Of general information it will be important to know:
- Who does the child like to be together with?
  - Grown-ups?
  - Children with/without handicap?
    - same age?
Where does the child like to be active?
Where does the child like to be cosy?
How much stimulation will the child tolerate?
Positions that are good for the child
- What activities can these positions promote?
Good places (indoors as well as outdoors) to be active with child
- What activities can these places promote?
Aids that will make the child more receptive and more active
- What activities can these aids promote?
What is the child's natural general quality of movement?
- What is the child's general state of mind?
  - Is the child slow?
  - Is the child quick?
  - Is the child intense?
- Is the child phlegmatic?
What type of sound/music does the child like?
- What type of sound/music does the child like, (but that makes the child jump)?
- What type of sound/music is uncomfortable for the child?
- What movements can the child perform?
- What does the child like/dislike to do?
- How quickly can the child perform these movements?
- What sounds can the child produce?

We must take into consideration the spasticity these children suffer from if overstimulated. One must at times use vigorous and/or fast music, but perform gentle and/or slow movements. The music will then compensate for vigorous movements.

Below are seen ideas for activities and aids, which will require adapting to each child or group.

When you move with a child, you should consider this as moving with a partner, sharing. You must consider whether movement should be:
- with a partner?
- against a partner?
- shared with a partner?
- away and towards a partner?

You must also decide if those who move should touch, and how they should touch.
DESCRIPTION OF ACTIVITIES

The following articles can be used as aids:

a. rings of bamboo (a hula hoop), size is not so important
b. sticks of bamboo or lightweight wood about 50 cm long. They must have a
diameter thick enough so that it will feel comfortable to hold them
c. beach balls of plastic (those one blows up), different sizes
d. thin, colourful scarfs
e. rope
f. foam rubber cushions

The aims of using these aids are:
- To unite and at the same time create a distance between two or more partners; this may make co-operation easier
- To give possibilities for variation with basically the same activities
- To stimulate new activities
- To help the child feel more comfortable, safer and/or more independent to holding, say a bamboo stick rather than the hand of a person

Important things to remember:
- Be sensitive to the child's inventiveness and use the child's suggestions - the child's initiative and your responses should be more important than carrying out your ideas.
- If the child does something by mistake, you can pick it up and use it constructively.

Get to know and control your body
If we are in the command of our body we may also have a greater awareness of our feelings and emotions.

The aim of controlling the body, in the context of this chapter, will be to increase the possibilities for experience, expression and communication.

Choose first the body parts you know the child likes to be touched; later when the child is used to your touch and enjoys it, try the other body parts.

It is important you touch the different body part in in an order that will give the child the feeling of having one whole body and not a collection of disjointed parts.

1. Touch the different body parts
   - in different manners
   - with different intensities
- in different speeds and rhythms
- sing or talk saying what you are touching and doing, and in which manner you are doing it
- use music from a tape that fits the manner you want to do it
  - striking with the whole palm of your hand
  - striking with your finger tips
  - clapping with the whole palm of your hand
  - clapping with your finger tips
- let the child touch you on different body parts and in different manners

2. **Touch and stop**
- the same as 1., only now you make a point of stopping the activity by stopping the movement, the sound and at the same time you say stop
  Be sensitive to signals the child may give to show the wish to stop and/or restart the activity.
- let the child do the same with you

3. **Move and stop - you do the main moving**
- move with the child - the whole child, not only a body part
  - by taking the child in your arms and dancing and stopping
  - by moving the child in a chair or a wheel chair and stopping
  - by putting the child in a blanket and moving the child by pulling the blanket along the floor and stopping
  - by putting the child in a blanket and moving the child through the air swinging from side to side or forth and back and stopping
  Follow the child's facial expression and body expression.
  Be sensitive to signals for starting and/or stopping an activity. Be careful not to overstimulate.
- the same as 1. and 2. only now you move the child's different body parts
  - bend and stretch
  - rotate
  Be sensitive to the child's muscle tension and stop the movement when the child may indicate this with a change in muscle tension.
  React whether the tension has changed voluntarily or involuntarily.
- let the child do the same with you
4. Move and stop - the child does the main moving
   - the child moves and stops while you give the sound accompaniment, letting the child to direct the activity
   - the child moves to your accompaniment; you lead the activity

5. Imitation and taking turns
   - the child moves and stops; then you move the same way the child did
   - A child must have experience to be imitated before we can expect him to imitate us.
   - you move and the child imitates you as well as the child can
   - the child moves; then you move in a different way to continue his movement
   - you move; then the child moves in a different way to continue your movement

6. Moving together
   - you and the child are both active and you move together in cooperation

7. Using energy
   - touching the child with different intensity
   - let the child push or press you; the child can do this with
     - hands
     - hands and arms
     - elbows
     - feet
     - head
   - you can do this activity in free rhythm or to a structured rhythm
   - let the child pull you
   - pull the child
   - you and the child are holding any of the mentioned aids, both are pulling
   - you can do all these activities in free rhythm or to a structured rhythm

8. Speed and rhythm
   You can use movement activities or you can sing or use a musical instrument.
   - You can use activities mentioned above, or an activity the child partially masters, and the speed and/or rhythm of the activity.
     - Slower or faster
     - Changing speed gradually
- Changing speed suddenly
- Even rhythm
- Uneven rhythm

9. Using space
- Large and small movements
- Move away and towards the child
- Move towards and away from the child
  Do this in different intensities and speed

  Do the same activities with a bamboo ring between you and the child.

10. Swinging movement
Swinging movement is comforting and gives a feeling of being cared for. You must however remember that most children with CP have a different relation to gravity, speed, and flow than other children do.
- You can calmly swing the child (some children may react badly to every movement even to swinging).
- You can do swinging movements with only one part of the body, an arm, or a foot.
- You can hold a scarf or a rope between you and the child and swing the material; the child should also try swinging.
- You can swing the chair the child sits in.
- You can put the child on a blanket or sheet and together with a colleague lift and swing the child.

11. Following the child's mood
If the child has difficulties to express himself, you should do it for him by singing, playing music, dancing with or for the child in the mood you think the child is in. You may describe the child's mood also with words. It is important you follow and see if and how the child reacts to you.

- It is important that the child learns that his mood will create reactions.
- It is important that you learn to differentiate among the different expressions the child may have.
- One learns through experience and through the mediation the surroundings may inspire.

For a child with limited physical possibilities, it will be important to be able to experience and to express himself through others. But it may be even
more important to receive response to whatever expression the child may have. Through experience, the child may develop an awareness of himself and his social surroundings. This awareness will help the child to master interaction and communication.

Through activity with the child, you will also increase your awareness and your interaction and communication with the child will therefore improve.

This will be the first steps towards a better quality of life!
### GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Aetiological factors</td>
<td>Causes or significant antecedents of a given phenomenon, e.g. disease.</td>
</tr>
<tr>
<td>Articulation</td>
<td>A spoken sound, especially a consonant.</td>
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<tr>
<td>Ataxia</td>
<td>Impaired neuromuscular co-ordination in voluntary muscular movements.</td>
</tr>
<tr>
<td>Athetosis</td>
<td>Involuntary neuromuscular movements and facial grimaces as in cerebral palsy, caused by brain lesion(s).</td>
</tr>
<tr>
<td>Auditive function</td>
<td>The function of the sense of hearing.</td>
</tr>
<tr>
<td>Central speech</td>
<td>An inability, partial or complete, to understand or express language whether written or spoken, because of injury or disease of the language centres of the brain.</td>
</tr>
<tr>
<td>disturbance(aphasia)</td>
<td></td>
</tr>
<tr>
<td>Cerebral palsy</td>
<td>Permanent impairment of movement and posture resulting from a non-progressive brain disorder lesion, acquired during early childhood.</td>
</tr>
<tr>
<td>Cognitive function</td>
<td>All processes involved in knowing.</td>
</tr>
<tr>
<td>Congenital</td>
<td>Actually or potentially present in the individual at birth, whether as a consequence of heredity or of environmental factors.</td>
</tr>
<tr>
<td>Curriculum</td>
<td>All of the courses, collectively, offered in a school, college etc. or in a particular subject.</td>
</tr>
<tr>
<td>Disability</td>
<td>A lack or restriction of ability, caused by an impairment, to perform an activity in the manner or within the range considered normal for a human being.</td>
</tr>
<tr>
<td>Dysfunction</td>
<td>Pertaining to some kind of defective function.</td>
</tr>
<tr>
<td>Dyslexia</td>
<td>Impairment of the ability to read, often as the result of genetic defect or brain injury.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>Handicap</td>
<td>A disadvantage caused by a disability that prevents or limits an individual's fulfillment of a role that is normal, depending on age, sex and social and cultural factors.</td>
</tr>
<tr>
<td>Impairment</td>
<td>Refers to any loss or abnormality of psychological, physiological or anatomical function or structure.</td>
</tr>
<tr>
<td>Incidence</td>
<td>The number of new cases of a specific condition occurring during a certain period.</td>
</tr>
<tr>
<td>Left-right asymmetry</td>
<td>The lateralization of cognitive functions to the left and the right hemispheres of the brain.</td>
</tr>
<tr>
<td>Long term memory</td>
<td>A recollection of an experience hours, days or a longer passage of time after it took place.</td>
</tr>
<tr>
<td>Motor speech disturbance</td>
<td>Defective articulation of speech due to impaired control of muscles involved in sound production.</td>
</tr>
<tr>
<td>Nystagmus</td>
<td>Involuntary movements of the eyes (or head) composed of alternate slow and quick phases in opposite directions or rapid oscillatory movements.</td>
</tr>
<tr>
<td>Oculo-motor defects</td>
<td>Disorder of eye movements.</td>
</tr>
<tr>
<td>Perinatal</td>
<td>The period from 27th week of pregnancy through first week after birth.</td>
</tr>
<tr>
<td>Pharynx</td>
<td>The cavity with its enclosing muscles, mucous and membrane situated behind the mouth, the nose and the oesophagus (tube leading from the mouth to the stomach).</td>
</tr>
<tr>
<td>Prenatal</td>
<td>The period from conception to 27th week of pregnancy.</td>
</tr>
<tr>
<td>Prevalence</td>
<td>The number of cases of a condition in existence at a certain time in a designated area.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------</td>
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</tr>
<tr>
<td>Short-term memory</td>
<td>A recollection of an experience immediately after it took place.</td>
</tr>
<tr>
<td>Spasticity</td>
<td>Marked rigidity of movement and inability to relax muscles, caused by brain lesion(s).</td>
</tr>
<tr>
<td>Stereognostic perception</td>
<td>The perception of the solidity of external objects.</td>
</tr>
<tr>
<td>Strabismus</td>
<td>A muscle imbalance in which the eyes move inward, outward, up or down. The condition frequently is referred to as 'cross eyed'.</td>
</tr>
<tr>
<td>Tactile-kinaesthetic perception</td>
<td>The simultaneous perception of touch, weight, position, and the extent and direction of movement.</td>
</tr>
<tr>
<td>Transaction</td>
<td>A reciprocal exchange of actions and emotions in human relationships.</td>
</tr>
<tr>
<td>Two-point discrimination</td>
<td>Determination of the distance which must separate two points in order that they may be perceived as two by skin or eye.</td>
</tr>
<tr>
<td>Visual-motor co-ordination</td>
<td>The co-ordination of sight and movements.</td>
</tr>
<tr>
<td>Visual-perceptual function</td>
<td>The awareness of external objects or relations through the sense of seeing.</td>
</tr>
</tbody>
</table>
REFERENCES


ADDRESSES OF INTEREST:

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BCI
350 Rumsey Road
Toronto
Ontario M4G-1R8
Canada.

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Communication Enhancement Center
Oakland Schools
2100 Pontiac Lake Road
Pontiac
Michigan 48054
U.S.A.

PIC
George Reed Foundation for the Handicapped.
Box 3400
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Peabody Rebus Reading Program.
American Guidance Services Inc.
Publishers Building
Circle Pines
Minnesota 55014
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Bildkommunikation.
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