

CONTACT a resource for staff working with children who are deafblind

Study Guide

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List of Contributors

Acknowledgments

The development of CONTACT was a major project and could not have been achieved without considerable financial and professional assistance. This has been in principle a Scottish office initiative. We wish to thank the Scottish Office Education Department (Division concerned with Special Educational Needs) who recognised the value of Sister Ailish Massey's work and provided the stimulus and finance over a period of 3 years. Gratitude is particularly due to Alastair Milne, HMI (until 1990) and Margery Browning, HMI (since 1990) for their sustained help, encouragement and guidance.

Credit must go to Strathclyde Region Education Department who have supported the project from the beginning; to David Harvey, Assistant Director of Education, Julie Bowen (Chief Adviser) and Peter Feeley (Adviser) for their on-going interest, advice and positive support; to Strathclyde Audio Visual Department without whose facilities and technical expertise the videotapes could not have been produced.

Marion McLarty (Headteacher), staff, pupils and parents of Carnbooth School, Glasgow, willingly contributed their time and also gave to the project the benefit of their experience.

Chris Lewis (Head Teacher), and the staff and pupils of Northern Counties School, Newcastle, trialled an early version of the first part of the course and gave us general and detailed comment which was invaluable in terms of shaping up the final product.

Gillian Morbey of Sense (Scotland) also gave valued editorial assistance and specific guidance about resource materials and bibliographies. Her comments were particularly insightful and contributed a valuable parental and professional perspective.

To all the authors of the text, illustrators, typists and designers we owe a special debt. In another dimension, a major contribution has been made by Moray House Institute who provided accommodation, administration and secretarial support all the way through.

Marion Blythman and Fernando Almeida Diniz (Editors)



Introduction

The materials have been developed collaboratively but are very largely derived from 15 years of work at St Vincent's (Tollcross) Glasgow (1974-85) and thereafter at Carnbooth School, Glasgow.

At the time when staff development began at these schools, there were effectively no training opportunities in the UK for staff working with children who are deafblind. It was during this period, that Sister Ailish Massey, who was the Headteacher, and Elizabeth Bryson, the educational psychologist, collaborated with senior staff in these schools to introduce, develop and test in practice a number of approaches to teaching children with the dual sensory impairment of deafblindness.

Recognising the value of these programmes, and the need to have a permanent record of this pioneer work, the Scottish Office Education department made a substantial grant available to enable these materials to be

developed, by Sister Ailish Massey and Elizabeth Bryson in conjunction with staff from Moray House Institute of Education, Edinburgh.

Broadly stated, the main aim is to help all those working with children who are deafblind to meet the challenge they present and become more effective educators. It is hoped that you find these materials of help. The education of children who are deafblind is a complex business and a relatively new area of education, with staff development material coming along all the time, though these are not always readily available. The main influence on the philosophy and practice which underpins these materials comes from the work of Jan Van Dijk, a leading figure in this field and the methods used in the Instituut voor Doven, St Michielsgestel, The Netherlands. Without this source of help and their encouragement and support the work in Carnbooth School could not have been developed as it was.

This set of materials has been designed primarily to be used in schools, particularly by staff beginning work with young (or developmentally young children) who are deaf-blind. Much of it could be used or adapted to the needs of children with additional learning difficulties particularly where there is a hearing or vision loss.

CONTACT is a resource which should provide you with fundamental knowledge and skills on which you will build as you work in this area, to extend your skills and try to keep abreast of new developments. The authors have tried to make the materials as comprehensive as possible but would emphasize that it has not been designed as, an 'academic course' covering all aspects and approaches. You are invited to add further materials from time to time which you personally have found of interest or value. These will come from a number of sources reading, books and journals and any conferences or courses you get the chance to attend. Together this will help you develop for yourself and your colleagues a perspective and a resource which might begin to answer your own professional needs, the needs of the school and the children you are involved with.

The idea has been to provide a package which is derived from practice and experience grounded in theory but which contains a strong practical element. It has been primarily designed to be used, in a school setting and ideally should involve you and your colleagues individually and in small groups. You will also want to relate it to your work with children in your school or unit. So it is essentially a practical guide, which should help you to identify key areas, reflect on relevant ideas and learn about specific techniques that you can use in your day-to-day work.

Inevitably for the authors, it has been difficult to maintain the flexibility which was a natural aspect of the original face-to-face staff development situation. Ideas and approaches set in print can appear crystallized rather than responsive to the real life needs of particular children, staff and schools. Sharing with colleagues, however, and planning and working together can obviate this and help you to use the materials flexibly. This will encourage you to keep going and to keep looking further afield to seek out the practical solutions and further information you might need as your awareness and skills grow and develop.

Most of the materials used in this training programme have been developed over a period of years, tried and modified in action. They have gained much from the experience of the authors and from the comments and criticisms of the staff at Carnbooth School who have used them over the years as a valued, intrinsic and on-going part of the work of the school.

You will be interested to know that the music used on the video tapes grew from recordings of the natural sounds of deafblind children. The composition portrays the initial isolation and confusion in the deafblind child's life which, when structure and order are established is transformed into a meaningful and harmonious whole. The music was composed by Susan Cassidy of St Columba's, Perth and Julie McKenzie from Carnbooth School.

Who is CONTACT for?

CONTACT is aimed to improve the knowledge and skills of those education and development involved with the education of children who are deaf-blind. It does not assume specialist knowledge or experience and is therefore appropriate as a framework within which to support on-going agency-based staff development programmes for New teachers in need of induction.

Experienced teachers, psychologists and other professionals who wish to extend knowledge and update skills.

Ancillary staff such as residential child care workers who are involved with all aspects of children's

Parents as equal partners in the education of their children.

Staff in schools for children with multiple disabilities may also find these materials useful though it should be borne in mind that the methods described are not specially designed for children with severe learning difficulties. Where children have global learning difficulties in addition to those arising from a dual sensory impairment it may be more appropriate to follow structured programmes especially designed to meet their needs, though we do hope that some parts of CONTACT will be helpful if used to match to the needs of the child and the staff of the school.



What does CONTACT consist of?

The contents are listed below

Module 1 Starting Out: What Do We Need to Know?

Topic 1 [A brief look at deafblindness](#) A Massey

Topic 2 [Common causes of deafblindness](#) M Turner

Topic 3 [Introduction to observation](#) E Bryson

Topic 4 [Introduction to communication](#) E Bryson

Topic 5 [Introduction to mobility and orientation](#) M Lee

Topic 6 [The network of support](#) *M Buultjens*

Module 2 The School & The Staff

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Topic 2 [Case study of Rosewood School for children who are deafblind](#) *A Massey & M Btythman*

Topic 3 [The visual, auditory and tactile environment](#) *A Massey*

Topic 4 [Roles and responsibilities of staff](#) *M Turner*

Module 3 Children & Families

Topic 1 [A look at normal development](#) *A Massey*

Topic 2 [Children who are deafblind](#) *A Massey*

Topic 3 [The effects of deafblindness on communication and language](#) *A Massey*

Topic 4 [Additional specialist information - hearing impairment](#) *M Turner*

Topic 5 [Additional specialist information - visual impairment](#) *M Buultjens*

Topic 6 [Working with families](#) *M Buultjens*

Topic 7 [Associations, societies and self-help groups](#) *M Turner & M Buultjens*

Module 4 Learning and Teaching - Introduction

Topic 1 [The Aims of Education for Children who are Deafblind](#) *A Massey*

Topic 2 [Introduction to the Curriculum](#) *A Massey*

Topic 3 [Introduction to Methodology](#) *A Massey*

Topic 4 [Assessment - Part One](#) *E Bryson*

Topic 5 [Aids to Hearing and Vision](#) *M Turner & M Buultjens*

Topic 6 [Learning Mobility Skills](#) *M Lee*

Topic 7 [Microtechnology](#) *M Buultjens*

Module 5 Learning and teaching Approaches and Methods

Topic 1 [Making Use of the Senses](#) *A Massey*

Topic 2 [Structuring the Child's Experiences](#) *A Massey*

Topic 3 [Developing Concepts](#) *A Massey*

Topic 4 [Using Experiences to develop Communication and Language](#) *A Massey*

Topic 5 [Following the Stages of the Child's Awareness of the World](#) *A Massey*

Module 6 Learning and Teaching - Curriculum and Assessment

Topic 1 [Assessment Part Two](#) *E Bryson*

Topic 2 [Overview of Curriculum and Methodology](#) *A Massey & E Bryson*

Topic 3 [Early Curriculum Guidelines](#) *A Massey*

Video Tapes

Tape One - Starting Out

Module 1 Topic 1:

Out of Isolation (13 mins)

A brief look at blindness (7 mins 30 secs)

A brief look at deafness (5 mins)

What is it like to be deafblind? (22 mins)

A brief look at deafblindness (11 mins)

Module 1 Topic 3: Introduction to Observation (19 mins)

Module 1 Topic 4: Introduction to Communication (30 mins)

Module 1 Topic 6: Sharing Experiences - parents talking (28 mins)

Tape Two - Learning and Teaching

Module 5 Topic 1: Making use of the senses (3 mins)

Module 5 Topic 2: Structuring the child's experiences (4 mins)

Module 5 Topic 3: Developing concepts (4 mins 30 secs)

Module 5 Topic 4: Communication and Language (9 mins)

Module 5 Topic 5: Stages the child passes through (14 mins)

Note:

As CONTACT was developed prior to the introduction of the 5-14 reforms in Scottish Education, there is no reference to the Guidelines on Curriculum and Assessment produced by SCCC.



How Should You Use CONTACT?

It is recognised that CONTACT will make considerable demands on you in terms of time and effort. For some, studying with printed and video materials will be a new experience. You may feel somewhat apprehensive but it is recommended that you try to get a colleague with whom you can work and share your experiences or, even better a small group of colleagues, working together in a school.

You will also find it helpful if your Headteacher is aware that you are going to do this work and is prepared to offer you some

support. This can come in several ways. You might have specific staff development time to get to grips with the materials which at times you will find demanding and challenging. There is no doubt that two heads are better than one and we would hope that, for example, planned activity time or in-service days might be set aside for this purpose. Access to resources will certainly be easier if your Headteacher is involved and recognises the value of what you and your colleagues are trying to do.

You will be asked to undertake activities with the children in the school, some in groups, some on your own. Where appropriate it is recommended that you try to do these in co-operation with a colleague who is also using CONTACT. In fact, establishing a relationship with a colleague and doing this kind of activity together will help you both to analyse the experiences and make the best of them once you have done them.

Ideally, you would find it helpful to get the help, guidance and co-operation of a senior experienced colleague, ie someone to act as a mentor, to whom you can turn if you encounter difficulties with the text or the activities.

Studying on your own with printed material is not easy and can put pressure on you whilst the demands of your job continue. It is important therefore to pace yourself. The danger is that you start off fired with enthusiasm, undertake too much too quickly and run out of steam. It is likely to take about two years to follow through the six modules. It has been written as a total package and there are clearly advantages if you can go through it in the order in which the modules are presented. This may not be possible for you though it is the plan of action strongly recommended. Even if you find some activities more relevant than others, you should at least, read all the materials and acquaint yourself with the main ideas.

Thereafter it is suggested that you set yourself realistic targets, agree them with your mentor or your group, and then try to stick to them. Even though your progress is slow, you will get more satisfaction in the end if you meet your targets - and you'll be less likely to give up.

You are strongly recommended to tackle all the activities suggested even if at times you feel this is slowing you down. In some cases you will find answers to the activities and you will certainly want to compare your responses with those of your colleagues and the authors. However it must be stressed that in many cases there are no right answers. Many of the activities are open ended and designed to help you think, discuss or speculate. It is in your own interest, however, to try to complete all the activities, record your responses as you do the activities, put them in a folder and discuss them with your colleagues and with senior staff. This way you will create your own study file which will help you to remember what you have done, consolidate and be better placed to start on material which is less familiar to you.

Specifically you should consider keeping

A log or diary detailing time spent on studying, meetings and activities.

Examples of any materials you develop arising from CONTACT.

Copies of any relevant national, regional or school-based curriculum or policy documents.

Reports of interviews, observations.

Book reviews.

Copies of all responses to activities.

Comments on your feelings or anxieties which you might wish to share with colleagues or senior staff.

You will find this a useful way to help you see the experience as a whole. It could also be used as a basis for the Accreditation of Prior Experiential Learning (APEL) towards a recognised qualification.

Each module and topic is complete in itself; the content is dealt with fully before the next item is introduced. However they are closely interrelated and you should try to relate them one to another as you make your way through CONTACT.

It is also important to relate the content to your job. The material is designed to help you with your day-to-day work and if you establish the connections, it will help you benefit from the extra work you are doing. The more you manage to keep actively involved, the more likely you are to maintain your motivation. Even, however, if you do drift away from time to time, the fact that you have the materials in your possession means that there is nothing to stop you coming back when your situation changes and you feel like picking it up again.

Finally, the authors would like to wish you good luck. The spin-off should be to children who are deafblind and of course their families, and friends.



List of Contributors

Sister Ailish Massey (writer) is a member of the Congregation of the Daughters of Charity. Former Headteacher, Carnbooth School, Glasgow, Sister Ailish researched and developed this approach over 15 years in conjunction with the children, staff and parents of Carnbooth School, Glasgow.

Elizabeth Bryson (writer) is a Senior Educational Psychologist attached to the Renfrew Division of Strathclyde and worked closely with Sister Ailish from 1982-89 on the staff development programme. During this time she worked with staff in the school in terms of individual support and through her contribution to the School's in-service programmes.

Marianna Buultjens (writer) has taught in mainstream education, in a school for the blind and as a peripatetic teacher based in a school for partially sighted children. At Moray House she has had extensive

experience in designing courses and teaching on the Diploma course for teachers of pupils with special educational needs, in particular visual impairment. Marianna is Co-ordinator of the Scottish Sensory Centre.

Margaret Lee (writer) comes from a background in mainstream education, teaching physical education and outdoor activities. She came to Moray House in 1973 and undertook a course in Mobility and Orientation at the National Mobility Centre in 1975 and a DPSE - SEN (VIC). Since that date she has been increasingly involved in working with children, teaching assistants, teachers, tutors and course members in all settings. Margaret is the visual impairment route Co-ordinator on the PG Diploma and is a member of Scottish Sensory Centre.

Morag Turner (writer) was, until her retirement in 1991, involved in training teachers who work with children and young people who are visually impaired, deaf and who are deafblind. Again her individual experience of training spans a considerable number of years and the organisation of a range of short and long courses, conferences and seminars.

Marion Blythman (editor) was Head of the Department of Professional & Curriculum Support Studies at Moray House until 1990 and was involved in course development in all areas of special needs.

Fernando Almeida Diniz (editor) was until 1990 Reader in Special Needs in Education in the Faculty of Education at the University of Greenwich, London. He is now Head of Department of Professional and Curriculum Support Studies at Moray House, responsible for teaching, consultancy and research in the areas of Special Educational Needs, Counselling, Guidance and Race Equality.

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A resource for staff working with children who are deafblind

MODULE 1 STARTING OUT: What do we need to know

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by Elizabeth Bryson

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by Margaret Lee

[TOPIC 6 The network of support](#)

by Marianna Buultjens

Module Descriptor

Aims

This module will provide information which will help course members to recognise and understand the needs of pupils who are deafblind. It will also give them guidance and practice in some of the skills necessary to meet those needs.

Objectives

On completion of this module the course member will:

be aware of the common causes of deafblindness;

be aware of the effects of deafblindness on basic areas of development such as communication and mobility;

have learned about and practised skills and strategies for handling and communicating with children who are deafblind;

have learned about links between school, families and other professional and voluntary bodies

Topics

A Brief look at deafblindness

Common causes of deafblindness

Introduction to observation

Introduction to communication

Introduction to mobility

The network of support

Style and modes of learning

Reading, [videotape](#), practical exercises, discussion

Additional resources

[Video tape One](#): Starting out

Topic 1

Part 1 Out of isolation (13 mins)

Part 2 A brief look at blindness (7 mins 30 sec)

Part 3 A brief look at deafness (5 mins)

Part 4 What is it like to be deafblind? (22 mins)

Part 5 A brief look at deafblindness (11 mins)

Topic 3

Part 6 Introduction to observation (19 mins)

Topic 4

Part 7 Introduction to communication (30 mins)

Topic 6

Part 8 Sharing experiences (28 mins)

Topic 1 A Brief look at deafblindness

Hello, welcome to the course. We do hope it will be of help to you in your work and give you a greater insight into the difficulties facing children with dual sensory impairment.

Deafblindness: definition and different categories

Many people have a confused idea of deafblindness. They are inclined to think of it as two handicaps, - the sum total of the difficulties imposed by blindness and deafness. It is, however, much more than this, because these two senses are our principal means of relating to the World and others. Without them we are totally isolated, unless an alternative channel of learning is developed. deafblindness creates its own problems and is therefore considered a handicap in its own right.

Again, many think that the term "deafblindness" only refers to those people handicapped by profound deafness and total blindness. In fact it covers any combination of vision and hearing loss, whatever the degree.

Let us now look at the definition agreed upon by educators during the Fifth International Seminar for deafblind, Condoover 1974.

"children are deafblind: who have auditory and visual handicaps, the combination of which causes such severe communication and other developmental and educational problems that they cannot properly be accommodated in special educational programmes solely for the hearing handicapped child or the visually handicapped child".

This means that under the umbrella of deafblindness we can include the following degrees of handicap:

the blind and profoundly deaf child

the blind and severely partially hearing child

the partially sighted and profoundly deaf child

the partially sighted and severely or partially hearing child

In addition to, and because of the damage to sight and hearing the remaining senses of the child who is congenitally deafblind may be underdeveloped. This means there is multi-sensory deprivation. The term MSD is sometimes used to describe these children in the USA and Canada.

Activity 1

List all the children who are deafblind whom you know fairly well.

Now write down opposite each one which category of deafblindness you consider they fall into.

Are other senses underdeveloped? - Write down which ones.

Are there any additional handicaps, intellectual or physical?

Show this list to someone who knows the children and discuss your answers with them.

Keep this list for further reference.

Reading

Now read Chapter 1 of Peggy Freeman's book **The deafblind baby**, it will give you more insights into the difficulties facing these children.

If you would like some bed-time reading, try Margaret Brock's **Christopher, a silent life**.

Both these authors are mothers of children who are deafblind and were founder members of Sense which was then called The National Association for deafblind and rubella handicapped children.

Deafblindness: A brief look at its effects on the individual

This section of the topic is to enable you to think yourself into the world of deafblindness and to experience some of the feelings and difficulties created by it. It is different from most of the other topics because it consists mainly of video tapes and involves you in some physical activity.

You must remember, however, that this is only an introduction to deafblindness, we will pick up the subject again at a later date.

Activity 2

Look at the [video](#)

Video Tape 1: Starting out

Part 1: Out of isolation

The following exercise will help you focus on some of the most important issues to consider. (You may like to watch the video twice)

- (a) What words would you use to describe the effect deafblindness has on the young developing child? eg isolation fear
- (b) As you watch the video jot down single words which describe how you are feeling.
- (c) What positive attitudes should you have towards your pupils who are deafblind if you are to be of constructive help to them?
- (d) What would you consider to be the differences between a school for children who are deafblind and one for their non-handicapped peers?

You may like to discuss your answers with your headteacher.

In order to help you appreciate some of the difficulties facing the child who is deafblind we will now break it down into workable parts, ie we will look at deafness and blindness separately.

Activity 3

Reflect a moment on blindness. Then jot down what you consider to be the most outstanding difficulties facing a child who is born visually impaired. Now look at the second part of the first video. Can you add anything to what you yourself have written?

[Video tape](#) 1: Starting out

Part 2: A brief look at blindness

Activity 4

Now reflect for a moment on deafness. What do you consider to be the major difficulties facing a child who is born deaf? Jot your thoughts down briefly Then look at the third part of the video tape.

[Video tape](#) 1: Starting out

Part 3: A brief look at deafness

How did your points compare with those mentioned on the video tape? You might have some extra. Discuss your answers with your tutor before you move on to the next section.

Now you are going to get some idea of what it is to be deafblind. Remember, we can never fully appreciate how our children feel, or how they experience the world around them. However, we can get some insight through doing the

following activity.

Activity 5

For this task you will need a sleep shade (a blindfold) and a friend to help you. Ask your helper to think up a simple job for you such as getting a glass of water from the bathroom upstairs. The important thing is that your friend must not speak to you while you are blindfolded. This is to help you understand what lack of communication caused by deafness means. Your friend should walk near you to protect you from hurting yourself. Reflect on the following points while you grope your way around the house.

How do you feel?

How are you tackling the problem? Are you picturing your surroundings and working out how you are going to get the object you were asked for?

What clues are you receiving from the environment which help you to know where you are?

When you have finished the task talk over your experience with your tutor and sighted guide (the friend who went around with you). What insights have you gained that will help you in your work with children who are deafblind?

Now look at the next [video](#). It shows you how two other people coped with the task.

[Video tape 1](#): Starting out

Part 4: What is it like to be deafblind?

The next part of Video tape 1 illustrates a few of the difficulties facing children who are deafblind. It is in no way a comprehensive study of the problems but it will help you to begin to understand the complex tasks you are involved in.

Activity 6

Look at:

[Video tape 1](#): Starting out

Part 5: A brief look at deafblindness

Jot down any points you may have missed when you did Activity 5.

Activity 7

Read Chapters IV and V of Lash's book *Helen and Teacher* and/or Chapters I - XI of Helen's autobiography, *The Story of my Life*. (You may like to read the rest later.)

Summarise what you have read under the following headings.

The attitudes and responses of Helen's parents -negative and positive.

The principal differences between Helen and the children who are congenitally deafblind (those born deafblind) whom you have met.

Annie Sullivan's teaching methods. How did she go about teaching Helen?

The breakthrough point for Annie was when Helen understood that W A T E R means "water". Why was this so?

You may like to discuss your answers with your headteacher.

Activity 8

On a copy of the following chart fill in what you have learned about deafblindness from your own experience and reflection and from the video tapes (You will find a copy of this chart is at the end of the topic).

Don't worry if you think you don't have a lot to write. This is only an introduction to a very complex subject.

The effects of deafblindness on the child's

development of her/his body	
understanding of others	
relationship with others	
understanding of things	
use of things	

Keep your completed chart. You will be referring to it again in Module 3 Topic 2

Appendix A: The effects of deafblindness

Use of things	Understanding of things	Relationship with others	Understanding of others	Development of her/his body

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- Lash, J (1980) Helen and Teacher: The Story of Helen Keller & Annie Sullivan Macy Penguin

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 [TOPIC 2 Common causes of deafblindness](#)

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A resource for staff working with children who are deafblind

Module 1 Topic 2

TOPIC 2 Common causes of deafblindness

It is often useful to divide the causes of disabilities into the three groups: prenatal, perinatal and postnatal. Prenatal is the name given to causes occurring before birth, perinatal to those at around the time of birth and post-natal to those after birth. If a person is born with a disability then it is "congenital" but if it occurs afterwards it is known as "adventitious" unless as a result of a genetic cause. Most of the literature on deafblindness concentrates on three main causes. These are Maternal Rubella, Usher Syndrome and Age.

Prenatal causes - causes in pregnancy

Maternal Rubella

What is it? It is considered the single greatest cause of deafblindness, Rubella itself is not a serious disease and indeed can be so slight that the person is unaware of it, or thinks they have a "fluish cold" and a "slight rash". The trouble occurs when it occurs during a pregnancy, particularly in the first trimester. Then it is of grave concern as it travels in the mother's blood supply which feeds the baby and can cause deafness, blindness, heart defects, brain damage and any combination of these. Sometimes too it causes problems later on in the child's life - epilepsy and diabetes are two. The importance of the first three months of gestation is obvious when you read that the eye develops between the third and seventh week, the heart during the second month and the ear over the third and fourth month.

Often too such babies are born with a low birth weight which according to Van Dijk is the most powerful factor relating to developmental problems.

It is interesting to note that research by Morbey and Aitken (1986) shows maternal rubella as the greatest single cause but not the cause of the majority of cases. The real tragedy of this cause is that it is preventable by ensuring vaccination of all girls (boys too if possible) and now the MMR (measles, mumps and rubella) to be given within the second year of life.

Cytomegalovirus

"This is one virus about which we are hearing increasingly. Viruses cause infections, but unlike bacteria, a cure for them has not been found. However there are many viruses which live in our body and cause us no harm. This particular virus is part of the largest group of viruses known to man. Some other viruses in this group, for example, cause chickenpox, shingles and cold sores.

The viruses in this group stay dormant within the body for periods of time. Cytomegalovirus is so common that it is estimated half the women of child-bearing age have caught this virus but are immune to it. The vast majority of adults and children who have this virus have neither symptoms nor problems as a result of it. Occasionally the virus is reactivated during pregnancy when it is possible the child may become infected. As was stated however infection in this case does not necessarily mean problems. Of the 3000 babies per year born in the UK infected, only 500 are born with some form of problem. The problems vary from jaundice to mental handicap and sometimes visual handicap. It is thought that only about 50 of these children will have a hearing loss."

Abstracted by kind permission from NDCS **Talk** Summer 1989

Drugs in pregnancy

Of those drugs which cause damage the most well known was probably "thalidomide" but there are some eg streptomycin and allied drugs which are very effective normally but dangerous in pregnancy. Thus streptomycin for example, would only be used knowingly in pregnancy where it were to save life. These diseases can also cause foetal damage giving rise to impaired sight and hearing. Fortunately in this country this is now rare. We do not know too much concerning this at present.

Measles and mumps

These diseases can also cause foetal damage giving rise to impaired sight and hearing. Fortunately in this country this is now rare.

Anoxia or lack of oxygen

During pregnancy anoxia may cause damage not only to hearing and sight but to the brain.

Prenatal causes - genetic

In some cases deafblindness is linked to an abnormality in the individual's genes (the means by which we inherit characteristics from our parents).

Usher Syndrome

Usher is an inherited condition being a syndrome within the Retinitis Pigmentosa group (see below). It affects 3% to 6% of congenitally deaf people and causes a progressive deterioration of the retina (retinitis pigmentosa often referred to as RP). Visual problems often only appear at puberty, late teens or twenties. Nightblindness is usually the first to appear and this may be accompanied by a difficulty in adapting to bright light or rapidly changing light conditions.

Tunnel Vision usually appears next, usually in the teenage years but it is rarely recognised by the person with it in the early stages. Central vision may remain stable for reading but often deteriorates later on.

Retinitis Pigmentosa

This condition is not confined to one disease but covers a group of hereditary diseases of the retina - the light sensitive tissue inside the eye. Slowly RP causes it to degenerate and lose its ability to transmit images to the brain, 25% of all RP sufferers are thought to have a hearing loss.

Down's Syndrome. Some children may have poor vision and also have a hearing loss.

Other Syndromes (Morbey Aitken 1985-86)

Unknown. Medical science has not yet discovered all the causes of a child being born deafblind

Perinatal causes

prematurity may be a cause

low birth weight babies may be at risk

anoxia

jaundice of the newborn

birth injury or trauma

NB In most of the literature the perinatal period covers immediately before the birth, the birth and a few days after but a few of the USA publications use the term to cover the first six months after birth.

Post-natal causes or adventitious causes

Meningitis

It is often difficult to ascertain whether the illness is the cause or the chemotherapy as sometimes massive doses of streptomycin or allied drugs are required to save the patient's life.

Measles and mumps

These are infrequent now in this country but it should be eliminated when the MMR vaccine has been established.

Tropical diseases

Some parts of other continents have diseases localised to those regions, but we need only consider those prevalent in the UK

Age

Activity 1

List the children who are deafblind with whom you work and opposite each name put the cause of deafness (If it is not in your information ask your head teacher).

Classify them under the headings of pre-natal (genetic and causes in pregnancy, perinatal and postnatal)

For further knowledge this topic will be developed in the module on Additional specialised knowledge Module 8.

Since deafblindness may refer to a person who suffers from deafness and has some visual problems or to a person who suffers from blindness but has some hearing difficulties it would be advantageous to know something of the known causes of each.

Causes of auditory and causes of visual impairment will be taken up later in the course.

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A resource for staff working with children who are deafblind

Module 1 Topic 3

TOPIC 3 Introduction to Observation

It is intended that this topic will not only introduce you to the importance of developing observational skills, but will also allow you to increase your knowledge of the children whom you will be observing.

Please note that the various exercises are really intended to be carried out under the guidance of an experienced member of staff. If you cannot manage all the activities, ask your Headteacher which ones you should focus on and in which situations to carry out the observation. (This will depend on your length of experience with children who are deafblind.)

You will also need time to discuss your findings with a colleague. The direct observation exercises can be an ongoing process and need not hold up your progress through the subsequent topics.

What is observation?

Observation means looking at the child carefully to note certain significant types of behaviour. In this way we can gather important information about a child. Observation should be for a specific purpose, not just "watching"! Also, observations should be statements, not hunches, although we do often have to interpret such statements, i.e. we must ourselves "What does this behaviour mean?"

Why is observation important in educating children who are deafblind?

In mainstream education, it is usually fairly easy to find out what children have learned and what they should learn next. We often make assumptions about what the average two-year-old can do or what the average five-year-old will know. However, it is impossible to have such expectations with a child who is deafblind, since his or her experience of the world will be so different from other children, and often quite unique to that child.

In educating children who are deafblind, we require as much information as possible about the individual child. Parents can usually supply a great many details about their child and there may be reports available which describe a child's hearing, vision, physical development, learning ability and sometimes personality characteristics. However, such reports may not be readily available, especially for the younger children, as it is often very difficult to assess directly a child who is deafblind.

When working as closely with a child as you will with one who is deafblind, you can hardly fail to acquire a lot of information about that child, but it is important that this information is objective,

it should be based on what you have seen

it should be able to be confirmed by other staff or parents.

it should be put in context, i.e. whether it is typical of the child in all situations or specific to one situation/person.

it should be stated as precisely as possible to avoid misunderstanding by other colleagues and uncertainty at a later date about what you actually meant.

It is important that observation is not just kept for 'special occasions', but that you develop an "observational attitude" to your work since it is often at unexpected times that children may give some clue about how the world appears to them, what aspects of their total experience have significance for them, and what skills they have mastered for themselves.

What should I observe?

The focus for your observation will depend on the overall purpose and may vary widely, eg.

obtaining an overall picture of a newly admitted child;

observing a child's reaction to various sounds in the environment.

The following are some of the broad areas in which there will be important questions to be asked and, as far as possible answered through careful observation. (Remember however, that children change, so be open to having your conclusions about a child challenged through later observation.)

What skills does the child have (in relation to the curriculum objectives)?

What skills have progressed remained the same, or possibly deteriorated?

What skills does the child learn most easily? (strengths)

What skills does the child find most difficult to learn? (weaknesses)

What does the child like and dislike? (This information can be used within a regard system to motivate the child.)

Does the child use his/her skills constructively or unconstructively (eg stereotyped repetitive behaviour)

Have specifically taught skills generalised to other, unstructured settings? ie Does the child apply what she/he has learned in one situation to new situations?

How do various factors affect the child's learning response to people? Consider the following

factors in the child (eg vision;hearing; attention)

factors in the educators/parents (eg how have adults assisted learning, or otherwise)

factors in the task (eg how rewarding is it to the child; how clear is the desired outcome to the child)

factors in the environment (eg level of lighting; familiar/strange surroundings)

Activity 1 Can you think of any other examples for these four factors? Write them down.

The information to answer some of these questions can only be achieved through observation. This information, combined with a knowledge of the school's curriculum and methods, should form the basis for drawing up the child's individual learning programme, or should provide the basis for a re-examination of the child's programme.

Activity 2 Initial observation practice.

(This activity is only intended for staff who have worked for a very short time with children who are deafblind.)

Over the next two weeks you will observe one of the children with whom you work. You will be discussing the child with members of staff to confirm your observations but only record what you, yourself observed.

Please use the headings listed below. If you cannot observe certain situations, write N/O (not observed). When the section does not apply to the child, write N/A (not applicable). You may write in note form.

Use of sight - what do you think s/he can and cannot see?

Use of hearing-what sounds do you think s/he hears? Does s/he understand?

Mobility skills - how easily does the child get around?

Fine motor skills - what can the child do with her/his hands?

Eating skills - how does s/he eat? Is s/he fussy?

Dressing skills - how much can s/he do for her/himself

Toileting washing - how much can s/he do for her/himself?

Sleep pattern - does s/he sleep well at night (during the day)?

Use and recognition of common objects - eg cup, spoon, brush, shoe, biscuit, toy, car, pencil, teddy/ doll. What does s/he do with these?

Response to people - how does the child react to a familiar person and a stranger?

Communication attempts by child - what and how does the child communicate?

Response to communication by other people - does the child show understanding?

Awareness of time/structure/routine does the child anticipate events

Play - what is the child's favourite activity? Is it solitary or with others?

Likes/dislikes food, drinks, toys, activities.

Other observations remarks

How will I know which observations are important?

Obviously, it is very time consuming to take note of absolutely everything that a child does. With experience, you will come to know what is particularly significant.

Even with experience it is helpful to have some sort of framework to help guide your observations. A knowledge of child development (especially the early years) will be very useful. In terms of your specific work with children, a knowledge of the school's curriculum will give you an idea of what skills are expected from the child. The curriculum will be discussed in a later Module.

Remember that observation is rarely a 'one-off' activity. Instead, it is a gradual process, which requires a certain length of time to build up a picture of the child. Remember too, that we each bring our own attitudes, beliefs, preconceptions and prejudices to any observation and the best way of dealing with any bias (which we may be unconscious of) is to discuss our observations and conclusions with other colleagues and parents. They may disagree with you - and they may be right!

Of course they may also be wrong but you should always reflect on what they say to try to understand why they have a different view of the child.

Activity 3

Observe a child working with a colleague in a familiar task.

Briefly describe the specific task involved.

Comment on the following:

The child's mood.

The child's concentration.

The child's confidence in the activity.

How much help the child had to be given Was this level of help required throughout the whole task or only during certain parts? Could the child have managed with less help?

How did child and adult interact? Did you notice anything which improved the child's performance?

Did you notice anything which interfered with the child's performance? If so, why was it a problem for the child? Could anything be done to help?

Were there any unusual circumstances during this observation?

Now can I record my observations?

There are various methods of recording observations which usually depend on how you set about observing in the first place. Some of these can become quite complex and are not easy, either to use or to read back the information later. We shall focus on some of the most practical approaches, but you may be asked (by the educational psychologist for example) to collaborate in the use of alternative methods.

Remember, all records should be clearly dated and initialled.

Here are some common ways of recording your observations. Other ways will be described in Module 4 Topic 4.

Diary

Some people find it easiest to keep anecdotal "diary" type records. Often a home-school liaison diary records staff and parents' informal observations about the child. These are very useful for day to day purposes but often a more structured approach is required in order to obtain a more complete picture of the child.

An example of a diary entry is given at the end of this topic (Appendix A)

Total Observation Record

This is a 'catch-all' approach to try to record the child's total repertoire of behaviours.

Often with very young or very low functioning children, behaviour has to be recorded in fairly minute detail, eg the different hand grasps used for different objects.

A total observation record can be useful to get to know a new child, but later it is necessary to concentrate on specific behaviour which seems most important for learning.

Always distinguish between **fact** ("child did not hold toy") and **impression** or interpretation ("child did not like the toy") until you have sufficient information to back up your conclusion (that the child does not like the toy).

NB It is very important to compare behaviour in different situations.

Behaviour Log

This is the most straightforward type of observation and is quite common. It can be used

to see if there is any pattern of behaviour

to get a baseline of the frequency of occurrence of some behaviour so that the result of our intervention can be shown by a change in the frequency of this behaviour at a later date.

A common instance of a Behaviour Log would be a toilet chart - this is frequently used to note if there is any pattern to wetting and soiling as a preliminary to a toileting programme. It is useful in situations where there are several members of staff involved with the child. An example of a toilet chart is shown at the end of this topic (Appendix B)

Specific Observation Record

This would refer to the observation of previously specified behaviour(s), eg

communication attempts;

mobility level (in a strange room)

It is necessary to plan out beforehand a useful observation record which will ensure that no relevant information is omitted. Commercial checklists can be useful here, but they may not be appropriate for those who are deafblind.

Activity 4

Devising an observation record.

What would be the important information to have about a child's tantrums?

Draw up a recording sheet with appropriate headings for these observations.

Check your ideas with the sub chart at the end of this topic (Appendix C).

Think **why** each heading in the chart is important.

Use of video recordings

When you are working closely with the child, it is not always easy to "stand back" and observe objectively. Each of us tends to see what we want to see. It can be very helpful to have another colleague observe the child as you work but frequently time will not permit. Video recording allows several people to observe the same situation and "Observer-bias" is reduced. Other advantages of video:

it allows limitless replay for closer examination

it allows observation of all the people in interaction - eg you can observe both child and teacher

it allows a visual record of progress to demonstrate change over time, especially to parts

But certain cautions:

Video can be misleading especially if just a short clip taken out of context. It is easy to read things into video recordings especially if you were not present at the time

Always check against your own knowledge of the child. Is this typical behaviour?

This topic will be developed further in Module 4 Topic 4 Learning and Teaching

Activity 5

Look at

[Video tape I: Starting out](#)

Part 6: Introduction to observation

Two five year-old girls explore an unfamiliar room They behave quite differently. Ann (with glasses) has some vision. Cheryl has very little vision.

Read through the following questions before you watch the video. You may wish to watch parts of it again.

Describe how the two girls explore their environment. Note similarities and differences.

Comment on their vocalisation. Do you notice any differences?

Comment on the activity level of both girls.

Comment on their use of objects.

What problems does Ann have when she starts to draw?

What problems does Cheryl have when she plays with the ring?

Any other comments

Bibliography

There will be no required reading for this topic. However it is suggested that you utilise every opportunity to discuss your own observations with colleagues. Also ask your colleagues if there are any particular aspects of children's behaviour which they are currently observing.

Appendix A

Examples of home-school diary for one child

Example 1

Friday: School

Carol has been in a very good mood this morning. Happy and cooperative. She began to complain at the end of dressing. I left her by herself and within minutes she was asleep. I'll give her 10/15 minutes then waken her.

Have you noticed any confusion in Carol's gestures. I have found a **little** confusion between

Finished - wash hands

Food - Drink

Shoe - Sock

What I've done is to hold back on "apron" and "vest" and concentrate on these three pairs. I have been emphasising the movement. Carol gives the wrong gesture if she is impatient so I'm not worried, but I will spend more time establishing these gestures before moving on to more gestures.

I'm still working at these hearing aids and insisting that Carol keeps them in for a few moments at various times during the morning.

I've enclosed a letter and some information about flying and radio aids. KS

Monday: Home

I have noticed some confusion in Carol's gestures. I offer her a drink which she refuses. She then takes me to the biscuit tin and gives the proper gesture for a biscuit. I dress Carol with her standing between my legs and when I'm doing her shoes and socks I have her on my knee and when she's doing her sock gesture it's OK but when I do the shoe gesture she sort of slides her hands away from her foot, not a clean movement away - more of a sliding her hands away - I know this will be difficult to understand what I'm meaning. I could show you better but I hope you get a rough idea of what I mean. For "finished" and "wash hands" I can't say I have noticed any confusion or such. Could you tell Doreen I'm waiting for nappies from the clinic. If it is going to be much later in the week then I'll bring them myself. MW

Appendix B

Toilet Chart

w - wets pants or bed s - soiled pants or bed c - clean, did not use toilet
 v - used toilet to wet x - used toilet to soil

Name Week

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun
8.00							
8.30							
9.00							
9.30							
10.00							
10.30							
11.00							
11.30							
12.00							
12.30							
13.00							
13.30							
14.00							
14.30							
15.00							
15.30							
16.00							
16.30							
17.00							
17.30							
18.00							
18.30							
19.00							
19.30							
20.00							
20.30							
night							

Appendix C
Observation chart

Date	Time	Place	Who present	What happened before	Description of tantrum (duration)	What happened after	Initials

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Module 1 Topic 4

TOPIC 4 Introduction to Communication

General introduction

Communication is one of the most important elements of human development, but it is likely that this will be one of the most difficult areas for a child who is deafblind to develop.

Think about the last thing you said (since we usually communicate by speech). You should be able to see that there are at least five essential components to the act of communication

An idea (wish or feeling)

These ideas arise from your experiences of the world around you, or knowledge gained indirectly from other people, books, or even in-service training packages like this one. **What was your idea?**

Deafblind children have difficulty in building up complex ideas about the world or other people because of their limited experience. You, as a critical adult, become a "go-between" or interpreter of the outside world for the child.

A purpose (or intention)

When we say something, it usually serves some need or purpose for us, eg to release our feelings about something; to find something out; to tell someone what to do; or to manipulate someone into doing what we want without them realising it. **What was your purpose?**

It is important that children who are deafblind have the need to communicate with other people. If all their basic needs are met automatically, they may remain passive receivers rather than active participants in the world. They must learn that they can control what happens to them by communicating with others.

Children who are deafblind usually need help to develop beyond the basic need to indicate hunger, pain, or protest etc.

A listener (or partner in communication)

True communication takes place in a social context, ie there must be someone transmitting or expressing a message, (eg the speaker), **and** an expectation that there will be someone who receives this message, whether or not he or she understands. Ideally, the listener can then become the speaker in a communicative exchange or dialogue.

Did you have a listener? Did you expect or get a reply? Perhaps you just said it to yourself. That is all right. You can be both speaker and listener, but you will also have a wide variety of people with whom you can communicate about a variety of ideas or topics.

The child who is deafblind is likely to have difficulty in developing social relationships; in understanding that other people have ideas, intentions, likes and dislikes; and in developing an interest in the other person. The child must acquire a sense of trust in a small number of significant individuals from whom he can expand to interact with a growing number of people, both familiar and unknown. .

A means of communication

We have discussed speech as our natural means of communication, but there are other forms open to a child who is deafblind which will be discussed later. For the time being, note that speaking and writing would be two different means of communicating.

The specific language used

For example, we all speak English, as opposed to French or Chinese. This will be discussed later.

To summarise: In your work with children who are deafblind, every effort must be made to establish a **relationship** with the child, as a basis for communication by a variety of **means**, about familiar **experiences** which will serve a growing

number of **purposes** for the child.

These themes will be taken up again in a later Module.

Communication with those who are deafblind

Before looking at special aspects of communication, there are certain basic points which are very important.

Treat children who are deafblind like ordinary children, as human beings, with feelings, likes and dislikes.

Be affectionate with them. Show them you are happy to be with them.

Remember to **speak** whenever you are with them. Talk about what you are doing but do not chatter too much.

These would apply to any child, and may seem to be too obvious to mention, but it is very important that we treat children who are deafblind like all other children, even though they cannot always "give back" to the same extent in a relationship.

There are also some **special features** which you should understand when you interact with children who are deafblind.

When you are about to start work with a child (or have some other form of involvement) it is important that you always identify yourself by whatever means you have decided on.

Now look at the video example

[Video 1: Starting out](#)

Part 7 Introduction to communication

First section: name signs used by staff and children

Can you think of a feature about yourself which is a stable characteristic (glasses, beard), or something which you could always wear which will identify you (scarf, necklace, headband, armband, belt)? Try to think of the possibilities for **movement** related to this feature which can become incorporated into a sign. Helping the child to feel this tactile "name" will be your way of introducing yourself to her/him, and will give her/him a way of thinking about you. Later this may become your **name-sign**.

Greet the older children whenever you meet them, but not the younger ones (unless they have good residual vision and/or hearing). This may seem rather unusual advice but for young children it can be too confusing to have a succession of approaches from people who have no significance for them. In the early stages it is more helpful for a child to learn about people through developing a relationship with a small number of consistent adults (and children, eg brothers and sisters).

Remember also to make it clear to the child when you are leaving. S/he may not know whether you have left him temporarily, or if you have finished your work and are going away for a long time, so make it clear by waving "bye bye" (and if necessary helping the child to feel this). If he has greater language skills, you can sign and say "(we're) finished".

Give the child time to adjust to an activity or your commands. Give several cues as to what you are going to do, rather than introduce new tasks abruptly. Allow the child time to respond.

Make sure the child's hearing aid is working and at the correct volume setting.

With all deaf children who have some vision, make sure you are facing the light so that the light falls on your face. This allows your facial expression and lip patterns to be seen as clearly as possible. Judge the distance from the child's face that is best for getting her/his interest. This will probably be learned by experience or asking colleagues.

Always speak using normal rhythm and a clear voice, not too loud. Use simple sentences and repeat key points.

Means of communicating with children and adults who are deafblind

The approach used to communicate with a particular child will depend on his/her individual characteristics. It is important to distinguish between the child's understanding of communication (RECEPTIVE SKILLS) and the child's ability to use a form of communication (EXPRESSIVE SKILLS). Some children may understand without being able to use certain forms. The degree of residual vision and hearing will determine to what extent the child requires to be in physical contact with the other person.

The best way of introducing these forms of communication to the child will be discussed later.

Most communication involves some form of representation of the real thing either by words (really just a collection of sounds), signs or symbols. However, children who are deafblind in the early stages, may not be able to understand any form of abstract communication and may require to feel or see the **real object**. A spoon or swimsuit can be shown to a child as a way of saying it is mealtime or swimming time. As long as the child can recognise the object and its associated activity, this is the most immediate way of conveying a message to a child who is deafblind.

Similarly, the child may use **direct body movement** to resist your interaction or to show that he/she wants to continue.

Now look at the video

[Video 1: Starting out](#)

Part 7: Introduction to communication.

Second section: Use of object to communicate. Child resisting activity, and asking for it to continue

However, not every idea can be shown by an object, eg. feelings, and it is not practical to carry a large collection of objects around, so we must help the child to move on to more abstract levels of communication.

At the earliest stage, **natural gesture** is used. This may be in the form of pointing or mime. It is important to find the **movement potential** of objects so that this can become incorporated into a natural gesture.

Now look at the video

[Video 1: Starting Out](#)

Part 7: Introduction to communication

Third section: Natural gestures for child with some sight. In tactile form for the child without sight.

Formal signs are signs which are widely used by deaf people throughout the country, though there will be variations from one area to another (like dialects). Some signs have been created for educational purposes. The meaning of formal signs is often not immediately obvious unlike natural gesture.

There are different sign systems (British Sign Language Signed English, Paget Gorman, Makaton) but these will be discussed at a later date.

Now look at the video

[Video 1: Starting Out](#)

Part 7: Introduction to communication

Fourth Section: Formal signing between adult and child.

Fingerspelling is a means of spelling out words using the fingers instead of using paper and pen. In Britain a two-handed system is used by deaf people.

For those with additional visual problems there are two other possibilities.

the deafblind adaptation in which one person signs into the other person's hand.

the American one-handed system.

Each has its own benefits and problems for different individuals. On balance, the one handed system is recommended since it is easier for the child to use as it does not require the other person always to be in physical contact. Also only a hand-shape is required rather than a handshape **and** finding a position on the other person's hand. There is probably little difference between the two systems in terms of the child being able to understand.

Many centres do use the two-handed deafblind system of fingerspelling. As always, decisions about alternative communication systems must be considered carefully. Also, the child's post-school placement and communication systems used there should be kept in mind.

Now look at the video.

[Video 1: Starting out](#)

Part 7: Introduction to communication

Fifth section: Fingerspelling

Drawings can be used very successfully as a visual means of communication when the child has little or no language, but does have some useful vision. This is most meaningful when the child sees the drawings being developed.

These could be simple line drawings using a black felt pen. The child should be encouraged to think of drawing as a way of expressing thoughts, wishes etc. Photographs or very clear pictures can also be used.

For the older child, **Graphic Conversation** provides a link between writing and language by showing the child the ongoing conversation with the adult through drawings and writing.

Later on reading and writing may be used to communicate with hearing, sighted people. This will depend on the extent of residual vision. Braille, a system of raised dots on paper, representing the alphabet, may be used if the person has almost no vision, but few sighted people can read Braille. Braille typewriters, (Perkins Braille), and other equipment are available.

Now look at the video.

[Video 1: Starting out](#)

Part 7: Introduction to communication

Sixth section: Early graphic communication, More advanced graphic communication. Braille.

Do not forget to speak to the child at the same time as using the above methods to encourage the child's use of speech.

It is very easy to stop using your voice when you use alternative means of communication. Be aware of this. Also, encourage the child's potential for speech since this will be the easiest way for that child to be in a communicative relationship with the largest number of ordinary people. who know little about alternative ways to communicate.

However, depending on the degree of deafness, many children who are deafblind have great difficulty in acquiring useful speech and the main emphasis must be on establishing some means of communication.

The **TADOMA** method is a tactile method of letting a person who is deafblind feel the vibration of the speaker's throat and lip movements.

In work with children who are deafblind, you may be called upon to learn any of the above approaches. It is essential that you take every opportunity to improve your skills especially in fingerspelling, signing and Braille since the children depend on your expertise to teach them.

You should also be aware of some specific points in communicating with older children and adults who are deafblind.

Never converse with them through a third person. This will only introduce confusion as to who is actually communicating and who/what is being referred to.

If you cannot fingerspell or sign and the person has some vision, write down what you have to say. Unless told otherwise, use clear lettering and join the letters.

Use a black felt pen unless otherwise directed.

Activity 1

Select three children who are deafblind and of different ages (if possible). As shown below, list the means of communication which:

they **understand**: (to some extent)

they **use**

	Receptive Communication (understands)	Expressive Communication (uses)
Child 1		
Child 2		
Child 3		

Definitions of the various approaches to communication used in the education of children who are hearing impaired are given at the end of this topic. (See **Appendix A**)

Now you are ready to start learning the particular forms of signing and fingerspelling used by your school. Ask your Headteacher which tapes you should watch or classes you should attend. If you will be working with a child who uses Braille, you should seek advice from experienced staff or approach a school for the blind.

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Appendix A

Definitions of various approaches currently used in the education of children who are hearing impaired

The following definitions are those of BATOD (British Association of Teachers of the Deaf)

Natural Oralism

Natural oralism is the teaching approach by which children who are hearing impaired develop their own understanding of the English language through meaningful interaction with their immediate environment, following the same process of language acquisition as normal hearing children, using hearing as the primary sense through which language is acquired.

The development of speech is based on the growth of auditory perception through natural experience rather than by direct teaching.

Structured Oralism

Structured oralism is the method of teaching through the planning of structured processes or sequences, involving the application of systematic intervention, understanding that language can, and needs to be, taught. Structuring would apply to:

the acquisition of speech

the full use of residual hearing

the acquisition of speech reading skills

the development of language in all its forms

Signed English

A specific system for representing the English language grammatically in a manual form, based on British regional and national signs and two-handed fingerspelling, simultaneously with spoken English.

British Sign Language

A mode of manual visual communication incorporating the national or regional signs used in Britain with a specific structure. It is recognised as a language in its own right distinct from English.

Fingerspelling

This is the forming of words and sentences by the 26 different hand positions that represent the 96 letters of the English alphabet.

Paget-Gorman Systematic Sign Language

The system bearing this name was devised by Sir Richard Paget and developed by Pierre Gorman and Grace Paget. It is designed to give a simultaneous grammatical representation of spoken English, for use as an aid to the teaching of language.

Cued Speech

Cued speech is a one-handed supplement to spoken language devised by Dr R Orin Cornett to clarify the phonemes of language that are ambiguous or invisible in lipreading.

The following definition comes from the 1976 Conference of Executives of American Schools for the Deaf:

Total Communication

Total communication is a philosophy requiring the incorporation of appropriate aural, manual and oral modes of communication in order to ensure effective communication with and among hearing impaired persons.

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 [TOPIC 5 Introduction to mobility and orientation](#)

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A resource for staff working with children who are deafblind

Module 1 Topic 5

TOPIC 5 Introduction to mobility and orientation

With children who have damaged or absent distance senses, it is movement or mobility which enables them to learn about the world and is the primary means of gaining information.

In interaction with the environment, people and children who are deafblind may be lacking in the following areas:

INFORMATION They may live in an isolated world, being unaware of objects, happenings and people.

EXPERIENCE IN MOVEMENT The use of movement as a therapy must be made fun and should be indulged in for its own sake.

MOTIVATION Who should the child who is deafblind move when there is no reason to do so?

SAFETY AND SECURITY It is much safer to stay on the spot and move within the limits of what is known.

ABILITY TO IMITATE

Keep the above in mind when taking part in the activity suggested at the end of this topic.

The ultimate aim in teaching Mobility and Orientation must be full independence. However, we must set our objectives for the individual child who is deafblind at a level appropriate to his level of functioning. A realistic objective may be to enable him to develop an awareness of and the ability to relate to various features in the environment, eg recognition of the sound of traffic on the road, down kerbs, up kerbs, scrunch gravel underfoot, rushing down slopes or puffing up slopes etc.

Recognition of key landmarks, anticipation of those landmarks, relating them to each other etc are all possible objectives which may mark a high level of achievement for particular children who are deafblind.

It is of great importance to ensure that the child always knows

where s/he is going next

when s/he arrives at this destination

what the next landmark is

her/his ultimate destination

S/he may require constant reminders. Several things to avoid include such things as just walking without telling the child where s/he is going or always saying 'come to me, come to me' and never allowing her/him to arrive.

It is important to relate the normal development of mobility at whatever level to the child's development generally. Without exploration of the environment, no matter how restricted that environment may be, the child cannot be expected to develop any idea of what is out there, or what it is. Therefore, grasping, reaching and moving towards some form of incentive are obviously crucial.

This will lead to some kind of experience with regard to the properties of surfaces and objects, eg soft carpet, hard and cold lino, wet and slightly displaceable grass etc. Hard walls, sharp edges, unstable items of furniture etc all form part of the environmental experience. Uncomfortable experiences may deter further mobility so security without stifling is essential. The environment must be stimulating, safe and consistent in order to develop an awareness of space and the properties that go towards making up space.

Tactile experiences are obviously essential to the child with limited or little remaining of his distance senses. However, the child may dislike being touched or touching unfamiliar objects.

For the tactile defensive child, structured programming and careful handling will be required to gradually make him tolerant of tactual experience.

Tolerance of physical contact is most important as this will provide security and a spatial reference point as well as the means by which actions may be modelled.

Activity 1

In twos, one person with asleep shade. The sighted person has to move the other person about the building without speaking.

Include in your route walking along corridors, turning, changing sides, going through doorways and narrow spaces, climbing stairs and sitting down. In addition, force the 'blind' person to handle and examine various items without giving any prior information.

Before starting, try turning the 'blind' person several times in either direction so that he is slightly uncomfortable and very disorientated.

The objective is to develop a small measure of awareness of the confusion and insecurity of being without sight and hearing while being **moved around**.

Did you always know where you were?

How far did your knowledge of the environment help?

Did you always feel secure?

Did you always know how far your foot was from the floor when you lifted it?

What else did you notice about the experience?

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 [TOPIC 6 The network of support](#)

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A resource for staff working with children who are deafblind

Module 1 Topic 6

TOPIC 6 The Network of Support

(This topic will be more fully developed in Module 3)

In this topic we are going to consider the family; the roles of the professionals; Record of Needs; self-help and voluntary organisations.

Families

The most important people in any child's life are its parents and family. In most cases professionals come and go but in the general run of things it is the family who will provide continuity of love, care and nurturing. Up until about 15 years ago it was commonly thought that families didn't know how to, or weren't capable of looking after children with severe handicaps. Blind children were taken off to boarding school at two years of age. Parents of children, who appeared to be multiply handicapped or profoundly mentally handicapped, (and many children who are deafblind might at first sight appear to be so) were encouraged to put their children into long-stay hospitals. Even today, this is still occasionally proposed as an option to parents when news is broken to them that their baby is handicapped.

Research into how babies learn and develop has revealed how important the very early periods in life are. It has demonstrated how active the young child has to be in its own learning process, but in order to engage in this learning process it needs a secure environment and familiar and, ideally, loving people with whom to interact and learn. These findings have influenced educational thinking. The family is seen as being the most suitable environment, in most cases, for the baby and toddler, even one with a handicap as severe as dual sensory impairment. It is also appreciated that the family's role continues to be a very important one when the child moves to nursery or school. It is the parents' right to know what is involved in their child's education. For pupils with deafblindness it is only if there is consistency between handling, structuring of activities and the ordering of the environment that they will be able gradually to make sense of their world and learn.

But right from the start families of children who are deafblind do need advice and support. Their own baby might be the first handicapped baby they have ever seen. They may even be afraid of holding their child, let alone feel competent to start it off on the adventure of learning and developing. Families of children who are deafblind will need help and support throughout their child's life. The extent and type of support will vary depending on the age and stage of the child. As a baby, parents will want to know how they can start communicating with their child and learn to understand and recognise how the child is responding and communicating with them.

When their child reaches the stage of more formal learning they will want to know how they can reinforce what is being done in school. When the young deafblind person leaves school, the kind of support the family wants is to see their son or daughter placed in a situation which will recognise and foster their potential for independence and adult living. If their child is unable to live independently even with help, families will want to know that there will be some organisation to share the care of their adult child if they stay at home, or that there will be a caring place for them to go to. Listen to the experiences, hopes and fears of these parents on the video.

Activity 1

Look at

[Videotape 1: Starting out](#)

Part 8: Sharing experiences

After a second viewing comment on the following:

Why do you think parents had to wait so long for a full diagnosis of their child's disability?

Many parents felt isolated when they discovered their child was deafblind. What helped them?

What were the positive and negative experiences the parents had with professionals?

How has this discussion on video tape helped you in your dealings with parents of children who are deafblind?

Discuss your comments with a colleague.

Professionals

All families in this country have contact with professionals when they have a baby. Even if the baby was born at home, which is very rare, the health visitor visits regularly for the first weeks and the mother and baby will be called to the clinic or GP for assessment at regular intervals to check that the baby is progressing normally. For parents of handicapped babies the number of professionals involved can sometimes be overwhelming, so, long before the child comes to school the families will be used to people from different professional backgrounds being interested in their child, treating or working with it and offering them advice. Not all professional involvement is seen as being beneficial or sensitive, but it is very rare for parents to refuse all help or to feel no need of support and help.

These are some of the professionals with whom it is likely the families of children who are deafblind have come in contact with before their child comes to school.

GP and health visitor

paediatrician

ear nose and throat specialist

eye surgeon . audiologist

hearing aid technician

social worker

educational psychologist

educational home visitor

teacher from school for deafblind children

It is also possible that they will have had help or advice from a speech therapist, occupational therapist and physiotherapist.

Activity 2

Objective: to develop an understanding of a role of one of the above professionals.

Arrange a time to speak to one of the above professionals. Ask the person if they would be willing to answer a few questions. Your questions might cover such points as how it was they became involved with the child and family; Frequency, purpose and place of contact with family; whether it will be short-term or long-term involvement in their work with child and family; relationship to the school and its staff, any comments they wish to make on it.

Write up a report of the interview as a record for yourself.

The Record of Needs

From your interview, if not before, you will have become aware that two aspects of the work of a professional are: receiving information on the child from other professionals, and in turn, sharing information with them. One way of getting information is by assessment. This topic will be dealt with in detail elsewhere. However, there is a process of assessment set down by law for all children who have "pronounced, specific or complex special educational needs.... arising from a disability which either prevents or hinders them from making use of educational facilities generally provided" (Education (Scotland) Act 1981.) For this the child must be assessed by a doctor and an educational psychologist. There must be an educational report if the child is already in school and the parents' views must be sought. This process which is called "recording" in Scotland and "statementing" in the rest of the UK, has been laid down by law to make sure that all children with special needs and their families have the benefit of assessment and support from a variety of professionals. It also ensures that these professionals have to listen to the parents and be answerable to them. Parents receive a copy of the Record of Needs (Statement of Needs) and a copy will also be in the school.

Activity 3

Objective: to familiarise yourself with the recording (statementing) procedure.

Ask to see a copy of the Record of Needs of the child or children with whom you work

Ask if you may be an observer at an interdisciplinary team meeting for opening or reviewing the Record of Needs of one of the pupils in the school.

Write a report on what you understood to be the aim and outcome of the meeting so that you will be able to discuss it with a member of the team or your headteacher. You may find that you need clarification on the role of some team members or need more background information to understand the reasons for certain decisions being made.

Self Help and Voluntary organisations

Support from professionals is necessary and important but no matter how skilled or sympathetic the professional may be, do they really know what it "feels" like to have a son or daughter who is deafblind? Often the desire to talk to someone who has had the same experience has led to the setting up of parents' groups. Sometimes the school encourages it. Other instances are where parents are aware of a particular need for their children, e.g. after-school provision and join together to form a self-help or pressure group to raise money and/or influence the decisions of the authorities. Organisations such as Sense started in this way. Teachers and other professionals are usually welcome to join these groups, but in order for them to retain their original character and purpose it is necessary to make sure they are not "taken over" by forceful and well-meaning "experts".

An organisation such as **Sense** which thrives on cooperation between parents, families and professionals exemplifies what the "network of support" can be. It is not all one way ie professionals supporting parents and families. In a true network all partners contribute. Parents soon learn to recognise that professionals don't have all the answers, may often be unsure and make mistakes. All parties in a network need to be supportive understanding and sometimes forgiving to each other.

Activity 4

Objective: to find out about self help groups.

Read the leaflets in your school library on the roles and resources of the organisations listed below or send off for them if they are not available in the school.

Consult the [Sensory Information Service](#) (SIS) database. Information from Scottish Sensory Centre, Moray House Institute of Education, University of Edinburgh, Edinburgh. EHS 8AQ Tel: 0131 651 6501 Discussion Point: note down the ways in which these organisations might be relevant to the families of your pupils.

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 [Module 2: The School and Staff](#)

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A resource for staff working with children who are deafblind

MODULE 2 The School and the staff

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by Ailish Massey and Marion Blythman

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by Ailish Massey

[TOPIC 4 Roles and responsibilities of staff](#)

by Morag Turner

Module descriptor

Aims

The Module introduces the participant to a global view of education for children who are deafblind. It presents the particular ethos one would expect to find in a unit or school specially structured to meet their needs, and introduces the participant to the technical aids which are beneficial to them.

This module will give the participant both general and particular information on the education provided for children who are deafblind.

Objectives

On completion the participant will:

have some awareness of provision

be aware of the various types of provision needed

have an overview of the curriculum to be expected in a school for children who are deafblind

be aware of the importance of communication between the various groups relating the child, parents teachers

be aware of the various technical aids available to children who are deafblind

have an overview of the history, organisation and aims of one school for children who are deafblind.

Topics

Background to deafblind education

Case-study of Rosewood School for Children who are deafblind

The visual, auditory and tactile environment

Roles and responsibilities of staff

Style and Modes of Learning

Reading, video and written work

Additional Resources

Video; Using Residual Vision

produced by Sense. [address in Module 7, Topic 3] .

TOPIC 1 Background to deafblind education

The Background; World Wide Provision

In order for us to appreciate the difficulties facing educators of children who are deafblind we will look at a section of an address given by Keith Watkins at the 1981 International Conference in London.

"In this technocratic age, with instantaneous visual and auditory communication around the world through satellite, education generally has become international in character. However it is in the field of Deafblind probably more than any other specific areas of education that strong international links and influences have developed. No doubt this is due to many and varied causes. There are many factors of low incidence and scattered nature of the population causing teachers and administrators to look to programs in other countries for advice and assistance. At the other end of the scale there are the people who have had the necessary vision and provided the essential effort to promote education of the deafblind throughout the world.

Historically, the development or organised international services to promote the education and welfare of deafblind children and adults is comparatively new. Dr Gabriel Fartell in "The Story of Blindness, related that as early as 1648 an Englishman, Dr John Bulwar, wrote that a person born both deaf and blind could be taught to speak. This was more than one hundred years before the establishment of the first special school for the Deaf in 1760 and that for the Blind in 1784 (Both in France).

It was almost two hundred years before Laura Bridgman was enrolled at Perkins School for the Blind in 1837, and "became the first deafblind mute to acquire the use of language".

Following Dr Samuel Gridley Howe's success in educating Laura Bridgman, deafblind children began to find a place in schools for the Blind and those for the Deaf around the world. The breakthrough at Perkins School for the Blind marked the beginnings of that agency's international influence in this highly specialised field. In 1842 Charles Dickens visited the school. On his return to England in "American Notes" he described the achievements of Laura Bridgman for readers world wide. European countries began to establish education services: France 1860, Sweden 1882, Germany 1887, Finland 1889. Still, more than one hundred years were to pass before international services for the deafblind began to systematise.

By the end of the nineteenth century a considerable number of deafblind children had been educated in the USA Most famous, of course was Helen Keller. In 1887 Anne Sullivan began teaching Helen and they went forward together for almost fifty years. During this time they paved the way for development of services for the deafblind both nationally and internationally.

However it was not until half way through this century that the first national organisation for the promotion of education services was established. As Dr Edward J Waterhouse has recorded. "The year 1953 was important in the history of education of deafblind children. In that year the National Study Committee on Education of Deafblind children met for the first time. This Committee co-operated with the American Foundation for the Blind to sponsor the first national workshop for teachers of deafblind children at the American School for the Deaf Hartford, Connecticut in 1955. The proceedings of this workshop were published by The American Foundation for the Blind. Thus the valuable information provided by participants from the major education agencies for deafblind children in the USA was disseminated internationally.

At the same time, The National Study Committee took an initiative that was destined to have a dramatic influence in the provision of education services for deafblind children around the world. This "was the adoption in the middle 1950's of a

definition of a deafblind child, which avoided references to specific degrees of deafness or blindness". Schools for the Blind and schools for the Deaf both in America and in other countries, generally refused admission to children who did not fit the traditional categories of deaf or blindness. In other words, while it was possible to define a deafblind child in terms of the recognised definitions of deafness and blindness, experience had indicated that such a procedure deprived a large group of dually (vision/hearing) handicapped children of the special services they required in order to be educated. For example, a child who had a severe hearing defect but was well above 6/60 visual acuity, might fall into the category deafblind because a visual defect prevented him or her from functioning satisfactorily in a school for the Deaf.

Hence, The National Study Committee adopted a broad "new" definition for the deafblind. A deafblind child was seen as one who had both a visual and an auditory deficiency to such an extent that he or she was unable to develop or function satisfactorily in either a school for deaf children or a school for blind children.

This definition came to be used extensively throughout the USA, particularly with the Rubella waves of the 1960's. Since 1968, it has been used to implement federal legislation for the education of deafblind children in that country. Moreover, acceptance of such a broad definition especially by international organisations, has been the most significant factor in the development of education services throughout the world."

From reading this extract you will appreciate that development of provision has been hindered by a number of factors: the low incidence, the scattered nature of the population, the onset of the handicap, and the very woolly and indistinct concept of what the handicap really is (especially since the upsurge of Rubella as a major cause of deafblindness). In addition to all this, the complexity of the problems for educators has resulted in an inadequate service which has only slowly developed over the years.

Children who are deafblind can be found scattered throughout the country in a variety of establishments, ie schools for the deaf, for the blind, or for the mentally handicapped.

Background to provision in Scotland

Typically, in Scotland, and depending on the level of disability, children were placed in schools for the deaf, schools for the blind or even schools for children with severe and profound disabilities. The Education Act 1980, further amended in 1981 was crucial in ensuring that all children were entitled to an education appropriate to their needs.

One of the main difficulties lay in the small number of children affected; the wide geographical spread and the lack of assessment and diagnostic procedures needed to ensure a proper placement. In Scotland provision had been established by Glasgow Corporation in 1974 in a unit attached to St Vincent's School, Tollcross, under the supervision of Sister Ailish Massey. The unit, under Sister Ailish, gave a focus to work with children who were deafblind and their parents, giving a professional voice and therefore credibility to their concerns. The support provided to families, the information and skills identified and shared, both helped the children directly and increased the expectations of the parents as to the important role that could be played by education in the lives of their children.

This was a mutual process, which combined with Sister Ailish's determination and commitment, culminated in February 1986 when Carnbooth School was officially opened by the Convener of Strathclyde Region Education Committee. In fact, it is still the only school in the UK dedicated to the education of children who are deafblind, other centres remaining as units attached to schools.

The opening of Carnbooth School marked the beginning of a new era for Scottish children who are deafblind. It was with the move to Carnbooth that awareness of deafblindness was finally brought to the Scottish public and a professional focus on the education of children who are deafblind firmly established. There is still much to be done. Children who are deafblind are placed in a variety of settings, some appropriate,) some inappropriate (even though they are nearer the child's home) as they are geared only to some aspects of the child's difficulty.

Carnbooth, however, has developed a recognised expertise and the pioneer work done there will undoubtedly underpin future developments in this complex area of education.

Activity 1

Before the definition of a deafblind child was drawn up these children were chiefly in institutions or schools for deaf, blind or developmentally delayed children. After the definitions drawn up in the 1950's in America and the 1970's in Britain obvious progress was made in providing the services they needed. Can you say, very briefly, why this was so?

Aims of Education for Children who are Deafblind

In the past, many children who had both visual and auditory impairments, were assumed to be profoundly retarded and

were automatically institutionalised. Little hope was given of them ever achieving even the basic self help skills. Of course there were always the few highly intelligent children, such as Helen Keller, but usually the child born deafblind was considered, in most cases, ineducable. Time has shown, however, that, given the appropriate teaching and attention, many of these children can achieve a potential never dreamt of before.

In order to accomplish anything even if it is only to bake a cake, we need first of all to know what the end result is to be. So, in order to understand what education is we must firstly define it.

Activity 2

Think of your own education. Why did you go to school? Now write down what you consider to be the aims of education in general.

Many of the points you have considered will also apply to children who are deafblind, but remember, they do not have the advantage of all the preschool knowledge you absorbed through your eyes and ears. Their education, therefore, will have a slightly different emphasis.

Reflect on the following:

"The overall aim of a school for deafblind children is to enable each child, according to his/her ability to become a happy individual and an integrated member of society, ie, one who can make sense of his/her experiences and environment and use them to continue the life-long learning process; who has an effective method of communicating and can therefore experience satisfying relationships with others; has enough personal independence to give him/her a sense of their own value and worth."

Carnbooth School Brochure

Every word of the above statement is vitally important. Deep reflection and carefully structured planning are needed if these aims are to be met and this is what we will discuss during the remainder of the course. (You will find more about this in the Warnock Report).

Activity 3

Compare your general aims of education with those given for deafblind education, Note the differences and similarities. These points will be further developed in detail in LEARNING AND TEACHING Discuss these with your tutor and your colleagues.

A philosophy for educating children who are deafblind

Deafblindness isolates; it cuts the individual off from other people, and from the reality of her/his surroundings. It stunts physical, emotional, social, intellectual and spiritual development.

Young children who are deafblind live in a basic world of pleasure and discomfort. They have difficulty discriminating between themselves and their environment. They exist from moment to moment and cannot form ideas about even the most fundamental things in their lives. Confusion and fear abound.

As educators we try to enter

into **their** experiences,

into **their** world,

and form a relationship **with them**.

Only when they have become aware of us as separate from themselves and have overcome their confusion and fear of us can we expect to slowly draw them out into "**our**" world.

The key to their learning is therefore **their** interest and **their acceptance of us**.

Drawing the child who is deafblind out into the "real" world is a difficult process; life is unpredictable and very complicated. So in a school for children who are deafblind the environment and the activities are highly structured and simplified. This is why the majority of schools are residential. The curriculum is based on all the natural activities a mother does with her child. These are used to take the child through all the developmental stages and to teach

language. Staff working with the child are kept to the minimum and a "day rhythm" is built up so that the child can anticipate coming events and be secure enough to learn from them.

Activity 4

Do you remember when in Module 1 you were blindfolded and no one communicated with you? Reflect again on your feelings. Perhaps you would like to write down some insights you now have into the world of the child who is deafblind.

Are you becoming aware of the complexity of the situation you are in? The more you learn about children who are deafblind the more you realise how little you know; but you are not alone in this confusion. As you go through the rest of the package you will realise the "we're all in the same boat". Every day brings new discussions, new insights into the difficulties facing these sensorially deprived children.

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 [Topic 2 Case study of Rosewood School for children who are deafblind](#)

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A resource for staff working with children who are deafblind

Module 2 Topic 2

Contact Topic 2 Case-study of Rosewood School for children who are deafblind

(This description is not drawn from any particular school)

The following aspects are dealt with:

Aims

Relationships with families

Assessment and admission procedures

Educational and social programmes

Organisation

Layout of buildings

Equipment

Safety procedures .

Aims

Children who are deafblind need a highly structured routine, therefore Rosewood School is residential. Children are introduced gradually until they reach the maximum stay of Monday to Friday each week. In particular cases, and as part of independence training, day attendance is considered.

The overall aim of the school is to enable each child to become a happy, integrated member of society, one who:

- can make sense of her/his experiences and environment, and use them to continue the life-long learning process;
- has an effective method of communicating;
- can experience satisfying relationships with others;
- has enough personal independence to give her/him a sense of their own value and worth.

Relationships with families

Good relationships with the children's families are of the utmost importance to the school. Families are encouraged to visit as often as is possible and, in turn, the staff including the school counsellor, visit their homes so that there is support for the parents and continuity in handling their child. Video records of the children provide for parents a detailed record of each new step in their child's programme.

Formal links, with the children's homes include:

Weekly - A home/school diary written by parents and the staff working with the child.

Bimonthly - A written copy of the child's progress and the plans for the next two months.

Six-monthly - Attendance by the parents at the child's review.

A school such as this places great emphasis on the needs of the child and the family. One outcome of this concern is to establish a holiday pattern which consists of 6 weeks in school followed by a break at home of 1 week. In addition to this the children have 2 weeks holiday at Christmas and Easter; and 4 weeks holiday in the summer.

In this way the year is structured so as to facilitate the greatest benefit to the child and ease to the family.

Assessment and admission

Like most schools, Rosewood has a formal admissions structure though much informal discussion and consultation takes place prior to the child's admission.

It is in the nature of things that all dual sensory impaired children are developmentally delayed. Assessment over time, with a known input, is desirable in order to determine whether a child's developmental delay is primarily one related to the dual sensory impairment, or to severe or profound learning difficulties, coupled with additional sensory deficits. Admission to school must therefore incorporate an element of assessment. Depending on circumstances (not least the age and location of the child), assessment in Rosewood School is either:

Direct this will be done at school or at home or

Indirect advice will be given to a referring agency regarding assessment and child management.

Because of the low incidence of dual sensory impairment it is normally outwith the experience of many professional workers. The nature of assessment regarding suitability for a residential specialist school is therefore flexible, depending on circumstances.

Application procedures for assessment and/or admission

Procedures for assessment and admission do vary from one authority to another but at Rosewood generally involve reference to an assessment and admissions team or panel. These panels almost invariably include the head-teacher of the receiving school, a community medical officer, an educational psychologist and a senior member of the regional authority - say an adviser or assistant education officer.

The panel responsible for admission and assessment to Rosewood School is presented, by the referring agent, with the medical and psychological information accumulated. Further aspects of that assessment also need to be carried out by the assessment team itself, a member of the school teaching staff visiting the child at home or in his/her existing educational provision. A second meeting may then be called to determine the approach most suited to the particular child's needs.

This may mean:

Admission to a reception class in the school for the purpose of on-going assessment.

Offering a home-training programme for the child over a limited period of time, with a view to future admission.

Requests for additional information.

Placement on waiting list for the school. or

the referral is considered inappropriate and is passed back to the referring agent.

In the case of (a) and (b) a review date is given. The referring agency is expected to be involved actively during this period, and parents will be involved and consulted right through the whole process.

Not all children with a dual sensory impairment are admitted to the school. Some, after the year's assessment (or before) will be considered better suited to the services offered by a school for the visually impaired, the hearing impaired or those for other special needs pupils. Rosewood School concentrates on those children whose development and learning is principally hindered by the dual sensory impairment of deafblindness. These children may also have a secondary disability, but unless this is considered a major handicap they will be admitted to the school.

Educational and social programmes

Young children with an auditory and visual handicap are often cut off from their surroundings and from other people. Their world is principally a combination of the two extremes - comfort and discomfort - and they have difficulties

discriminating between themselves and their environment. They exist from moment to moment and have difficulty in forming ideas about even the most fundamental things in their lives.

In Rosewood School the educators are encouraged to enter into the children's world ie, their interests and experiences and form relationships with them. The environment is highly structured and a 'day rhythm' built up for each child. All the normal activities which a mother carries out with her child become part of the programme, being channelled in such a way that the aspects of development needing stimulation are emphasised.

An integral part of this process is the teaching of communication and language. These are developed through 'conversational situations' being created by staff who, on a one-to-one basis, are so closely involved with the children that they have ample opportunity to recognise and pick up even the faintest signs of communication.

Building on this foundation, the children come to an understanding of themselves, others and the world around them. They are taught to communicate through sign language, fingerspelling or speech, according to their abilities. Training in independence means that some of the older pupils may eventually be able, not only to look after their personal care and needs, but to cope with living on their own with the minimum amount of supervision.

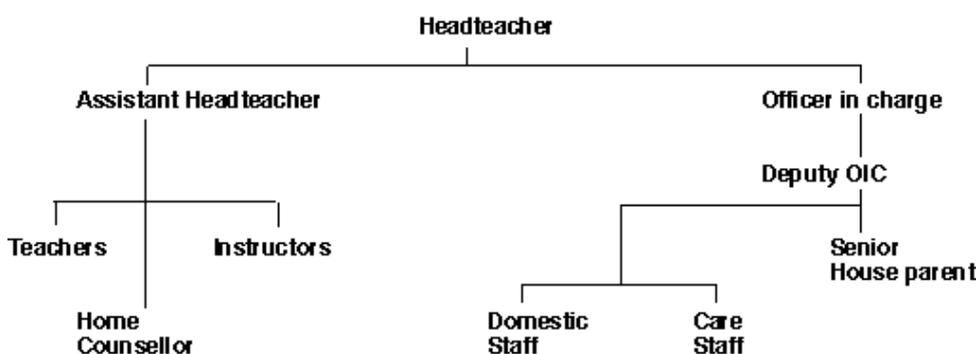
Life at Rosewood School is not all work. Children, according to their ability, may attend local evening clubs, go horse riding, skiing, swimming, or play in the school's ball pool, adventure playground or other open areas. They may also go on holiday with the school each year.

Organisation

If there is to be a balance between the needs of the individual child and the overall needs of the group, the school has to be an organised establishment. Staff must be clear about the contribution expected of them and of their roles and responsibilities. We will therefore look at the structure of the staffing, how the teams responsible for the children operate, how information is communicated and how staff are trained to become active contributors to the education offered by the school to the population who are deafblind.

Staff Structure

Teachers and residential social workers (child care staff), are employed to work on a one to two ratio with the children. The structure is as follows:



General meetings for all the staff take place every 6 weeks and weekly meetings are held for the different professional groups.

It is worth knowing that a clean cut structure like the one above which recognises levels and varieties of responsibilities helps to obviate inter-personal difficulties and problems of management.

Activity 1

Ask for a list of the staff in your school and, using the above diagram, group them according to their role. Now find out

the names of all the other people who are in some way associated with the school, eg doctors, psychologists, physiotherapist, escorts etc.

Children's teams

The team of workers associated with each child generally meet weekly to exchange information and discuss ideas. Each team has an appointed coordinator who may be chosen by the Headteacher on the merits of his/her knowledge of the school's methods, experience with the child, and general ability to work with others. He or she may be a teacher, child-care worker or instructor.

Coordinators are mainly responsible, in conjunction with the Headteacher, the child's team and the other promoted members of staff for planning the child's programme according to the school's policy and methods and the child's needs. They have to keep in mind the overall organisation of the school and the wishes of the promoted staffing their respective areas. They may be overruled by them if it is considered necessary.

Coordinators often lead the weekly and/or daily meetings about the child. In the absence of the Headteacher or at her/his request, they may also chair the six weekly reviews with the exception of the major ones which are led by the most senior member of the promoted staff present in the school at the time. They keep in close contact with the child's family, writing in the weekly diary, making sure that all information is passed on to them, and from them to the promoted staff. Important occurrences such as illness etc, are seen to by the Headteacher.

Activity 2

How are the staff working with the children in your school organised? Do you have specific teams? Find out all you can from a senior member of the school staff. You may also like to ask them to explain their role.

Record keeping

Record keeping is also an important factor in the running of any school. The children need the security of structure, and their progress cannot be correctly assessed unless accurate records are kept. The principal methods of communicating information in Rosewood are as follows:

By word of mouth

Daily record sheets. These are generally filled in by every member of staff working with the child. They should be clear, concise and short, recording the child's response rather than passing an evaluation. .

Bimonthly reviews. The appropriate staff are expected to draw up a clear and concise report of their child's progress before each meeting. This is the basis of the verbal presentation they give to those attending the meeting.

Progress reports. These are the summaries of the bimonthly reviews.

Video record of child's progress. These are made regularly and kept in the library. They may be borrowed by the school staff, parents or interested professionals. They are not shown to others without the permission of the Headteacher and the parents.

General records. These are confidential. All letters, psychologist's reports, permission forms, Records of Needs, and the progress reports for each child are kept securely by the Headteacher and only available on request.

Training

On commencement of work in Rosewood School, care staff and teachers are introduced, by the Head Teacher and/or an appointed tutor, to the in-service training programme. There are also a number of training days in the year when all the staff have the opportunity to come together to consider general topics.

Layout of building

We have already mentioned the importance of teaching the child who is deafblind in a structured setting and through the normal everyday activities of washing, dressing, eating cooking and for the older children, general household duties, shopping, budgeting etc. This cannot be done in the artificial setting of the classroom, so Rosewood School building is planned with this in mind.

Each floor has all the rooms necessary for a group of children, while the gym, music room and soft play room are common to all. The child who is deafblind needs to be taught throughout the whole day so every room is considered a teaching room. The concentration of back-up work is, however, done in what are called activity rooms, the music room and rooms with ultraviolet (UV) lighting.

Activity 3

Ask for a copy of your school plans and, using it, go around the school making yourself familiar with the location of rooms and how they are used.

Aids and equipment

The school is planned in such a way that the layout and furniture are as close as possible to what a child would find at home. However, there are some additional helps for the child who is deafblind.

There is an amplified electric organ along with other musical instruments in the music room.

There is also a CCTV (Close Circuit Television) for enlarging print for partially sighted children. Braille machines are also available. All staff are eventually trained in their use, either through in-service or as part of another course.

Again, in the area of visual training, there are three rooms equipped with Ultra Violet (UV) light. Staff are recommended not to work under it for longer than 15 minutes at a time.

For those children who may be tense or stressed, there are spa baths (jacuzzi) and facilities for massage. Demonstration video tapes are available to the staff and parents.

Computers are also available.

Video cameras and recorders are widely used for staff training purposes and as records of children's progress. There are also photocopiers which reduce and enlarge.

Because the children are of various ages, it is difficult to have furniture to suit them all. The school therefore is supplied with Trip Trap chairs which are altered to suit the needs of individual children. These are adapted as they grow.

The following are the right and wrong positions for the child seated on a Trip Trap chair. (Incorrect positions are indicated by the dotted line.)

Safety Procedures

We will now look at the safety procedures in Rosewood School.

There are various fire extinguishers and emergency doors. The alarm sound is a siren - as flashing lights can be attractive to visually impaired children, and may cause them to linger.

Fire practices are held regularly, and at various times, so that everyone is familiar with the procedure. In every major room there are instructions on what to do when the alarm goes off.

First-aid boxes are available in all kitchen and utility areas and are marked with a white cross on a green background. In addition to this, there is a medical cabinet on each floor, in the utility room.

Activity 4

Go around your own school and, with your plan, mark in the emergency doors, fire extinguishers and fire alarm

Look at the various fire extinguishers. Now find the instructions about emergency procedures. **READ THE INSTRUCTIONS CAREFULLY**; you may be asked what they are at the next general staff meeting! The Health and Safety files are often kept in school libraries. Find them and, when you have free time, start to work your way through them. There is a lot of information but it is all important

Here are some general hints about safety which can be applied to your school setting:

Doors should not be left open (unless for a short time while moving furniture); the children have a visual handicap and could bump into them easily. They are often the principal means of controlling the spread of fire and can contain it for 90 minutes, if treated with the appropriate material.

Do not leave things lying around the floor; the children could trip over them.

Do not leave the electrical equipment to a child to play with, eg a tape recorder. Neither should you leave leads hanging near the children as they could chew or pull them. Wall points should be covered in areas used by small or more handicapped children.

Do not have the electric kettle near the edge of the kitchen counter. Neither should you pull out the flex while leaving it switched on at the socket.

Handles of pans should not be allowed to stick out over the edge of the cooker.

Do not leave any form of medication lying around. It should be **LOCKED** away in the medical cabinet. Neither should disinfectant be left out in the bathrooms, a child could drink it!

Test water in the hot tap. Get the child to put the cold water in first.

Do not leave sharp objects lying around, eg. knives, scissors or blades.

Put yourself in the child's place - watch out for sharp edges at the child's level and protect him/her from them.

Never push a child who is deafblind from behind, or drag them by the hand. When walking alongside a child, make sure you allow them enough space so that they do not bump into things. Be careful of traffic around the school and do not take children's bikes out on the road.

When on the street hold the child's hand or use the deafblind grip to lead them. Do not let them run on the pavements. Pause at the edge of pavements. Point out traffic if the child has some sight. .

Follow the Safety Code of Practice. Children should **ALWAYS** be supervised in the gym and adventure playground

Activity 5

There may be a school procedure book kept in your school. Ask someone to point it out to you it contains lots more

information which you should know about. Look through it, but do not expect to take everything in immediately you will need a regular reminder.

Activity 6

In addition to the fire alarms, your school may also have other types of alarms. These are emergency calls for help. Find out what they are, and when they are used.

Many of the school staff are responsible for equipment or areas. Find out who you should go to for information about the following:

Hearing aids

Electric, amplified organ

UV Room

Massage

Computers

Photocopier

Video equipment

Toy library Library

Stores

First aid cupboard

Supplies

Social activities (children)

Any others appropriate to your situation

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 [Topic 3 The visual, auditory and tactile environment](#)

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A resource for staff working with children who are deafblind

Module 2 Topic 3

TOPIC 3 The visual, auditory and tactile environment

In Module 1 Topic 5 (Mobility), you have already been introduced to practical ways of helping the child who is deafblind to move around his/her environment. Module 4 Topic 5, will concentrate on the various aids which may be of help to the child. In this 1 topic we will look at the child's visual, auditory and tactile environment and how these can help to make the child's growth towards independence easier.

Remember:

Don't overprotect the child, allow him/her to do as much as he/she possibly can.

Don't oversimplify the surroundings, the child will not learn to adapt to normal situations.

Do keep the school environment as close as possible to normal living situations.

Do keep the adaptations flexible and suitable to the child's level of independence.

We will begin by looking at the various aspects of a building, the floors, stairs, walls, furniture, lighting and sound. We will then look at some points to keep in mind about the outside environment.

The Floors

The child who is deafblind will be wearing a hearing aid which amplifies all environmental sounds, so carpet is the ideal floor covering. This should, however, be plain not patterned, as the latter will confuse a child with a visual impairment. Different textures and colours on different parts of the floor and in different rooms will help the child to identify where s/he is.

Non-slip, rubber mats can also help. These can be placed at doors and at junctions in corridors. Care should be taken that mats with a thicker pile (nylon or cotton) are never left around. These can trip the visually impaired youngster and are highly dangerous.

Ideally you want

carpets of a plain colour contrasting with the walls
different textures or colours of carpet for different rooms
rubber non-slip mats.

You should avoid if at all possible

patterned carpets or those which are the same colour as the walls
same texture of carpet in different rooms
cotton/nylon mats
linoleum or vinyl floor covering unless they have non-slip surfaces.

The Stairs

A continuous handrail should follow the curve of the stairs and landings.

Sometimes a gate may be needed at the top, especially if there are few features to warn the person who is trailing.

Some warning such as a change in flooring should be used to indicate the top of the stairs.

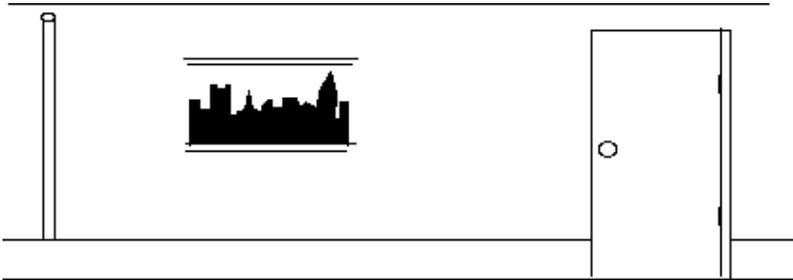
The edge of each step should be marked by a white or contrasting strip to make the task of walking up and down easier.

The Walls

Walls, like floors, should be plain. A uniform, pale colour is usually best as pictures, notice boards and people will be seen more easily. Avoid dark colours, and gloss paint as these create difficulties for the child who is visually impaired. Don't display masses of children's work on the walls, instead of helping the visually impaired child this adds to their confusion. Keep displays simple and scarce. Use contrast.

The child who is visually impaired will use "trailing" to find his/her way around a building. (Module 4 Topic 6, Module 6 Topic 2). Natural clues such as door frames, window sills, radiators, wood panelling and wall 'phones are ideal, while others such as fire extinguishers, coat hooks and open doors can be very dangerous as they can obstruct the passage or, being above hand height, will not be perceived by the children and can cause injury to them. Special clues may be added to walls. Temporary strips of material, rope, textured wallpaper, etc. can help when the child is learning a new route, as may objects attached to door handles. These should later be replaced by Braille or tactile labels depending on the level of the child.

In this passageway, the picture and pipe are all useful clues in helping the child who is deafblind to understand where s/he is.



Remember to

- use plain, light coloured, non-gloss paint and paper
- use different textures on walls,
- use lightweight springs on doors

and not to

- use dark colours or fussy patterns
- put lots of children's work on the walls
- put large coat hooks at eye level
- have wall fittings protruding in such a way as to trip a child

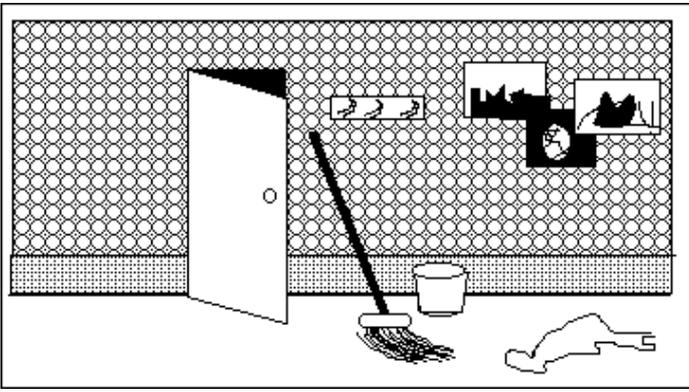
The Furniture

On the whole, normal everyday furniture may, and should be used with the child who is deafblind. What is important is how it is arranged.

A child who is deafblind uses furniture not only as it is intended to be used but also as a support and a guide. He/she will bump into things more frequently than the sighted child, so cupboards, wardrobes etc, need to be sturdy. If they are being used as room dividers, they should be attached to the ceiling and/or wall rather than the floor, where protruding bolts and brackets can trip the child. Items such as low coffee tables should be avoided for the same reason.

Activity 1

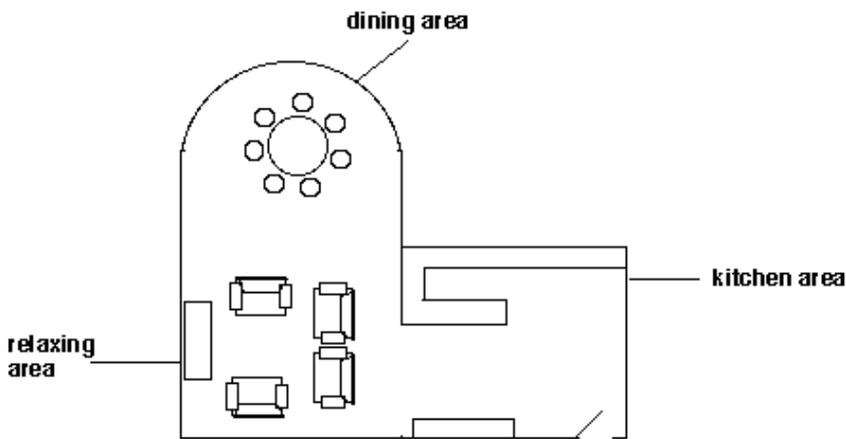
List the dangerous features and then the unhelpful ones in this illustration of a room. Show your answers to your tutor and discuss your findings with your colleagues and your pupils, if this is possible.



Arrange it!

Wide empty spaces are particularly difficult for the visually impaired child. Group your furniture, keeping a balance between what look good and what is good for the child who is deafblind. Ideally, different rooms should have different functions, eg a living room for relaxing in, a dining room for eating in, and a kitchen for cooking in. However, this is not always the case, especially in the child's own home, so areas should be defined in order that the child who is deafblind is clued in to where he/she is and what happens in that place. This is particularly important for the young child. Staff and parents should be careful that activities are carried out in the correct area or room, otherwise the child will be confused.

An example of how one school planned the children's open plan living/dining room/ kitchen is shown below.



Keep it the same! Change it!

If the child is to become secure and independent it is important that their environment remains stable. So as far as is possible, things should stay in the same place. However, it is equally important that he/she knows what can and cannot be moved, so changes should be made about twice a year, or according to the needs of the child. If the child becomes overdependent on the environment he/she will eventually react strongly against anything new or different and will avoid exploration, lack initiative and become insecure. So, remember to make simple changes, but let the child know what has happened. Take him/ her around the room, systematically pointing out what remains the same, what has changed, and how the changes relate to the known areas. Observe how the child reacts to these and if he/she is inclined to become immobile in the new environment. Give extra help until there is adjustment.

Contrast is also important. Table tops, dishes and mats should all be in contrasting colours. Use Dycem Roll on slippy surfaces as this allows the child to concentrate on the task in hand without having to cope with keeping the item in the one place. Define the area of work if necessary, eg, a tray, a shallow box, or a small table with a raised edge. In the case of the child with some sight, a contrasting piece of Dycem is sufficient to help him/ her recognise the area to concentrate on. Remember, if the child drops something, make him/her pick it up. In this way they will learn two things, the concept of on/under, behind/ in front of etc, and they will come to understand that things exist if they are outside their immediate reach.

Remember

Do keep the furniture in the same place but change it around about twice a year.

Do have separate rooms or areas for different activities. The young child will become confused if s/he sits on a potty in the living room and eats her/his food wandering around the house!

Do have contrasting dishes and tables or mats.

Do define the area of work for the child.

Activity 2

Look at the rooms your deafblind pupil uses. What are the good points and the bad ones? Show your answers to your head teacher or tutor.

The Lighting

Children with a visual impairment may have some usable vision and lighting can play an important role in helping them become independent.

Bright lighting is not necessarily good lighting, in fact some visually impaired children may prefer dim light. It is important to know what is most comfortable for the child you work with.

Try to provide a good overall illumination in all areas including halls, stairs, landings and bathrooms. Fluorescent tubes are one of the best ways of doing this, and the cheapest. It is more expensive to switch them on and off than to leave them on all day. Beware, however of the buzzing sound they sometimes make as this can be very irritating to a child with a hearing aid. Table and standard lamps may also be used to provide light for close up work, but Anglepoise lamps are the most suitable, as these can be altered to prevent glare. This can be a very big problem for someone with cataracts. So, look out for naked bulbs, inadequately shaded lights and sunlight, especially shining through dirty windows.

One of the best ways of avoiding this problem is to reflect the light off a white ceiling or wall. Reflected light is by far the best and this should be kept in mind when choosing shades.

Remember to position your furniture so that the main source of light (window or lamp) is coming from the side opposite the hand the child uses most, eg. a right handed child will have the light on his/her left and vice versa.

Activity 3

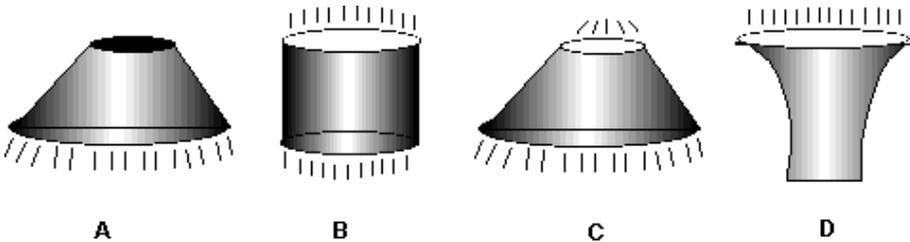
Some of the lights around the school need new shades.

a ceiling lamp in a bedroom

a wall lamp in a hallway

a reading lamp in the living room

Can you decide which of the following shades should be used?



Look at the correct answers which come at the end of this topic. (Appendix A)

Remember

Do use the correct shades on lamps.

Don't leave a lamp without a shade.

Do use blinds and cults to control the light coming through windows.

Do keep windows clean.

Do use anglepoise lamps for close work.

Don't shine the lamp in such a way that it casts a shadow.

Don't sit a child facing or with her/his back to the main source of light.

Do have the light coming from the left or right of the child depending on the hand s/he favours.

Don't forget to replace dead bulbs. The dark areas these leave in corridors confuse the child.

Do find out the lighting most appropriate and comfortable for the child.

An additional reminder

Because some children will light-gaze (stare at light), it is not always possible to have the light best suited to their needs.

Video

The Sense video **Using Residual Vision** illustrates many of the points mentioned in this topic It is worth looking at.

Sound

By this time you should be very aware of the environment in which the child who is deafblind lives and works. There is one last point to keep in mind - sound.

Carpets help to deaden echoes and so do curtains and soft furnishings, but what about the other sounds you don't normally hear but that are picked up and amplified by a hearing aid?

Activity 4

Close your eyes and listen for a few seconds. Now jot down all the sounds you hear. Did you realise there were so many?

Your activity will have alerted you to sounds in the room you are working in but many more could be heard in other places, eg

The buzz of the fluorescent light

The radiator or water pipe

The banging of cutlery or games on a table

A person talking or child crying

A clock ticking

A door banging

A radio playing

A Hoover

Traffic outside

The birds

The wind or rain

All of these sounds will mask the voice of the person trying to communicate with the child who is deafblind. Although it is not possible, nor is it ideal to eliminate all of these, you do want to help the child to concentrate on the task in hand so care should be taken to quieten the immediate environment.

(NB Radio microphones are an excellent means of eliminating undesirable sounds. Only what is being said into the speaker's microphone is picked up and transmitted to the child).

If possible, soundproof the particular rooms where you want the child to concentrate. (Acoustic tiles are suitable). Use carpets, curtains and soft furnishings. Keep the lighting and central heating as free from noise as possible. If you have a hard floor covering use rubber on the legs of furniture. Control the use of the Hoover to times when the child is not being asked to concentrate. If your building is near a busy road, plant trees to mask the sound and, if funds allow, invest in double glazing.

Remember

We are preparing the child for life, and life is noisy, so don't overdo things! It is important for the child to know what each of these sounds is so that he can ignore them to concentrate on the task in hand. This will be looked at later on in Module 6 Topic 3

Remember:

Do use carpets, curtains and soft furnishings.

Don't leave the TV or radio on when the child is not using them.

Don't Hoover when children are working.

Do check buzzing fluorescent lights.

Do get your heating pipes checked if they are noisy.

Do get double glazing if you are near a busy road.

Activity 5

A unit we will call Rosewood is being renovated for 5 children who are deafblind. Can you help by making appropriate suggestions for the rooms shown on the plan? (Remember to use a photocopy of the plan supplied in Appendix B).

The outside environment

Children who are deafblind can be helped in independence if thought is put into planning the surroundings of the school.

Paths should be of smooth concrete or tarmac with a clearly defined edge (not a drop) to grass variety of surfaces to clue the child into where they are. Loose sand or gravel can be used for this. Waist high flower beds with scented shrubs are also helpful.

Steps should always have a handrail and, if in the middle of a path, should have some clue to forewarn the child, eg a change in the surface texture.

Playground equipment such as swings should always have a protective barrier, otherwise the child could walk in front and have a nasty accident.

Children who are deafblind have to learn to play - don't expect them to entertain themselves. They will need to be shown what to do with the various pieces of equipment; they will need you to play with them in the Wendy House. But be careful, don't overdo it. As soon as you see some indication of them taking off on their own, give them their freedom. So long as the environment is safe they should be allowed, and also encouraged, to explore their surroundings freely. This will give them confidence and encouragement in further exploration and risk taking. Play is another way of learning, it should be fun.

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Welsh Office (1981) Staff development package on visual handicap

APPENDIX A

Answers

What type of shade?

Ceiling lamp - Shade B or C. These let light out from the bottom and top to be reflected off ceiling/walls.

Wall lamp - Shade D. This directs light upwards to be reflected to the whole room.

Reading lamp - Shade A This shade throws all the light onto the area where it is needed. It is good for close up work.

APPENDIX B

APPENDIX C

Answers

Activity 5

Some suggested improvements and modifications to go with Rosewood plan (see below)

Room suggestions

Living/work room. The living and work areas have been clearly defined. Anglepoise lamps are provided for the work table and on a small table beside a low chair. The standard lamp has been removed as it is too easily knocked over.

Kitchen/dining room. Here again the areas have been more clearly defined. The kitchen furniture and outside door have been positioned so as to give a continuous work top. Extra lighting has been installed over the dining room table and the work tops. Fluorescent strips have replaced the ceiling lamps.

Bathroom. The only change here is to add a mirror with a fluorescent strip over it. Remember, it helps to have contrasting toilet paper, soap and towels.

Bedrooms The three bedrooms have their beds arranged differently to help the child identify which room he/she is in. As

far as is possible the beds should also be in different positions in the room so that the child can identify his/her own area. Reading lamps have been attached to the walls over the beds.

Hall. The hall should be kept as clear as possible but have some clues to help the child locate the rooms. The phone is now on 'l the wall and the coats put into a cupboard with sliding doors. Both these will act as clues for the child. The lighting is now fluorescent as this gives a better overall light.

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 [Topic 4 The roles and responsibilities of staff](#)

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A resource for staff working with children who are deafblind

Module 2 Topic 4

Topic 4 Roles and Responsibilities of Staff

After you have studied Module 1, you will appreciate that deafblindness is an umbrella- term covering a vast range of handicap. Because these children suffer from some degree of deafness and some degree of blindness it does not mean they are immune to any other disabilities. Like hearing, sighted children there is a complete range of ability. They too may have cerebral palsy, epilepsy, mental handicap etc. Indeed some of the causes of deafblindness also give rise to such disabilities (see Common causes of deafblindness Module 1 Topic 2).

Dependent on such variables as age at onset, family support, general health, there is also the complete range of emotional reactions. In Module 1 Topic 1 reference is also made to multi-sensory deprivation which leads to a delay in so many aspects of living.

The staff member has therefore to fill some or all of the following roles, in fulfilling which, they could be working with a variety of professionals in addition to parents and adults who are deafblind (see Module 1 topic 5).

The course in conjunction with your practice, should enable you to achieve foundations of the following professional capabilities.

Assessor

To diagnose effectively and assess the
effects of auditory loss
effects of visual loss
effects of combined visual and hearing loss
suitability of aids
progress or lack of progress in your student learning difficulties.

Teacher

To teach effectively children who are deafblind
within an age range from infancy to adulthood
within the complete ability range
with additional difficulties (including challenging or stereotyped behaviour)
all facets of communication skills
social skills which will involve you in such basic activities as body awareness, toilet training, eating skills, etc.

Planner

To plan, implement, evaluate and contextualise short and long term programmes for individual children who are deafblind with respect to their needs and abilities.

Consultant

To fulfilling a consultancy role with other members of your profession and professionals from other disciplines

Counsellor

To counsel effectively: teachers in mainstream education, special education, parents siblings and employees.

The central aim is that you come to recognise not only the individual nature of each child's skills and difficulties but also that you require to help them develop these particular skills while remembering that you are responsible for the social, emotional, intellectual, physical and spiritual parameters of their lives.

Activity 1

Define and describe two different roles you may have within a school for children who are deafblind and illustrate their interaction.

Communication

Think of all these roles. If the school unit is residential and most are - then the staff members must change as the day progresses. The pupil, however is there for twenty four hours of each day. It is therefore very important that each member of staff concerned with a particular pupil/student must be fully informed as to any interactions which have taken place between pupil and pupil, pupil and any member of staff, pupil and visitor (parent, medical etc.) pupil and home. It is vital they know all this in addition to any developments or regressions socially, emotionally or cognitively. The staff member must maintain consistency and continuity, must give positive reinforcement, must give the pupil confidence in his environment both human and material. In short each member of staff must see the pupil as a whole, not in terms of social skill development or cognitive development or change in degree of stereotyped behaviour but as a whole person. This can only be achieved when staff not only fulfil their roles but have good inter-staff communication be it oral, written or by video. This has to be based on skilled observation (see Module 1 Topic 3 with its accompanying [video](#)).

Activity 2

Who do you think most units for children who are deafblind are residential?

Think of two such children you know in your school/unit and list every feature about which you would appreciate comments when communicating with a member of staff.

- (a) working with you
- (b) handing over to you on completing the previous shift.

Suggest way(s) in which you would make this report. Show your list to your headteacher and ask for comments.

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A resource for staff working with children who are deafblind

MODULE 3 Children and families

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Module descriptor

Aims

The aim of this module is to help you gain insight into the effects of deafblindness on the development of children and the family.

The specific objectives are to:

consider more closely the social and language development of young children

provide knowledge of the development of the senses in young children

extend your knowledge of the characteristics and attributes of young children who are deafblind

consider in detail the effects of deafblindness on communication and language in young children

provide additional specialist knowledge about the areas of hearing and visual impairment

consider the relationship between the child, the family and the educator

provide information on associations, societies and self-help groups involved in deafblind education, welfare and leisure provision.

Topics

A look at normal development

Children who are deafblind

The effects of deafblindness on communication and language

Additional information - hearing impairment

Additional Information - visual impairment

Working with families

Associations, societies and self-help groups

Style and modes of learning

Reading, practical exercises and discussion.

Topic 1 A look at *normal* development

At the very beginning of this training package you were introduced to some of the more obvious needs of the child who is deafblind. In this module we will go into more depth, but, in order to help you appreciate how the baby's development is affected by her/his deafblindness, we will first of all look briefly at "normal" development. It is however not possible to go into this vast area in the detail it deserves.

You are therefore advised to take time to read as many of the books listed at the end as you possibly can.

In this section we will consider those areas which are dependent on sight and hearing for development. These will be picked up again and discussed in Topic 2, Children who are deafblind. We will also look briefly at some aspects of infant development which have a bearing on how we teach children who are deafblind.

Social development

There has been a lot of recent research into the social behaviour of very young children, looking at how infants and mothers relate to each other. Two points which have been highlighted are that it is the baby who is active in the early stages and that mothers are usually very sensitive to the child's actions and follow the child's lead. (It used to be thought that the baby was passive and needed the mother to take the lead). Of course the mother (and father) will bring new toys and experiences to the child but in terms of one-to-one interaction it has been found, for example, that at least up to the end of the first year, it tends to be the mother who follows the baby's line of gaze. Joint gaze is an important basis for communication ie that both individuals are looking at the same thing. The child can then associate what the mother is saying to whatever is the focus of their mutual attention. After the first year the mother tends to take the lead in looking at new things and the baby follows her interest.

Turntaking routines arise naturally from the baby's tendency to be active in short bursts eg sucking tends to be broken up by pauses. Vocalisation also comes in bursts. Mothers tend to fill these pauses by patting or cooing. Mother and baby usually become very good at taking turns because the mother adapts her behaviour to suit the baby, and in this way an important foundation for communication is laid down. Achieving this kind of rhythm is, however closely linked to seeing and hearing. Tactile turntaking is not so common after the child is weaned.

Language development

There are many books which give a detailed account of the development of language in young children (eg de Villiers and de Villiers). In addition to the growth of language skills it is interesting to look at what the child's "partners" in conversation are doing. Much research has looked at how mothers (and in fact fathers too), adapt their talk to babies. They do so in ways which are likely to be most interesting and helpful to the developing child and this has come to be known as "motherese" with the following features.

sentences are **simple**

sentences (or utterances) are **short**

much of what is said is **repeated** many times

important words are **emphasised**

voice is pitched **higher** than normal, often with a **sing-song** intonation.

If you think about the last time you spoke to a young baby and how you spoke, you will probably "hear" yourself using many of the above features. They reflect the natural ways in which mothers gear their talk to the child's interest, attention and limited understanding of language.

It is important to remember that mothers talk to their babies with very little in the way of feedback for a long time. From day one, a mother will talk to the newborn baby as if s/he could understand, or at least in the expectation that s/he will understand. Mothers behave towards their babies with the expectation that they are ready and willing to interact, relate and communicate. Babies are willing to join in a social world - they become social through their experiences with social adults.

Development of the senses

During the first 5 to 7 days, the new born baby is slowly recovering from the trauma of birth and is beginning to establish some kind of relationship with the environment. New born babies seem to possess quite a wide range of capabilities. They can smell and taste, are sensitive to pain, discomfort, touch and a change in position. They also have some ability to see and hear, and have a variety of reflexes necessary for survival; eg they suck, cry, cough, vomit and turn away. In addition to this, they have an inbuilt programme for later development.

Nevertheless, the newly born infant is helpless and dependent on others for survival. S/he lives in an immediate world of touch, reacting to what gives pleasure and discomfort. When hungry, wet or uncomfortable, the baby will cry.

The environment (ie parents) reacts to this by feeding or changing, making the situation pleasant again. The regular repetition of this provides the child with a **feeling of security** and this is extended to the person who furnishes the pleasure.

It is at this time that the child's near senses develop. These are distinct from the principal **distance senses** of sight and hearing whose development accelerate after the first few weeks.

What are the near and distance senses?

Our senses are our means of receiving information about the world outside us. They are our communication links and without them we could not learn. We usually think of them as

VISION

SMELL

TASTE

TOUCH

HEARING

but our sense of posture, the relationship between our body and our surroundings, is another channel through which we glean information so,

PROPRIOCEPTION (including MOVEMENT)

can also be added to the list.

The **near senses** are those which receive impulses by direct stimulation, not through a medium. They supply the child with information about his/her own body. The skin which is sensitive to touch, pain and temperature is in this category, as is the sense of posture.

The **distance senses** supply information about the outside world. They receive stimuli through a medium, the air, and their sensitivity is specialised; the eye to light; the ear to sound; and the nose to smell. These are slower to develop than the near senses and are a more important means of learning. Without the distance sense, the world would be limited to information received directly by touch. *Can you imagine that?* The answer has to be "no". We already have our concepts of things around us so, touching would trigger off clues to an object's identity.

To be solely dependent on touch and taste from birth is something totally outside our experience. The world conveyed to such a person would differ radically from ours.

What then is the importance of the two principal distance senses, vision and hearing?

Briefly, they create the world we live in because they determine our "world image". We now know that at birth a new born infant will react to light and, within a few hours has been observed to sustain gaze in spite of poor focusing skills. Hearing is also present at birth and responses to loud sounds have been recorded in the womb.

"Babies live in an immediate perceptual world ... little guided by memories or anticipations"
(Bower, 1986)

The senses may function from very early on but the child does not have the ability to interpret the meaning of all this sensory information. This can only be achieved by experience of the world.

The important aspect of both seeing and hearing is the ability to **recognise** and **classify** the essential characteristics of what is seen and heard. Newly born infants appear to possess some pre-programmed powers of discrimination and preference but on the whole this ability is learned and the distance senses play a major role in this learning. Early on in life the infant will begin to associate the mother's face and voice with the "contact comfort" she provides as well as the pleasure of feeding. Being presented with the same face at these times will **motivate** the child to discriminate.

Memory also begins to play a major role. Very soon discrimination leads to recognition of a specific adult and real smiling, as opposed to the earlier generalised mouth movement, begins to develop.

The effects of experience on the child's visual perception can be illustrated by the fact that normal babies can see people and objects from the time of birth (though they may not see fine detail). However there is no understanding of the permanence of the object ie that the object continues to exist even when it can't be seen. Young babies will lose interest if an object is hidden but towards the end of the first year they will try to find it; ie experience has taught them that objects don't just disappear.

So even for the normal child it takes time for the child's perception of the world to be more than just sensory information but to be linked to a knowledge of the properties of the real world ie develop concepts about the world. Preschool children (and older) can be over-dependent on what they see; eg pouring liquid from a wide glass to a thin glass they will assume that one contains more (because it is taller or wider). Ultimately they will be able to make judgements about the world based on experience.

So we see that perception is an ability to understand meaning in the many impressions presented to the senses, and to discriminate and organise these impressions so that they can be remembered and used.

By means of the eye, working in conjunction with the sense of touch, a person can store impressions of objects around them. This knowledge is then applied to other objects out of their reach, so they are able to see mountains, church spires, etc, and, placing them within their world image, make them part of their world. In daily living, therefore, most objects in the world only exist for people because they are interpreting visual impressions. For the blind baby, things out of his/her immediate reach do not exist, although explanation by another person can often help to bridge the gap.

Perception is closely linked with the near sense experience of the three dimensional world. This explains why vision receives such stimulation when the baby begins to move. The experience of objects, the experience of moving in space, and vision, all reinforce each other. The child plays with his toes, bangs his cot or crawls towards an attractive ball and discovers the effects of her/his movements and that s/he is the cause of what happens. Vision provides the major feedback in this process and so the child's self-awareness develops. At the same time **object consciousness** grows and the nature and possibility of things around the child become clear.

Vision also has an important role to play in establishing **relationships**. Through eye contact, facial expression, etc, the bonding between baby and mother or father grows. Hearing reinforces this as the child begins to discriminate and attend to the voice of the particular adult attending to her/him. This lays the foundation for the future development of **language** and **communication**.

Babbling has been shown to increase in proportion to the frequency and variety of sounds in the child's environment, especially in response to vocalisation by the mother. **Reciprocal babbling** is a two-way exchange of vocalisation, when parent and child take turns. It is a strong reinforcer for the child and another foundation for language and speech.

With the onset of speech, a new dimension is added to her/his concepts of the objects round about, that of symbol, a name. Now the child has an ideal means of recall. S/he can communicate needs and thoughts; s/he can discuss and reflect on things out or reach AND out of sight. **Distancing** has developed and as a result, learning accelerates.

Overview

There has only been space to mention the few relevant aspects of early development which have a particular bearing on our work with children who are deafblind. One of our most important tasks is to take the child with the sensory impairment back to the early stage of interaction and communication with the mother. This will give us the means of establishing the fundamental building bricks of learning, allowing at the same time for the gaps in experience caused by vision and hearing limitations.

The educator will assume a parental-like role in terms of trying to develop what McInnes and Treffry call "the reactive environment" ie the adult will **follow the lead of the child** as long as necessary in order to bring that child into a relationship with them. They will then **be able to lead the child** through the environment and make a confusing, unknown world into a predictable and controllable one.

Activity

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A resource for staff working with children who are deafblind

Module 3 Topic 2

Topic 2 Children who are deafblind

The effects of deafblindness on the development of the young child are so extremely complex that it is impossible to touch on everything in one short presentation. Don't be surprised therefore, if you find the next 2 topics quite difficult, everyone does. We therefore suggest that you pay very close attention to all the points mentioned, re-reading if necessary, before attempting the activities. The readings listed are very important and you should, if possible, buy (or borrow from a library) the suggested books as they will be of great use to you in the future.

How can you plan a curriculum if you don't know what the child needs to learn? How can you enter into the world of the child who is deafblind if you have never stopped to observe her/him, to put yourself in their place and to reflect on the consequences of their handicap? This topic will, hopefully, help to start you on this journey of discovery.

It is commonly held nowadays that the learning process is dependent on two elements, the innate intelligence of the individual and his/her interactions with the perceived environment. Bigge and Hunt (1967, p 122) have stated that

"In the interactive process, the quality of perception is of crucial importance and perception hinges on the efficiency of the sensory organs".

So we can therefore conclude that for the baby who is deafblind, environment perceived and the interaction with that environment, will be different from that of the "normal" baby. Their world image is formed by what actually comes in contact with their body. It can only be compared to the world of the newly born, which is an existence in the world of the near senses.

What is meant by the *percieved* environment?

Assessment of the young child who is deafblind is very complex. Assuming that the two elements necessary for learning are innate intelligence and interaction with the perceived environment, it is difficult to identify which of the two is the cause of the child's inability to develop normally as they are both so interdependent on each other. For simplicity's sake, therefore, we will presume that the child in question has the innate ability to learn, but is prevented from doing so because of damage to the two principal distance-senses, sight and hearing. In other words

"the input systems have been damaged but the processing mechanism has not" (McInnes, Treffry, 1982, p5).

To perceive something one has to become aware of it, be given the opportunity to interact with it and understand the results of that interaction. Our senses are our means, our tools for this and they are interrelated, they work together to help us **form concepts**, ie inner pictures of the objects and people around us and the ways in which they relate to each other.

"The deafblind child must be taught to tolerate, recognise, receive, discriminate and integrate sensory input" (McInnes and Treffry, 1982, p 7).

While accepting the fact that the principal distance-senses are not functioning adequately, we must not fall into the trap of presuming that the remaining ones are all right. Indeed recent research has shown that the opposite is true (Chambers, 1973). Damage to sight and hearing can throw the whole process of perception into confusion and only through structured training can the child who is deafblind learn to use her/his remaining senses to the full.

Evidence of this may be observed in the child's use of the senses; touch and smell may be a means of getting excited rather than as an instrument to explore and learn about the environment. Movement, instead of being used constructively can become stereotyped, legrocking and head banging. If the child has any residual vision s/he may light gaze or eye poke to obtain the desired pleasurable stimulation.

These misuses of the senses are closely related to the emotions and can often reach the point of being out of control, the particular stimulation appearing to reinforce the child's isolation from the surrounding world. This strong preoccupation with the body can only be helped by involving the child in purposeful activities and providing a reactive environment which will stimulate the child to use her/his senses constructively.

Summary

The child with damaged sight and hearing will very often suffer multi-sensory deprivation, not using even the near senses constructively but as a means of self-stimulation. This has an adverse effect on the development of concepts in the child.

Activity 1

Observe a young child who is deafblind for approximately 15 minutes on her/his own, with some toys. How is the child using the senses? Fill in the sections titled "on own" in the following chart: Remember to use the chart at end of topic. (see Appendix A)

Then observe the child eating and fill in the columns titled 'during activity'. List your conclusions. What senses do you need to work on?

Activiy on own was

The structured activity was

The Sense	Used for self-stimulation		Used to get information or do something positive	
	On own	During activity	On own	During advitivity
Taste				
Touch				
Smell				
Movement				
Hearing				
Sight (for child with some vision)				

Why does the child who is deafblind have difficulty in identifying and understanding objects and people?

Our world consists of people and things, their relationship to each other and their position in space and time.

In order to form a **concept of an object** we must use all our senses to get as much information as possible about it. We must experience using the object for a purpose and, having formed an internal concept of it, we can then name it and integrate it into whatever concepts we already have of the world. It then, in turn, can form the basis for forming new concepts.

The child who can only know an object, or a person, through the near senses, ie touch, taste, smell, will as it were, be physically tied to that object. It will only exist for the child when s/he is in touch with it. It has meaning only in so far as it satisfies the needs of the child and once in contact with it the child is, as it were, at its mercy; s/he cannot resist using it to gratify self.

Objects and people are, for the child who is deafblind, extensions of her/his own body and another means of self stimulation. They have little value in themselves, therefore the child cannot distance her/himself from them.

As we have already said, in order to come to an understanding of the otherness of things and people, ie distance oneself from them, one has to discover what their function is, experience using them and develop an internal concept of them. many of the experiences that go to make up this concept are lost to the child with damaged sight and hearing. S/he will have no idea that people and things still exist when they are no longer in physical touch with them. We therefore say **the child does not have object permanence**. S/he has difficulty realising that an object is the same from one day to the next and from one situation to another. **The child does not have object constancy**. **The child cannot generalise from the particular**, ie move from recognising her/his personal cup to the general idea of "cup". S/he cannot discriminate between types of cup, eg plastic cup, pottery cup and understand they all are cups. Indeed it is highly unlikely that s/he will distinguish a cup from other things round about. **The child does not have object identity**.

It is important to emphasise, however, that although this is clearly the case for the baby and young child it need not be so forever. Our beliefs that with intervention and careful teaching some understanding will develop.

Summary

Objects and people are merely extensions of the body of the young child who is deafblind. S/he has a very limited concept of their otherness, identity or permanence.

Activity 2

Tomorrow during dressing, hand a large shoe to the young child you work with. List all the things s/he does with it. Now take it from her/him. Does the child search for it?

Later, in the bathroom, hand the child the same shoe. Again, list all the things s/he does with it. Lastly, just before bedtime, hand the child a shoe with a high heel. Again, list what s/he does.

Repeat the whole activity with another item such as a hair brush. From your observation, would you say that the child is beginning to develop: Remember to use the chart provided (see Appendix B)

	Yes	No
Name of object:		
Recognition of object according to use		
Object permanence		
Object constancy		
Object identity		

If your answer is yes to all four, then the child has begun to develop concepts.

If you have a number of "no's" identify the areas you have to work on.

Reading

Now read page 5, the section on **The Object Concept** in Cooke and Williams D (1985) **Working with Children's Language**, Winslow Press.

How does the young child who is deafblind INTERACT with the environment?

It has already been said that we develop concepts of people and things around us when we use our senses to get to know all that is possible about them and when we do things with them; when we are in some way involved with them. For the child who is deafblind this will almost always mean physical involvement. Therefore the child must be encouraged to do things in the early stages with an adult and, hopefully, later on her/his own. At the same time as learning about the objects s/he is involved with, the child is coming to know the adult who is helping and is forming a concept of them also.

On account of the damage to the senses the child who is deafblind has difficulty in perceiving the things and people around about, so her/his concepts are inadequate. The way s/he uses or relates to the environment is also defective and, as we have already seen can often be bizarre. The child will use the things around to lick, suck, flick, wave or bang her/his head. Things will not be explored or used purposefully but as an extension of her/his own body and for

stimulation. Obsessions will also occur and be used to entrench the child more deeply in this isolated world. People may be used in the same way. Instead of developing an awareness of others the child will use them as extensions of her/himself and for self stimulation. The child may lift a person's hand and use it to bang or rub or suck. S/he may become obsessed with a particular adult, may compulsively cling onto or hug that person, becoming in the process highly excited, even losing control - something that may be mistakenly interpreted as affection by the inexperienced person. Only when the child comes, through training to recognise the otherness of the adult will some form of relationship begin to develop. A point worth keeping in mind is that children who continue to misuse objects and people may have brain damage as well as sensory impairment though it should not be presumed that all of this misuse can be attributed to one or other of these conditions.

Summary

The child who is deafblind must be encouraged to use things; to be involved in everyday activities, in order to develop concepts.

The child will not be able to relate to another person until there is some awareness of the otherness of that person.

Activity 3

Before you go any further, read pages 4-6 (Problems of behaviour and relating to people and the environment) in Jurgens M R (1977) **Confrontation between the Young Deaf-blind Child and the Outer World** Swets and Zeltlinger.

STOP AND THINK

How does your child who is deafblind relate to you? Does she use you for self-stimulation or, is there control, eg in the way you are hugged? From what has been said above, would you question whether or not your child has brain damage?

In addition to the bizarre behaviour mentioned, the child who is deafblind fails to grasp other aspects of the relationships between things and people around about. Concepts to do with **existence, disappearance and recurrence** come naturally to the child with sight as they experience their daily routine. The child who is deafblind does not develop this. When the child ceases to be in touch, the object, for him/her, no longer exists. Recurrence is not anticipated. The young child also discovers the effects of his/her movements on surroundings and other people. Through moving around the child comes across objects that can be propelled and those that stay put. S/he comes to recognise what things to expect to find where and so a concept of location is formed. The child who is deafblind does not naturally acquire this knowledge. S/he does not see or hear the effects s/he has on the surroundings and so **a concept of cause and effect is not acquired**. The child is not motivated to move purposefully in response to the surroundings, so **concepts of the relationships between object and object, person and person and self with both, do not form. Neither do a sense of space or an awareness of location.**

Summary

Relational concepts, existence, disappearance, recurrence and cause and effect do not develop naturally in the child who is deafblind. S/he will also have a distorted concept of space and location.

Activity 4

Read the section on Relational Concepts - page 5- Cooke) and Williams D (1985) **Working with Children's language** Winslow Press.

What other aspects of development are effected by deafblindness?

Concepts, our understanding of the nature of things around us, are the basis of all learning. They constantly develop and increase as we are exposed to new experiences and discover connections with previous ones. We begin to grasp underlying meanings in our relationships and the events in our lives and develop the ability to reason and evaluate the information presented to us through our senses.

The world around us is a medley of objects and persons, thoughts and emotions. We will not cope with this confusion until we begin to recognise the connecting links between things and begin to have some organised approach in relating to them and using them. Already we have mentioned the difficulties the child who is deafblind has with object permanence object constancy, object identity, cause and effect and relational concepts. What the child also fails to recognise is that **events have a sequence**, eg in order to have her/his hunger satisfied by milk s/he may be:

lifted into mid-air, out of a warm cot,

carried some distance before being held (or as some children might consider, restricted)

and then experience a soft substance being put into her/his mouth before the initial need for milk is satisfied.

This is a very basic and simple sequence of events and is easily recognised by the baby with sight and hearing. But what about the baby who is deafblind? What about those experiences which have a more complex sequence of activities and/or do not have a satisfying outcome, such as being bathed? **How can the child who had few environmental cues**

anticipate what is to happen next? Is not each experience a new and confusing one? To be picked up - snatched from a secure and solid support, to be moved through space with little support to be undressed, pulled, pushed, rolled - is it not terrifying? Is it not natural to resist all these frightening things and tense oneself when touched by an unknown person and experience? The answers can only be yes. None of us, with the full use of our senses can come to any realisation of the importance of structure in giving us security and a means of understanding life. For the child who is deafblind, **it (structure) is of the utmost importance in order to develop memory, anticipation, a sense of past, present and future and eventually a concept of time.**

Summary

The world of the young child who is deafblind is a chaotic one. S/he does not recognise structure and so fails to anticipate and be prepared. S/he has a poor concept of time. Equally the child cannot organise and control her/his environment so as to eventually develop some ability to think and reason.

Activity 5

Read pages 12-14. **Confrontation between the Young Deaf- Blind Child and the Outer World.** (Swets and Zeitlinger)
Read pages 8 and 9 on **Deaf-blind Infants and Children.** McInnes & Treffry

Reflect on the following- What structures have I developed in order to help me through each day eg what is my early morning routine?

How do I feel when, having slept in a strange bed I have to adapt my routine to a new situations Write a description of these for yourself. Try to identify the key points of your routine and highlight for yourself how these help you to cope with the demands you are going to meet day by day.

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- or any book on child development which explains Piaget's theories on the development of human understanding.

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Appendix A

The sense	Used for self-stimulation		Used to get information or do something	
	On own	During activity	On own	During activity
Taste				
Touch				
Smell				
Movement				
Hearing				
Sight (for child with some vision)				

Appendix B

Name of object	Yes	No
Recognition of object according to use		
Object permanence		
Object constancy		
Object identity		

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Module 3 Topic 3

Topic 3 The Effects of deafblindness on communication and language

Separating language and communication is rather an artificial thing to do, however it is helpful in this instance if we are to highlight the problems facing the child who is deafblind.

Before we begin to look at this very complex subject, take a few minutes for the following activity.

Activity 1

What is communication?

Write down your **first** thoughts on the subject.

What is language?

Again, write a brief description of what you think it is.

It will be helpful to go back and reread the earlier sections on communication.

More than likely your definition of communication will include some reference to interaction between people. Communication, however, is much broader than that. All through our waking hours we are receiving information from, and relating to, our environment. Our senses are the principal channels for this. We use smell, taste, touch, sight and hearing to **pick up** the messages around us. We express ourselves through:

sound; ie speech, laughing, crying, etc

vision; ie eye contact

body position; ie stiffening, withdrawing

body contact; ie shaking hands, hugging, etc

"communication can be summed up as our attempt to obtain information from and impart order upon the world around us"

(McInnes & Treffry 1982 p 58)

When several people use an ordered system to communicate, we have a language. The most common human language is the word language, usually spoken, but also written or fingerspelled. Another form of language is sign language.

The early developmental stages of communication

The young baby's cries, although reflex responses to feelings of discomfort, are signals from the child that something is wrong. Through experiencing a response from the mother, the child becomes aware of the results s/he can produce and begins to **cry with intention**. This can be noticed in the baby whose cries cease when her/his mother appears with a bottle.

Again, at this early stage, other actions are picked up and responded to by the parent, eg the baby smiles so the mother smiles back. The child makes a noise, the adult talks back. Simple games such as tickling will be initiated and the child will learn to anticipate what is to come and respond by waving her/his arms and legs with great excitement. This is the beginning of social interaction.

At this early stage of the near senses the baby's attention is restricted solely to her/his own body. The mother relates to the baby through that centre of interest by tickling, playing with the child's toes etc. Having thus established contact she will draw the baby's attention away from her/himself towards herself by bringing her face close to the child's and using exaggerated expressions and a high-pitched voice. In this way the child is slowly encouraged to move out of self-absorption and not only to become aware of things outside but to distinguish them from each other. The essential ingredient in all of this is motivation - this is the tool the mother unconsciously uses.

It is easy to see how deafblindness affects even this very earliest of stages in communication development. Obviously the mother will respond to the cries of the child who is deafblind by feeding, changing or whatever, but her smiles or soothing noises will be lost on the child. Additionally because the baby is not responding to her attention, she will unconsciously lessen her attempts to do so. The child will thereby remain in the state of **self-absorption**, the world of the near senses. S/he will not be motivated to move out of that state and therefore even the beginnings of **social interaction** are lost.

Of course a few mothers, are fortunate enough to be given help early in the baby's life and may avoid some of the pitfalls. Unless that help has been given to the mother it is more difficult for the mother to know how to reinforce the child's responses and the relationship consequently is in danger of being impaired.

After approximately the three month stage, the mother and baby will play games where one will imitate an activity and the other join in. This will take the form of head movements, making faces or vocalisations, especially cooing. Mutual feedback or turn taking is essential if the interaction is to be maintained.

Gradually these alternate exchanges give way to imitation. The mother imitates the child immediately he she does something in an effort to get her/him to repeat it. If the baby fails to respond she will play the double role, ie acting her own and the the baby's part. After much experience of this the baby will eventually attempt to imitate.

Activity 2

Now read Chapter 2, Pages 11-16 of **Teaching and Talking with Deaf Children**

Summary

Communication develops:

as the parent draws the child out of self-absorption and towards others

as the parent gives meaning to signals from the child by responding to them

when turn taking, and finally imitation, is established

The skill of communication helps the baby to:

develop social interaction which is the basis of relationships

develop awareness of things and people around her/him, which in turn

help develop concepts, which in turn

help develop language, which in turn

help the child to reason and think.

The baby who is deafblind cannot respond to the efforts of the parent and so:

is not motivated by her/his surroundings

remains in the state of self-absorption

fails to develop the skill of turn taking and imitating

has difficulty bonding with the parent which affects her/his ability to form relationships

has no means of understanding symbols and therefore may fail to develop language **unless there is intervention by an experienced teacher**

Activity 3

Why will the baby who is deafblind fail to develop turn taking and initiation? Show your written answer to your tutor/headteacher.

The early developmental stages of language

In order for language to develop in the child, the following elements must be present:

Motivation

Concepts of objects and persons and their relationships

An understanding of symbolism

We have already touched on these when we spoke about communication, for as we know, language is not only an important means of communicating but is also developed through it. It is very difficult to say which comes first, both are interdependent and rely on each other for growth.

Motivation

According to Van Uden (1971, p 81), it is extremely important for us to identify the motives which drive a child to acquire language. He distinguishes 4 key motives

The need to follow the forces of conditioning

The need to imitate others

The need to plan

The need to master

We have already mentioned the interplay that develops between the mother and the young baby. She picks up and gives meaning to the sounds the child makes and eventually the child begins to understand that particular sounds can be signals for things s/he wants. The attraction of the required object and the pleasurable interplay with the mother motivates the child to continue and develop making the sounds responded to. S/he is conditioned to keep going.

In addition to the mother picking up the child's sounds, the child in turn learns to pick up the mother's. Imitation is thereby established in the child and is reinforced by the obvious pleasure expressed by the mother. Once the child begins to imitate, language development accelerates.

The next motive for learning language, according to Van Uden, is the need to plan. Language is a means by which the child interacts with the world. The child must therefore be able to use it to express her/his personal thoughts, desires etc. In order to do this, the child must have the ability to structure it and plan it. S/he is therefore motivated to develop language so as to have an increasing ability to express her/himself.

Lastly the basic need to master is a strong motivation for the child in learning language. It is exciting to watch the toddler suddenly recognise the connections between objects, to be excited by them, run from one chair to another saying "chair" and turning for confirmation each time to her/his mother. In this early stage the child is learning to master the objects around by developing the ability to name them. later on, through language, s/he will learn to master the world of people. It is the

"feeling of mastering the common world he shares with his fellow-men that motivates a child in his 'hunger for names'."
(Van Uden 1971,87)

What then can we say about the child who is deafblind?

Does this child also have these inborn motives to learn language? It would seem that s/he has. So, why then does motivation so often appear to be lacking?

When you look closely at a young child who is deafblind, you will discover that s/he is in fact motivated to do certain things. Motivation is present but because of the damage to sight and hearing there is distortion and the inner drive to develop is channelled into alternative actions such as self-stimulation. **What we have to do is identify what form the motivation drive has taken and try to steer it into a constructive force for growth.**

How does this force of motivation become distorted?

Well, to begin with, the child is not conditioned to respond to the environment or the mother because s/he cannot see or hear them. Also, the child's inborn compulsion to imitate is limited, discouraged or diminished because there is nothing to trigger it off. Again, the child who is deafblind cannot plan or master the environment because s/he has no tools to do so - having no language. So, that inborn force, those inner compulsions that are necessary if language is to develop are steered into something the child can experience and "benefit" from, ie self-stimulatory actions. This is why it is so important to intervene in a child's life at an early stage, then hopefully these motivating forces can be used constructively

and prevented from becoming a barrier to learning instead of a means to it.

Summary

Motivation is essential to learning language. It is very often distorted in the child who is deafblind because the means of stimulating it (sight and hearing) are damaged.

Activity 4

Observe your child who is deafblind during the coming week and jot down the various things that s/he likes. Keep this list near to hand and add to it each time you make a new discovery, recording the date you observed it. As time passes can you recognise any evidence of the emergence of the 4 key motives in the child?

Optional activity

If you can manage to get the book **Deaf-Blind Children and their Education** (see bibliography) you should read the article by A Van Uden on the **Motives in Learning a Mother Tongue**.

Forming concepts

We have already discussed how concepts are developed in the child (see the section in Topic 2 on the identification and understanding of objects and people). We have explained how the child who is deafblind cannot distance her/himself from objects and people because s/he experiences the world through the near senses. The child:

is open to the lure of objects and experiences no distinction between self and objects

is at one with them, seeing no value in them except in the pleasure they give her/his body.

Have you ever noticed how some children who are deafblind cannot wait for food but immediately on touching it are compelled to stuff it into their mouth? Others flit from object to object, never investigating things or attempting to learn something about them - they will either put them to their mouth or flick them or use them in some other way to stimulate themselves. Their ability to be drawn away from self-absorption and stimulation has not developed because of the damage to sight and hearing. So things are not recognised for themselves as distinct from the child. There is no **distance** between the two and so the child cannot organise her/his experiences of the object and develop a concept of it. The ability to distance is an extremely important factor in the development of symbols.

Summary

The child who is deafblind has difficulty in distancing her/himself from the objects and people around and so does not readily, easily or naturally develop concepts.

Understanding and using symbols

"The use of symbols is basic to true language, which is a system of symbols that allows man to transcend the here now in his communication and thought"

Cooke and Williams (1985,7).

What is a symbol?

Basically a symbol is something which represents or stands for something else. It can be an object, a drawing, eg a logo, a written word, a mathematical formula, musical notation, a sign (as used by deaf people) or a sound. It is a concise and formally accepted means of communicating a concept.

Activity 5

Draw up a list of symbols, mentioning at least one in each category and saying what each symbolise.

An object which is used as a symbol

A drawing which is used as a symbol

A written word which symbolises deep meaning for you

A movement which is a symbol

A colour which can be symbolic

The development of symbols is totally dependent on the concepts the child has developed and on the level of her/his communication. Wood, Wood, Griffiths and Howarth (1989,12) maintain that early language development has a

"multisensory and 'interactive' nature. For words (symbols) to take on meaning for a child they must be integrated with what he sees, feels or in some other way senses' in the world. To take on communicative significance, words must refer to something perceived, remembered, imagined or felt. Words are also 'shared symbols' and for successful communication they must invoke similar percepts, ideas or conceptions in both a speaker and listener; they are 'socially constructed shared symbols'."

We have already touched on the mother's role in mirroring the young baby's interest in things. When at about the 4 month stage, the infant's attention begins to include objects and happenings in the environment, the mother mirrors the baby's visual exploration and looks where s/he looks, and talks about what is being looked at. About the same time, the baby begins to follow the adult's line of gaze and this also will be talked about.

Looking together at a common object while it is being talked about enhances the possibility of the child understanding the relationship between words and subjects. sounds and words of delight, fear or surprise, expressed by the adult will, during shared experiences, be 'mood music' to the child and help her/him to interpret and associate them with her/his own feelings.

As the baby's early coos and gurgles give way to babbling, the mother puts meaning on them by repeating the child's sound, responding to what she anticipates the child is referring to, and gives the appropriate word. The child, over a period of time, will make an attempt to imitate that word. The pattern will be something like this:

Baby pointing to ball says "Ga Ga"

Mother picking up the ball and giving it to her/him will repeat "GaGa"

Then she will say "ball that's a ball"

Eventually the baby may repeat "ba ba" or something similar to the sound "ball" having adapted her/his original effort.

This pattern of increasing interest in the environment, the daily exposure to experiences deepening her/his concepts, and the interaction with the mother and other adults is the foundation of language development in the young child. Needless to say, the baby who is deafblind does not naturally come to an understanding of symbols, and therefore does not naturally develop language. Because the necessary ingredients are missing, there is little or no interest in the unseen, unheard environment round about and as the feedback by the mother is very restricted, the understanding by the child that his/her noises or movements can have meaning is lost.

Summary

The child who is deafblind does not develop language naturally because there is little understanding of symbolism and an unawareness of the mother's attempts to give meaning to her/his movements and sounds.

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A resource for staff working with children who are deafblind

Module 3 Topic 4

Topic 4 Additional Specialist Information- Hearing Impairment

Introduction

"Hearing is the deepest, most humanising, philosophical sense man possesses ...the sound of the voice that brings language, sets thoughts astir and helps us in the intellectual company of man"

Helen Keller

To begin to understand the implications of hearing loss - "the most desperate of human calamities" as Dr Johnson described it - you must realise how important hearing is to people.

Activity 1

Make a list of the benefits of hearing to you personally

Activity 2

Make a list of the places and events where hearing is essential for you.

I am sure your first list would include some of the following headings:

communication with other people either in the same location or by telephone

identification of danger signals

enjoyment of the sounds of the environment

the sound of voices even when you cannot hear their speech to the extent you can understand.

Humans are gregarious animals. They need to relate to others and to themselves. The basis of all human relationships is communication. Hearing loss impairs communication with others, with the environment - and yes, with oneself.

If you were to lose your hearing now what feelings do you think you would have? The most common reported are:

loneliness

isolation

anger

frustration

depression

paranoia

resentment

hopelessness

fear

insecurity

Activity 3

Pick five of the above list and give illustrations of situations/ circumstances which you think could arouse those feelings in an adult with an acquired hearing loss.

The enormity of the problem of hearing loss in terms of population, particularly in the ageing population is not generally realised. Did you know that in the OPCS Survey published in 1989 hearing impairment has the second highest incidence rate for disability in adults? We know that in the United States of America loss of hearing affects more Americans than are affected by the sum of all the following.

heart disease

cancer

blindness

tuberculosis

venereal disease

kidney disease

The incidence of hearing loss in neonates is still much as it always has been. In Scotland, 1.12 per thousand live births have a sensory neural hearing loss (HMSO, 1989).

"The incidence of hearing impairment found in school children on routine medical examinations in Scotland has fluctuated (per 100,000) between 1850 infants in 1974 and 1700 per one hundred thousand in 1986 peaking at 2100 per hundred thousand in 1985 and between 1150 per hundred thousand leavers in 1974 to 1000 per hundred thousand leavers in 1986."

The Management of ENT Services in Scotland 1989

If you add the numbers of children born with a hearing loss and those found to have a hearing impairment in school with those who acquire hearing loss in adult life I think you'll agree there is a great need for a deeper understanding of hearing loss, congenital and/or acquired and its implications These numbers do not illustrate the full impact. Add to all those who actually have the hearing loss the circle of people surrounding each once since hearing loss affects communication it affects all in the circle.

The ear and types of hearing loss

What does the ear do?

It is responsible for energy transformation. It is sensitive to acoustic energy. It has a diaphragm sensitive to (a) pressure changes, and produces (b) mechanical movement in relation to (a) Membranes and bones continue this movement and (c) mechanical movement is converted into hydraulic waves which actuate (d) nerve potential.

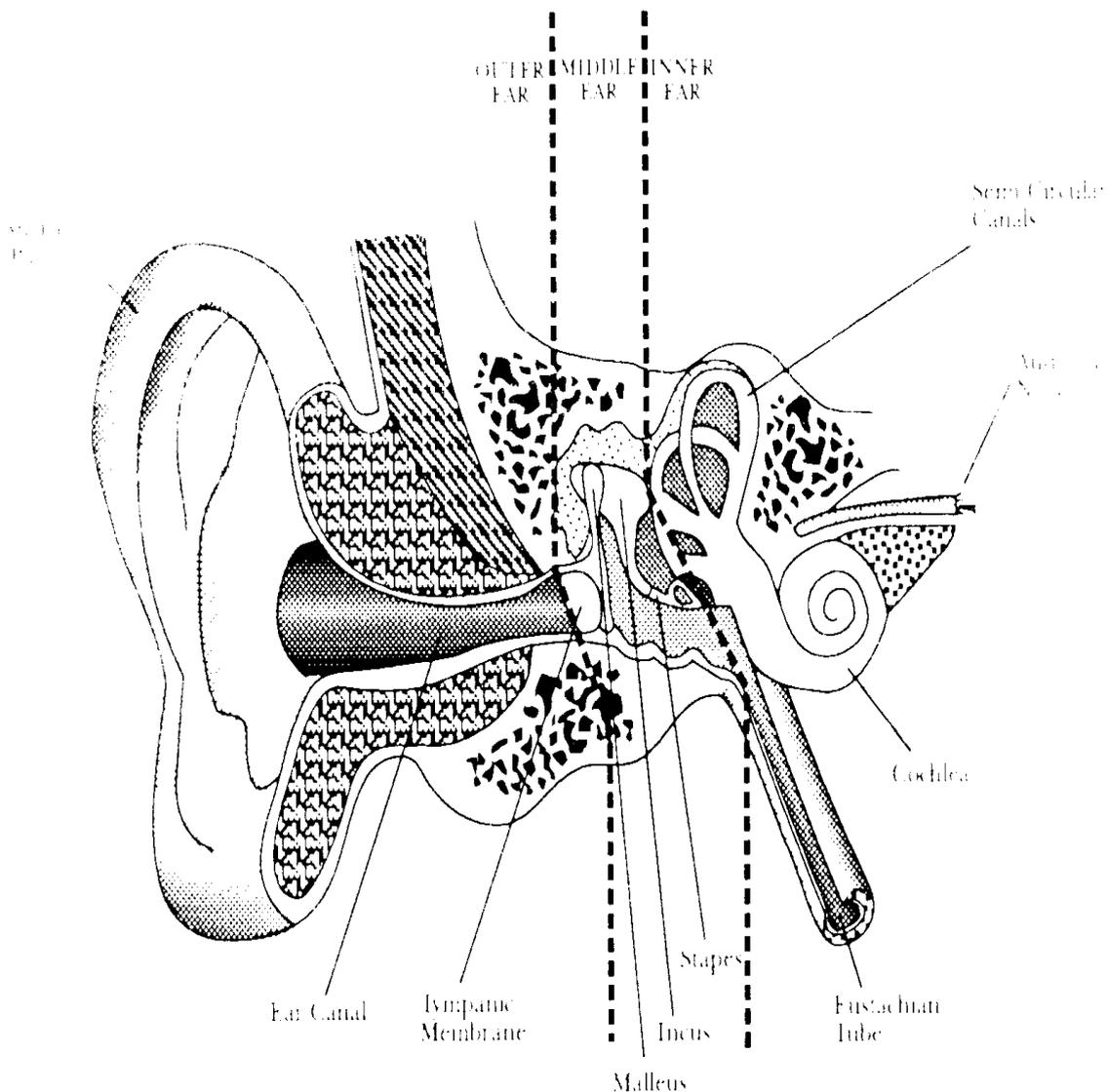
Traditionally the ear is divided into three parts, largely for reasons of function.

Outer/external ear with a collective function.

Middle ear with a transmissive function

Inner ear with an analysis function which continues in the higher neural centres of the brain.

Anatomical cross-section of the ear



External The external ear has very little function in humans but by cupping a hand round it one can improve acuity by 10-15 Db. (Db stands for decibel - a unit of measuring sound.) This part of the ear is called the auricle or pinna.

External meatus which is a rough cylindrical passage of a quarter inch diameter and a little over an inch long. Usually there is sufficient bend in meatus so that it is not possible to see the eardrum by looking into the canal

This takes the sound waves and focuses them on the eardrum.

It protects the eardrum and the middle ear by cerumen (wax) which discourages insects, and by hairs.

It has two portions: cartilaginous and osseous (housed in the temporal bone).

The external or outer ear is separated from the middle ear by the

Tympanic membrane - roughly circular in shape, semi-transparent, and is the thickness of parchment. It is made up of three layers - the outermost which is the same as the meatus, the middle which is composed of intertwined fibres, and the innermost which is continuous with the lining of the middle ear and is therefore mucous membrane. It is slightly concave pointing towards the middle ear and is normally, when healthy, pearly white.

Middle ear or tympanic cavity

This is a very small cavity, bean size, and probably capable of holding about a half a teaspoon of water in size. It is also housed in the temporal bone. The lower end is connected to:

The **eustachian tube** which is not normally open and has soft walls.

The **ossicles** which are the malleus the incus the stapes, known in English as the hammer, the anvil, and the stirrup. They fit neatly together and operate as a unit. The handle of the hammer is attached to the inside of the ear drum and three bones stretch across the cavity so that the footplate of the stapes fits into the oval window which opens from the tympanic cavity into the inner ear. The three bones are connected by the fibrous ligaments which permit the footplate to rock in the oval window and here the mechanical movement is transferred to hydraulic waves

The muscles of the middle ear

tensor tympani

The tensor tympani is attached to the handle of the hammer and draws the ear drum inwards to the centre of head thus increasing the tension

stapedius which lies in bony tunnel of its own

The stapedius is fastened to the neck of the stapes and pulls it backwards so that about half of the footplate presses inwards to the inner ear and the other half outwards towards the outer ear. The result of the movement of the stapedius and tensor tympani is to give the footplate rotational tension around the footplate axis. These two muscles are involuntary muscles and operate both automatically and antagonistically pulling against each other. This purpose is again a preventative one, preventing exceedingly high pressure waves harming the ossicles or the oval window. It is however not foolproof.

Functions of the middle ear

transmission of sound

impedance matching device

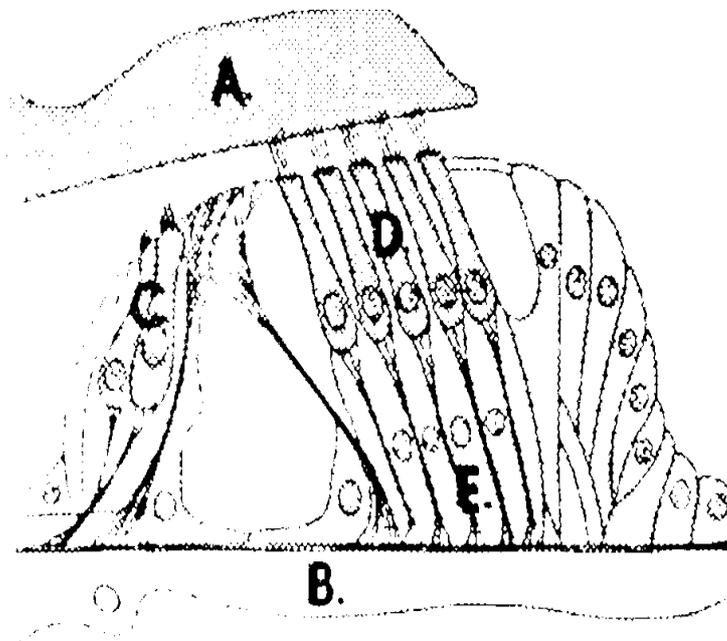
It efficiently transfers the energy of sound waves which have been travelling through the light elastic easily compressible medium of air to an incompressible fluid - perilymph. Ossicles transform the energy collected by the ear drum into a greater force with less excursion thus matching the impedance of the sound waves in the air to that of the fluid (the ear drum is about thirty times the size of the footplate of the stapes). Therefore the sensitivity of the ear is increased.

It protects from very large sounds the muscles tending to stiffen the bone chain when loud sounds occur. This prevents force pushing the footplate right through the oval window. There is also a certain cushioning effect from the air in the tympanic cavity.

The eustachian tube equalises the pressure on both sides of the drum permitting it to vibrate freely.

Note that this is not the only pathway of sound to the inner ear. There is also the bone pathway as the ear is housed in the temporal bone. Low frequencies carry better through the bones than the high ones do, therefore when we hear ourselves talking we hear our voice with less high frequency than the listener does., This is a reason for not recognising tape recordings of our own voices.

If a person loses the ear drum or the use of the ossicle he loses some but not all of his hearing. A hole in the drum itself probably causes about a 10 db loss. The eardrum and the ossicle are not essential for hearing.



- A Tectorial Membrane
- B Basilar Membrane
- C Inner Hair Cells
- D Outer Hair Cells
- E Nerve Fibres

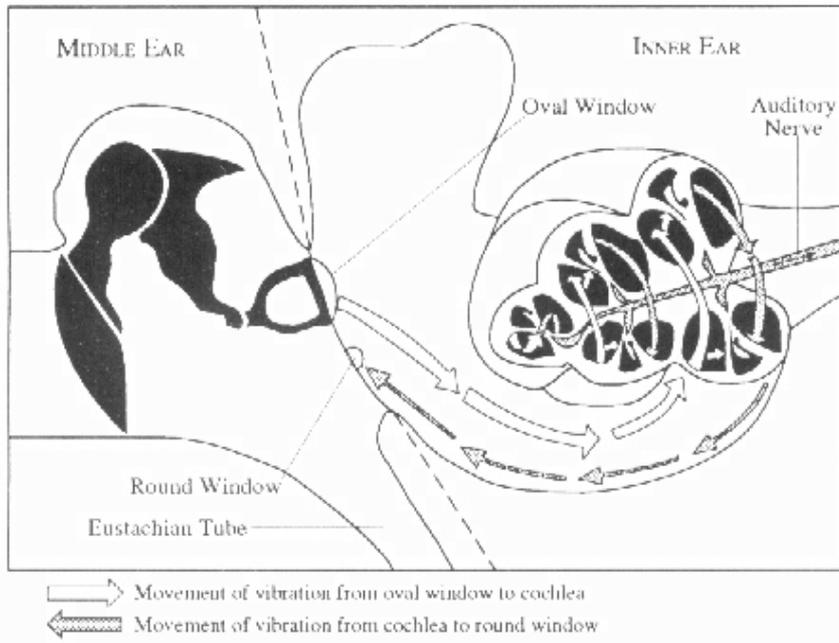
Inner ear

Is a series of chambers and channels so complicated they are known as the labyrinth. Within these canals filled with fluid are a corresponding series of tubes and channels. The important parts for you to remember are:

the cochlea (snail like structure which is the organ of hearing)

the semi-circular canals (organ of balance function).

the footplate moving back and forth in the oval window transmits vibrations to the fluid which eventually results in stimulating many thousands of hair fibres (cilia). These hair cells are balanced on the basilar membrane which extends the length of the cochlea. This fires electrical impulses along the auditory nerve to the brain where it is analysed and perceived. The pressure is ultimately relieved by movement at the other opening in the inner ear - the round window.



You can see that the sound waves initially collected by the auricle are finally analysed and understood by the brain having travelled through the external ear, the middle ear and the inner ear.

Types of hearing loss

There are three main types of hearing loss which could concern you:

conductive

sensori-neural/nerve/perceptive

mixed

Conductive deafness is caused by any blockage or defect in conducting sound. This will reduce the amount of sound reaching the auditory nerve. It can be caused by:

excessive wax infections (generally brought in from the mouth by the eustachian tube)

obstructions

Conductive deafness

This is the type most easily helped through amplification.

Four points which may arouse suspicion that the deafness is conductive are:

the person often appears to "hear better" in noisy surroundings (people speak more loudly to overcome the ambient noise) than in a quiet environment

the person is likely to tolerate very loud noises since this type loss raises the threshold pain

there is a reduction in the hearing of all sounds the person often speaks too quickly

Sensori-neural deafness

This is caused by deterioration of nerve cells and as such is irreversible. Symptoms of this form of deafness in a sufferer are:

inability to hear high pitched sounds (These are often the sounds upon which intelligibility depends);

ability to hear better in quiet surroundings since this renders easier the hearing of low intensity sounds;

often has pain with slight increase in amplification;

loss of, or poor, balance;

tinnitus, ie noises in the head (only occasionally accompanies conductive losses).

inability to monitor his own voice so that it is too loud or too quiet

Common causes of hearing loss

Like the causes of deafblindness given in Module 1 the causes of hearing loss can be divided into three main groups; prenatal, perinatal and postnatal. Here are some of the commonest causes from each group.

Prenatal causes

Familial

Deafness in one or a few members of a family. This maybe sporadic and may 'jump' a generation or generations then reappear. Sometimes members of a family exhibit different features of a syndrome; eg in the Waardenburg or Fisch Syndrome some members may have a white forelock, some a broad epicanthal fold, some eyes of a different colour (heterochromia iridium), some may have several of those features. Then one member, with or without any of those features may have a high frequency hearing loss.

Otosclerosis. Although the persons may not lose their hearing until their late teens or even later, they were born with the latent tendency to develop otosclerosis and so it is listed under 'familial' causes. Again it may appear in successive generations. In otosclerosis the stapes becomes fixed in the oval window.

Infections of mother during pregnancy

Rubella - particularly in the first three months (see Module 1)

Glandular fever

Measles

Syphilis

Other virus infections cause hearing loss; eg influenza

Toxic conditions of the mother during pregnancy

Toxaemia

Kidney infections

Certain drugs in pregnancy as for Module 1.

Thyroid deficiency

Perinatal causes

Prematurity

Difficulties with breathing soon after birth which may result in oxygen deficiency

Birth injuries

Severe jaundice resulting from blood group incompatibility between the mother and baby; eg rhesus incompatibility

Prolonged and difficult labour

Postnatal causes

Secretory otitis media

This cause should be noted as frequently, due to lack of attention being paid to it occurring in the early years of school, a child may develop learning difficulties through 'missing' basic information at critical learning points. This condition, which prior to the advent of antibiotics would have advertised its presence by a discharging ear with its accompanying distinctive odour, is characterised by the formation of a thick mucus or thin fluid in the middle ear. When it is the former it is often termed "glue ear". Children with this condition present some or all of the following symptoms:

fluctuating hearing loss (How often have you heard, or even said "It's funny how he can hear when he wants to"? It may be that the child so described does have a fluctuating hearing loss).

earache

disturbance of balance

frustration

distress when loud noises are heard

difficulties with accurate speech discrimination

Certain acute childhood illnesses

Not so frequently as previously but such illnesses included measles, mumps, scarlet fever and diphtheria

Meningitis

This is dangerous to hearing as sometimes in order to save the sufferer's life it is necessary to use drugs which can destroy the hearing. The infection itself can also cause hearing loss.

Labyrinthitis

Inflammation of the labyrinth of tubes inside the inner ear. This can be caused by meningitis, mumps or otitis media where the infection has travelled beyond the middle ear. A child whose hearing loss is acquired after the first few days of life is described as having Adventitious Deafness, while those whose deafness occurred prenatally or perinatally are described as being Congenitally Deaf. Both congenital and adventitious hearing loss can be conductive or sensori-neural. It is possible for a child with a congenital sensori-neural hearing loss to have the loss increased by an adventitious conductive hearing loss perhaps as a result of otitis media.

NB. Do take into account that people who only hear in one ear have two great disadvantages compared to those of us who hear with both ears

It is extremely difficult to locate the source of a sound. This will be particularly frustrating for those visually impaired children who rely on their hearing to locate people and objects.

It is far from easy to discriminate foreground from background noise. It may therefore be difficult for such a child to detect the spoken message in a noisy room, or to pick out your message against even relatively quiet background music.

Implications of hearing loss in children

It is extremely difficult to explain or to understand why the value of hearing and the implications of deafness in human experience are so little recognised and so difficult to grasp. Hearing and deafness are of course invisible, intangible and complex.

If you have normal hearing you probably accept sound unconsciously, It constantly fills your life. Even if you try to escape hearing you cannot ,even when you are asleep. It brings us and gives us pleasure - emotional pleasure, spiritual contentment, intellectual development, aesthetic pleasure. It also brings us distress. You cannot avert your ears. Hearing is mandatory other than by applying artificial means.

Apart from the fact that hearing and vision are both distance senses ie both are concerned with information from a distance, hearing differs from vision in almost all respects. Like vision, hearing can be a foreground sense, focusing upon a particular sound but inhibiting recognition of background sounds but it is constantly exposed to background sounds be they continuous, intermittent or 'one-off'.

Activity 4

Sit quietly for two minutes wherever you are while reading this. Note down every sound you hear.

Did you notice creaking, ticking, sudden noises eg toilet flushing? Did you notice they were different not only in duration but in pitch and loudness? Did you notice that most sounds emanated from sources out of your vision? Are you still hearing sounds?

We may choose to listen but we cannot choose not to hear, unlike people who shut their eyes so as not to see. It is only for physiological or psychological reasons that we cease to hear. Hearing continually 'monitors' the environment for those of us who hear. Let us not imagine however that senses operate only in isolation. All senses work together I with the dominance occurring in different times at different stages. Without full sensory input there is less sensory information and perhaps the person with an impaired sense could have very different environmental perceptions than those people with unimpaired sensory input, if they did not learn to maximise the use of residual hearing, residual vision etc. Since hearing yields the greatest amount of environmental information it is important we encourage the use of residual hearing.

If I were to say to you that a child born deaf is born into a still cold silent world you would probably think me sentimental.. Think about it before you react. According to Kellmer Pringle (19) the four basic needs of the child are love, respect, security and adventure.

Don't most children receive their first feelings of love from the carer's vocal intonation as they are cuddled, fed, lulled to sleep? Don't they have feelings of security when they hear the carer's voice in the next room, from the garden from a part of the room out of their range of vision. Even if the content is incomprehensible the intonation is meaningful to a hearing baby. To see no familiar figure, to hear no familiar voice, to feel alone is terrifying for a baby. How can he have security feeling thus?

Activity 5

Read the "Young Handicapped Child" (Bowley and Gardner 1969 pp 57 & 8). Write two short descriptions one of a shopping trip with a young hearing child and one of a shopping trip with a young hearing impaired child illustrating the differences caused by the effect of deafness.

There are four essential factors for normal language development which a child must bring to the learning situation

They are:

intact sensory pathways;

adequate intelligence;

unimpaired central nervous system;

emotional stability.

What about the environmental factors? Is water running soundlessly the same as our concept of it? What about laughter?

The teaching of vocabulary is relatively easy but for a child with a hearing loss the acquisition of conceptualised language is extremely complex. If s/he acquires the concept of; eg 'run' as faster than 'walk' what happens when he meets the following:

The play had a long run

There's a run in your stocking

She has run out of sugar

His blood runs cold

The river runs slowly

How do children learn the customs and taboos of society, more of the reasons and motives of human behaviour, the why and how of emotion, ethical and moral values? They cannot be innate since they vary from culture to culture. Such concepts are passed on usually by oral means and received either through hearing or 'overhearing'. Are colloquialisms, social behaviour, everyday 'gossip', everyday information? Hearing impaired children if not helped, do not pick up this vast wealth of information.

Children born with a significant hearing loss are, if they and their carers are not helped, in invisible isolation chambers where language and spoken communication are concerned. They have no past language experiences to use as a base. Children who acquire deafness have to cope with the trauma of such an event but they have heard words and sounds. For those born with imperfect hearing, spoken language can only be heard imperfectly. If you heard language delivered only in the way you will hear the next audiotape I think you will agree that it is not surprising if children with imperfect hearing have difficulty in acquiring and/or mastering vocabulary, language constructions and articulation.

Activity 6

Ascertain if the child/children in your care are congenitally hearing impaired or adventitiously hearing impaired. Try to observe characteristics or skills or lack of skills which result from the time of onset of hearing loss. Discuss your findings with other staff members.

Hearing impaired people, in common with people having other disabilities, and minority groups, are stereotyped by the rest of humankind. The labels are usually among the following:

aggressive, bad-tempered, immature, impulsive, physical, rigid, selfish and lacking an ability to see other than in terms of black and white.

It is true that there is far greater incidence of reported maladaptive behaviour in hearing impaired people than in the hearing population but is the aggression, selfishness, and bad temper not perhaps the result of an inability to communicate expressively and receptively with those around them rather than a direct result of Hearing Impairment? Hearing impaired people have the same needs as the general population, are subject to the same forces which affect the behaviour of hearing people and there is the same range of abilities among them as among those not affected by hearing loss. Hearing impaired people form a diverse heterogeneous group of people. There is no such convenient entity as "the deaf person". When a hearing impaired child's lack of skill at understanding and/or expressing himself to those around him is noticed there is a real danger that those involved with that child - family, carers, etc - may attempt to communicate less frequently. This leads to decreased interaction. If the interaction with the family and carers is inadequate or inappropriate then not only the child's linguistic handicap will be exacerbated but his self esteem, his comprehension of his environment etc. Can you wonder if that child grows up to be aggressive, bad tempered, immature, impulsive, physical, rigid, selfish, and black and white in his outlook?

It is up to those of us who are not hearing impaired to try to ensure this does not happen.

Activity 7

Observe the child with whom you work most. Does his personality fit the 'stereotype' in any way? Make a list of his characteristics as they appear to you.

Do not assume that because hearing impairment carries with it inherent limitations, the person who has the hearing loss does not have the human capabilities of adaptability and learning. We must ensure that by understanding and empathising with the implications of hearing loss, we do not acquiesce in allowing the person to become a self-fulfilling prophecy of the perceived difficulties of hearing impairment. Hearing impaired people can and do acquire language, can and do achieve good posts, can and do interact with others, can and do communicate well. We must understand so that we can help the hearing impaired person reach towards realising her/his maximum potential

Hearing loss

Hearing loss is rarely total. The term covers a continuum from a very slight deviance from normal hearing to almost total deafness. To complicate the matter hearing loss can affect some sounds more than others, so that speech is received in a distorted fashion. To further complicate the issue, no one speech sound is made of a single frequency nor are words made up of speech sounds of identical intensity. Unfortunately too the sounds which are weakest in volume are those which are also the highest in frequency. For most hearing impaired children high frequency sounds are in the range they cannot hear. Many of the consonants are the sounds which give intelligibility to speech. (For explanation of 'frequency; see below.)

A visual analogy would be the following.

--e -o--- -i- ----e -oo- -o--- -i----y -e----e

Compare this with the same sentence only showing consonants

sh- t-ld h-m th- b--k c-st f-fty p-nc

Activity 8

Listen to the audiotape. Try to recognise the words in each list. East list shows the effect of a different type of hearing loss without decreasing the volume.

Check your responses with the correct answers given at the end of this topic.

Sound and its measurement

Have you ever wondered what causes sound? Sound is always caused by a movement' - a pencil does not produce a sound, but drop it and it does. The source of a sound which is continuous is always a vibration set up by movements. A sound is any disturbance of the air that could cause vibration of the eardrum leading to the pattern described under "The Ear and How It Works".

Activity 9

Can you think of any movements which set up vibration? They may be begun by nature or by human contrivance.

Here are some examples:

In a piano or violin the sounds result from the vibration of strings

In wind instruments the cause is the vibration of reeds

In a drum the cause is the vibration of a membrane

Speech sounds result from the vibration of vocal chords and the movement of air from the lungs.

Another important point to note is that sound cannot exist in a vacuum. Sound requires a medium be a gas eg air, a fluid eg water, or a solid eg steel. Do you remember as a school pupil when a bell was rung in a belljar which had been made into a vacuum? There was no sound. Sound takes time to travel through a medium and the speed depends on the medium. This sound travels through air at approximately 1100 feet per second. This is, of course, much slower than light which travels at 15,6000 miles per second. No wonder you see the lightning before you hear the thunder!

What happens when something vibrates? Think about a tuning fork. The prongs move backwards and forwards. If the movements of a prong are forwards and backwards, then we say it has completed a cycle. If the whole cycle occurs 500 times per second, we say that the cycle has a frequency of 500 cycles per second. That is how we scientifically, or objectively, describe sounds - X cycles per second (X cps) or X Hertz (X Hz). Subjectively we describe sound in terms of high pitch or low pitch. The greater the frequency, the higher the pitch. For most people, children or adults, the most vulnerable sounds are those in the higher frequencies. Remember the visual analogy of demonstrating the relative importance of consonants and vowels? The consonants are mainly composed of higher frequency sounds.

Similarly there are objective and subjective ways of referring to loudness. The objective term for loudness is intensity. Intensity of sound is measured by units called decibels (dbs). When the unit is db it describes a step or difference between two sounds. Thus if it is said that a child has a hearing loss of 30 dbs at a frequency of 500 Hz, it means that the child requires a sound of 500 Hz to be stepped up by 30 db greater than a normal person requires to detect the sound. Thus we describe sound in terms of frequencies and decibels.

Audiograms

An audiogram is a graphic representation of hearing loss, with the vertical axis showing hearing loss in decibels and the horizontal axis showing the frequencies of the sounds used.

To gain an audiogram the person's hearing is measured by means of an audiometer. The sounds to which the person is subjected are pure tones ie sounds of only one frequency. However, no natural sounds be they of wind, bird song, water or speech, are pure tones. They are all mixtures of frequencies. Thus even if a child can hear a pure tone of X Hertz, it does not mean s/he will comprehend a speech sound containing that frequency since s/he may not hear the other components. The responses from both ears are usually shown on the same audiogram and traditionally the right ear is plotted with arches and the left ear with crosses.

Do not assume an audiogram is a definitive tool. It is a guideline. It tells what a person does not hear (remember it is a picture of hearing loss) but it does not tell us what a person hears. The points plotted on the graph depict detection of sound, not comprehension. Only the person whose ears are being tested knows what they hear.

Note too, that 0 db on an audiogram does not mean 'no sound'. It represents the average sound level at which the normally hearing person can just hear that particular frequency, that is the normally hearing person's threshold of hearing, threshold of audition or threshold of audibility. If a child's audiogram shows that he has a hearing loss of 'X' decibels at a particular frequency that means he requires that frequency to be made 'X' dbs more loud than the average hearing person requires that particular sound to be. Thus if a person with average hearing requires a sound to be 40 dbs greater than his threshold for him to hear and understand it, the deaf person is going to require it to be 40 dbs plus 'X' dbs to hear it.

This method of testing hearing is not appropriate for young preschool children nor for children whose other disabilities may be profound and/or complex since it requires interaction with and cooperation from the child. The most common test for preschool children is a Free Field Test of Hearing. 'Free Field' describes the fact that the child is not attached to machinery or headphones. Sounds are made of known frequency and intensity - perhaps speech, perhaps familiar environmental sounds, sounds signifying meaningful events eg sounds similar to food being prepared. The observer requires to be very knowledgeable where child development is concerned to interpret his observations. This is particularly the case with children who are deaf-blind - accurate observation is probably the single best tool when used and interpreted by experts.

There are objective tests which can be used eg tests which do not require voluntary responses from the person being tested. Impedance audiometry and evoked response audiometry such tests. Electro-cochleography is also an objective test but requires the subject to have a general anaesthetic.

Auditory training

Like most people, hearing impaired people use vision and what hearing they have, be they using lip-reading or signing. The problems of visual fields where signing is concerned are mentioned under Loss of Vision. To help deafblind children use their residual hearing we must carry out auditory training.

With sighted hearing impaired children we would ensure that as far as possible they saw and felt the origin of the sound eg water from the tap, chimes from the doorbell, loudspeakers on the radio or record player, membrane on the drum. Partially sighted or blind hearing impaired children have difficulties here but the same principles of auditory training, or indeed of teaching would apply ie from the known to the unknown, from the gross to the fine ie start with sounds totally dissimilar in frequency and volume to 'train' discrimination. Music can play a tremendously important part in this. Loud and quiet, high and low, fast and slow, leading eventually to finer, even speech, discrimination to phrasing and intonation.

To carry this out as effectively as possible, you must incorporate the use of the most effective form of amplification for the particular child at all times. Never think that because a hearing impaired child cannot hear as hearing people do, that there is no point in using hearing aids. In addition to particular strategies like those mentioned above, all interactions between the child and his peers, between the child and the environment, between the child and you, provide opportunities for encouraging that child to be aware of sound, to detect it, to respond to it and to understand it. As said before we can only measure hearing loss, we do not as yet know what the person hears so encourage the awareness and use of any residual hearing.

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Contact

A resource for staff working with children who are deafblind

Module 3 Topic 5

Topic 5 Additional Specialist Information - Visual Impairment

Introduction

As you will have been working with your pupils who are deafblind and making your way through this teaching package, you will have become more and more aware of the importance of the two distance senses, vision and hearing. They play an important part in the daily tasks and enjoyment of living and learning. For you as teacher or care giver, it is extremely important to know whether or not your pupil has any vision. If there is no remaining sight then your strategies will involve alternative modes of presentation of material, and teaching your pupil compensatory skills. If there is remaining sight then you will be concerned to know how much, and how you can enable your pupil to make best use of this and how you might adopt strategies to complement or take into account the visual limitations of the learner.

Aspects of visual impairment have already been dealt with in [Module 4 Topic 5 Aids to Hearing and Vision](#). This topic will:

provide a short introduction to the causes of visual impairment in deafblindness;

the role and functions of vision; types of visual assessment;

a diagram of the eye and

a short glossary of terms;

a bibliography

Cause of the visual impairment

Knowing the cause of the visual impairment is very important. Parents will find it very hard to bear if no one can tell them why their child cannot see well or at all. Although a diagnosis does not take away the sorrow, it offers some kind of explanation, sometimes a prognosis and often some help in deciding what ways the child can be helped either to use their remaining vision, or to concentrate on non visual ways of learning. For this reason, knowing the diagnosis is also very important for the teacher or care giver. Unfortunately, it is not always easy for this information to make its way to the classroom or residential setting. Confidentiality can sometimes be so well observed that the information does not reach those who need it in order to do their best for the child. If you are unable to get access to this information through school sources, ask the parents to request the medical sources, to give you that information.

Eye conditions in dual sensory impairment

Some conditions are well known as causing dual sensory impairment such as rubella and Usher's Syndrome (see [Module 1 Topic 2 Common causes of deafblindness](#).) Sometimes impairments of vision, hearing and severe physical and learning difficulties may result from some accident such as asphyxia, or lack of oxygen, during or after birth.

One of the reasons that it is vitally important to know the cause of the visual impairment is that the implications will vary. Rubella may cause a variety of visual conditions the most common of which is cataract (see glossary at the end of this topic) which affects central vision or vision for detail, may be operated on, and a lens implant, contact lens or glasses will be necessary. Retinitis pigmentosa (see [Module 1 Topic 2](#)), which is associated with Usher's Syndrome, means a progressive loss of vision, starting with peripheral vision, the type of vision we use for mobility and gradually progressing to partial or total loss of central vision. Damage to the visual cortex of the brain may cause cortical visual impairment or perceptual problems.

Role of vision in the development of communication

In [Module 3 Topic 1](#) you will remember the important role vision plays in the development of the normally seeing child and in particular its role in communication

As well as wanting to know how much your deafblind pupils can see to enable learning in general, it is particularly important if you are considering or already using a signing system or lipreading. If the peripheral field of vision is affected then the signing space should be confined to the midline. If the child is able to make use of lipreading, then the signing space will have to be constrained even further so that both face and hand movements of the communicator may be seen. The direction of lighting is also extremely important. The teacher/adult signer should never stand in front of a window or strong light. The child will be dazzled and the signer will be in shadow. Better to have a light erected towards the signer/communicator. A plain background will also help the child's visual attention.

What are the different functions of vision?

In day to day life we tend not to think much about the different ways in which we use our vision. However, when we want to find out if and how a child who is deafblind is using their vision, it is helpful if we think about the type of vision necessary for the task.

We use vision to get information about ourselves and where we are as well as to find out about other people and objects. As well as playing an important part in early communication and development of motor skills vision later enables us to move safely through our surroundings whether familiar or unfamiliar. It also enables us to make out the shapes and colour of objects, see detailed features of them and if our vision is sharp enough to be able to make out the small symbols of letter and words and learn to read.

Types of assessment

Certain types of vision assessment can be done only by medical or ophthalmological practitioners. Examples of these are testing reaction of pupils to light, assessing refractive errors or electrical responses from the retina or cerebral cortex. As the active participation of the child is not necessary for these assessments they are sometimes called objective tests.

Types of assessment which involve the child's active response are called subjective tests. These are mostly used to assess the child's ability to see detail in order to do such activities as read print. However, they usually involve quite a range of activities that are not purely vision based - they often depend on the child's attention and interest, a certain level of understanding and sometimes speech and motor skills. These tests, which I shall refer to later, have usually been tried out or standardised" on many children, can be bought as packages or lists and can be carried out by doctors, nurses, orthoptists and teachers. The person administering the test has to observe and record the child's responses.

Observation is a very useful and essential method of building up knowledge of what the child can see. Observation should not be confined to the "staged" and formal use of vision tests. Observation of whether and how a child is using vision in the activities of the school day or after school can give many insights. These observations can also be "structured" so that you choose the surroundings and the materials and task involved. You may want simply to observe, or you may wish to participate as well as observe.

Where do I begin?

You may already know how well your pupil can see. However, if you are working with a very young child, or one who is new to the school, or your class, you may wish to find out where your child is functioning in the range of vision from no useful vision at all to vision which can be used for getting around or for seeing drawings, pictures or letters. This range of vision is sometimes called the visual continuum.

The visual continuum

If we consider the possible range of vision we can think of it as a progression from being able to perceive the difference between darkness and light, through seeing reflected light, being aware of movement, being able to see objects of different size, of different contrast and at different distances, to the sharpness of vision which gives the ability to see changes in facial expression, and enables the child to use drawings, pictures and letters. The sharpness of vision is called visual acuity which ranges from poor vision to "normal vision". Thus the visual continuum could be described as ranging between light perception and normal vision.

Perception of light

A light source such as the sun, ceiling light, lamp, torch or penlight or computer screen can be used to gauge if there is a response to the difference between light and its absence. If the child is young or does not yet communicate you will have to decide from your knowledge of the child and of your observations of the child's reaction whether or not there is light perception. If you know how the child responds to other stimuli such as touch, this will help you decide whether or not the child was aware of the light. Moving the light will help draw the child's attention. You will then be able to see if the child's gaze can fix on the light and follow or track it if it moves.

In order not to misinterpret a child's eye movements, it is essential to take some time just to observe the child's eyes. Are

they clear or cloudy? Are they steady or do they move or roll rhythmically? This observation can tell you a lot about the child's eyes as well as saving you from misinterpreting movements.

Responding to reflecting surfaces

If the child can see light then you can try surfaces which reflect light such as the inside of wine boxes, tin-foil, mirrors etc. Move these objects, horizontally, vertically and diagonally and then present them stationary at different positions to see if the child notices them.

Visual field

It is useful to note at which point the child first notices the moving or stationary object. In normal vision we have vision to the left, to the right, an upper and lower field, and central vision.

You will remember that peripheral vision is the vision which gives us spatial orientation and enables us to orientate ourselves and find our way about in the environment. Central vision gives us vision for details such as patterns, and pictures and enables us to perceive letters and shapes of words for learning reading.

Activity 1

Look at an object straight in front of you. Keeping your eyes fixed on that object note to yourself all that you can see without moving your eyes from the target. You will see the target object clearly as you are using central vision, or sharpest vision for that. The things you can see out of the line of direct vision you will not see in such detail, but you will know what they are. You are seeing them with your peripheral vision. This is not so sharp but is very good at picking up movement cues.

Hold your arms out horizontally and see if you can see them. If you can't, move your hands and see if that helps. Move them gradually forward until you can see them without having turned your eyes.

Activity 2

Try out spectacles which simulate different eye conditions. (Addresses of centres from which these may be borrowed/tried out at end of this topic.) Try different activities with each pair walking, reading, writing. Then write down for each pair loss of vision. Some simulate conditions which affect central vision and you will find these make it very difficult if not impossible to do activities like reading. Some simulate defects of peripheral vision and make locating objects or moving around very difficult. When wearing simulation spectacles it is a good idea to have a helper/escort/notetaker. As well as being helpful and reassuring, this other person can ask you questions about visual items in the room, building or street and note down any comments you make.

Size of objects

So far along the visual continuum we have found that light sources or reflecting surfaces are easier to detect and that contrast and movement help. Size is another important feature so the next stage will be to use large objects such as a balloon or ball.

Contrast

Contrast between darkness and light, or in a more advanced form, the contrasting brightness of different surfaces is one of the earliest visual responses. The visual acuity of tiny babies can be assessed using a technique called "preferential looking" (Teller et al, 1986), which uses grey cards with black or white stripes to the left or right and with different sized stripes on every card. They are made in such a way that if the child cannot see the stripes the cards will appear grey all over. If the child can see the stripes, her/his eyes will be drawn to them.

That, of course is for testing visual acuity. However, if you are still at the stage of assessing whether objects can be seen, contrast can be of help at this stage. For example, a yellow balloon will be more easily seen against a dark surface than a light surface.

The distance at which an object can be seen is also important. It is better to start at normal working distance and then to increase the distance if the object is seen, or decrease it if it is not.

It is sometimes difficult to keep a young child's attention if you move the object too far away, so make sure that it is not just a lapse in attention or loss of interest. If the child responds positively as you vary the size: from larger to smaller, from high to low contrast; distance from near to far; presenting the objects in the same way as suggested for light sources and reflecting surfaces, each stage is demanding higher visual skills.

Visual sphere

This is described by Lindstedt (1985) as being "how far away the child can see, or rather - how far away an object can be and still arouse the child's visual reaction. The visual sphere depends both on visual capacity and interest." It is very important to bear this in mind when dealing with very young children or children who are developmentally young.

Drawings and pictures

If your pupil is able to see smaller toys you will want to introduce pictures and depending on the age and development of the child, jigsaws, card games and lego. You will remember the importance of the use of drawings in the education of children who are deafblind (see [Module 5 Topic 4](#)). If the child has this level of vision you will be able to use drawings as a meaningful communication and learning strategy.

Visual acuity tests

Earlier, standardised subjective vision tests were mentioned. References at the end of this topic will tell you where you can find detailed descriptions of these tests. I will do little more than list them here.

The Stycar test (Sheridan's test for Young Children and Retardates) gives information about perception of shape, visual acuity and field of vision. It is commonly used at baby and toddler clinics. There is a toy test, a test with a ball fitted to a rod and rolling balls of different sizes, and a letter test. (There is a restriction in those people allowed to administer the Stycar test.)

Sheridan-Gardiner's test is a letter test with a test card and a match card and a series of books for testing at near and distance.

BUST is a combined test of form perception and visual acuity. It is designed in such a way that the demands on the child's understanding of the image can be varied and also the demands made on its visual acuity. It can be used as a game or for testing visual acuity near or distance with those functioning at the eighteen month level or older.

LH is a combined test of form perception and visual acuity which can be used for near or distance vision testing. The symbols are shaped in such a way that correct perception of the picture depends on visual acuity. It can be used from a developmental age of three years.

There are many other standardised tests. Ask your school medical officer or orthoptist for more information.

The process of gathering information

A useful video to watch at this point would be "Using Residual Vision" available from Sense (address at the end of this topic). It deals with the assessment and use of vision.

The following are some practical hints to help you plan how you are going to assess the level at which your child is functioning visually.

Preparation

Gather together as much information as you can from reports of medical assessment of vision, parents views and views of professionals who have been involved with the child. If you know the name of the eye condition it will give you some idea of how vision will be affected. If the child already has glasses or contact lenses, then find out how they help the child and when and where they should be worn.

With whom?

Two pairs of hands and eyes are better than one and it is better to have someone to help you, either by observing and recording responses or by presenting the material or interacting with the child.

You may wish to have the help of the class teacher, auxiliary/instructor, parent or care staff

When?

Depending whom you have chosen as co-assessor, will influence the day and time.

Judging when the child is most alert or seems to 'see' best will affect the choice of time of day.

How long you spend with the child will depend both on time available to you, but also on the child's attention span or health and strength.

You will not be able to get all the information at one session so it is a good idea to plan in advance the number and

frequency. As the child matures so the use of vision may develop. If the eye condition is a degenerative one, vision may decrease. It is therefore wise to reassess when you would be doing a general review of the child's progress every year to eighteen months.

Where?

This decision will depend on with whom and when you will be assessing. Some aspects which should influence your choice of place would be: familiarity to child; as distraction-free as possible ie as little sound, movement, decorations, interruptions as possible; appropriate lighting or blackout facilities.

Don't worry if you can't find the ideal spot. Just make the best of what is available.

General observation

Give yourself time to get to know the child before you attempt a systematic assessment of how the child uses their vision. Both informal and structured observations will be useful so that you do not misinterpret and think the child is not looking or seeing simply because their head or eyes are not directed towards the object. Similarly, jerky movement of the eyes or "nystagmus" can sometimes be misconstrued as tracking.

Observing the child's eyes

Obviously the eyes need to be open in order to "see". A clear image will not be possible through cloudy eyes. Only if eyes are well-balanced and move together is there the possibility of binocular vision. A tremor in the eyes or nystagmus as it is called, usually indicates a visual defect and may make what is seen fuzzy or indistinct. Pupils getting smaller (contracting) in bright light and getting larger (dilating) in poor light normally indicate presence of light perception (LP).

Short glossary

Cataract: cloudiness or opacity in the lens of the eye producing blurred vision.

Choroid: layer of tissues and cells between the sclera and the retina containing vessels carrying nourishment to the eye.

Ciliary body: organ which forms aqueous fluid and contains the muscle of accommodation or focusing.

Cornea: transparent circular part of the front of the eye.

Fovea: area of most acute vision, situated in the centre of an area called the macula.

Iris: the coloured area immediately in front of the lens and behind the cornea, which by changing the size of its aperture controls the passage of light to the retina.

Lens: is a transparent disc of highly specialised cells, suspended from the ciliary body. The lens changes shape to focus on near, middle distance, or distance.

Ophthalmologist: medical eye specialist.

Optic nerve: conveys the visual impressions received by the retina, macula and fovea to the brain.

Orthoptist: trained person who provides treatment for defective binocular vision and eye muscle imbalance by visual exercise and training.

Pupil: "hole" in the iris through which light rays pass into the eye.

Retina: thin inner coating of the eye which receives the images and transmits them to the brain via the optic nerve.

Sclera: fibrous outer coating of the eye - the white" of the eye.

Visual acuity: sharpness, clarity of vision; ability of each eye, separately or together, to perceive shapes or objects in the direct line of vision.

Visual cortex: area of the brain which receives and interprets visual information.

Vitreous: transparent colourless mass of soft gelatinous material filling the eyeball behind the lens.

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Resources

Simulation spectacles: if you do not have these locally, enquiries may be made at the Scottish Sensory Centre, Moray House, University of Edinburgh, Holyrood Road, Edinburgh EH8 8AQ; Tel: 0131 651 6501

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Contact

A resource for staff working with children who are deafblind

Module 3 Topic 6

Topic 6 Working with families

All staff working with children who are deafblind will come into contact with their families at one time or another. Depending on the staff member's individual role, this contact will vary in its extent and purpose.

This topic is presented as a bibliography to enable you to browse and choose the articles or hooks which will be more appropriate for your needs. You may wish to buy some of the books, or take out a subscription to a journal. It is always a good idea to borrow first and then decide if, in fact, this is the book or journal most suited to you.

Where can I borrow these books or articles?

Some may already be in your school library or available from your nearest college of education, some are available in the library at Moray House Institute of Education in Edinburgh where this package was produced. Your local library will also be able to get them for you on inter-library loan.

If you intend to continue your reading and studies in this field for some time then it would be very worthwhile to join the Royal National Institute for the Blind Reference Library or the library of the Royal National Institute for the Deaf (addresses at end of topic).

How the Bibliography is arranged

The bibliography is arranged under the following headings, though, inevitably, there is overlapping of topics:

Counselling and family programmes;

Children who are deafblind and their parents;

The handicapped child in the family (General);

Parents who are deafblind or visually impaired;

Journals concerned with the field of deafblindness and children.

As families have many characteristics in common, whether or not they have a child who is deafblind, not all the references are specific to this. The principles to be borne in mind when interacting with families will be the same, though the details to be considered will differ depending on the age, type and severity of the child's impairment and the circumstances of the family.

Some of the books listed here are also recommended in other modules and topics of this package. The list is long and it is not expected that you will want to read all of these at once. They are presented as a resource for yourself and parents to draw on when needed.

Counselling and family programmes

The approach of the "Counsellor" is one which is being adopted more and more by teachers and others involved with families of deafblind children. Here are some comments from participants in a recent course in counselling:

"I think the most important thing I learnt was the fact that as a counsellor you don't have to provide an answer to every problem and the 'client' can help themselves by answering their own questions."

"The examination of my own interpersonal relations and personal values, in relation to both working and family situations, has been enlightening to me."

"The most important thing I learned was not to impose my value system on the client."

The following is an extract from an article by Stuart Aitken, (1988), Family/Education Adviser with Sense Scotland.

Counselling

Many of us have found ourselves at one time or another either at the receiving end of counselling perhaps as parents -

or some of us may be involved in the giving end - as the helper. By itself this sounds like an imbalance in a relationship, and for many of us who might at some time be asked to act as the counsellor this can be an uncomfortable feeling. We may feel we are being cast in the role of a problem solver when in fact we can feel helpless - mostly due to the fact that it is the other person who has that problem. It is not our problem. The skills with which we carry out our job are suddenly not of much use and yet, having already been cast in the role of the "expert", through having these other skills, we feel we cannot do anything but struggle through. Sometimes we feel a sense of satisfaction; at other times we feel we cannot have done anything but make matters worse. It is the very fact of caring for that other person which makes so uncomfortable these times when we feel we might have done the job a whole lot better. At times like these we often feel we would take the easy way out - offer advice.

There are many ways in which people might be helped. They may be helped by being given information, or by having some sort of direct action performed, or indeed by coaching. Notice that these forms of helping are not described in terms of who it is that provides the help, but instead in terms of the nature of the help given. Counselling might be seen in this light too. For example a family who are having difficulties may be helped to identify their situation in greater detail and then encouraged to explore ways of changing it. It is not who is giving the help, but that the resources being explored come from within the individual. One definition of counselling sees it as a way of relating to another person, where that person is enabled to explore thoughts, feelings and behaviour to reach a clearer understanding self; s/he is then helped to find and make use of strengths to cope more effectively with life by making appropriate decisions and actions. In this view, counselling is a purposeful relationship in which one person helps another to help herself/himself.

But does this mean that counselling is what counsellors do? This view has certainly been a factor in leading to the mystique surrounding counselling. However this view has led to there being a counsellor for every specific type of problem: one for deafness, one for blindness, one for Downs syndrome and so on. The view is one of the expert. From what has been said earlier however, this is but one form of helping, and there are specific skills of counselling which can be brought to bear while still leaving intact these other areas of expertise. Through identifying what these might be, we become in a position to improve our range of helping skills.

Time to listen

Time is the first thing that the helper or counsellor has to be able to give. It is often difficult within our busy day, to recognise when that time is needed. This is particularly true as most of us are not employed as actual counsellors, so we often are not looking to spend time counselling. Where it is recognised that time is needed for this activity though, it should be seen as a separate and necessary component of our work. How often have we been so obviously busy that people feel they should not bother us with a problem. We might think that we are giving time to that person's problem but in reality we are avoiding it. Time is needed, but the helper has to have another self-evident skill. The helper has to be able to listen. This might seem the easiest thing in the world. Surely it should not need stating?

Listening is an active process. Active listening has to communicate to the other person that the counsellor is with her or him. Unfortunately those of us who doth protest too much are the ones who are least likely to possess active listening skills. Where helpers are offered that chance to enhance these skills, they are often taken aback by just how difficult the exercise can be. For to be good at it takes certain skills to be practised. It can be difficult to reflect accurately what a person's feeling might be. Putting the two together - where a person tells the counsellor one thing but is feeling something entirely different - and the counsellor has to try to paraphrase accurately this feeling, one with which s/he too may be uncomfortable, then clearly the potential for misinterpretation is great.

There are many techniques that can be brought to bear to improve our active listening skills. Unfortunately we are often too embarrassed or too unwilling to give over time to learn these techniques - we are usually only willing to try them once and if they feel uncomfortable, then surely they cannot be of any use? Even where we think we may be using these techniques we have often let them slip. Too often we are unwilling to say we need help because surely that would somehow reflect badly on us. There is no doubt that practice in using these techniques of listening will improve how we are able to help others, but where can we practice them? What is needed is an atmosphere of trust in which we are willing to display our own difficulties with these areas, where we share experiences of these difficulties and not need to be the "expert". It is not unusual in working through exercises to hear people say that reflective responding or paraphrasing or giving feedback, are unnatural. But this is normal, it is just like learning or refreshing ourselves of any skill, it can seem unnatural because concentration is being given over to a different way of responding. We are not only at that time learning a new resource, but probably have to unlearn an old one.

Were we to work only on our ability to listen, we would probably feel that the activity was worthwhile, and we would feel that we were becoming better helpers. This though is not enough. The story goes of one well-known counsellor whose technique was to do nothing but sit and listen to clients. He listened and listened and listened to a client saying he would jump out of the window (they were several floors up), until . . . the client did just that.

Counselling requires skills of empathy. Empathic responding shows that we are not misinterpreting: for where misinterpretation does occur, it can be a sign that we are trying to take over the situation. Empathic responding demonstrates a genuineness, that there is a relationship between the counsellor and the other person. Empathy skills can be worked on and developed, helping people to see problems as their own. When a person is at their lowest it is often very difficult for them to imagine themselves as having resources to meet that problem.. Helping is not about solving that problem but about helping to identify those resources within that person, in turn allowing the problems to be seen in manageable terms. This process can be a very difficult one, because as with all areas of counselling it can say as much about our own set of values, it can be a process of self-identification and indeed of self-disclosure - something that many of us find uncomfortable. Again, situations are needed in which we can comfortably explore and share these feelings and doubts.

Challenging

It is often hard when as helpers where we have tried to listen and have tried to comfort, to realise one day that there is something the person is saying with which we, as the helper, disagree. Perhaps something they say does not fit in with their non-verbal communication - they say they are happy but they recoil from discussion. As a good listener and one who is full of empathy and genuineness, we often say nothing. It will only make things more difficult because in this view it might be seen betrayal of trust. This stage of counselling, where people are challenged to take up a new perspective on their problems can be difficult for us as helpers. This stage of counselling is however one where genuine progress is often made. It will only be possible if all that has gone before has the right mixture.

What next? This article is not intended to be read as a definitive text on counselling. The inspiration for writing it came from attending a counselling course during which the sort of areas discussed above were aired in a shared atmosphere. Although I had not expected it, having been on several counselling courses, I found it extremely rewarding, seeming to be targeted at the sort of areas which are of direct concern to those of us who are involved in the field of special education - in its widest sense. If any of these areas have struck a chord from within your own work, perhaps a course which allowed us to explore how we might become better helpers would be of interest."

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Talking Sense is published by Sense (the National Deafblind and Rubella Association)

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Module 3 Topic 7

Topic 7 Associations, Societies and Self-Help Groups

Many national and local associations, societies and self-help groups have been established over the years to further the cause of education, welfare and leisure provision for people who are deafblind. Some organisations such as Sense were set up to provide specifically for the needs of people who are deafblind. Others, such as the Royal National Institute for the Deaf, while offering information, help and assistance, were originally set up for a different client group.

The following are some of the organisations which have a UK-wide remit. The list is by no means exhaustive.

- The British Deaf Association (BDA)
- LOOK - National Federation of Families with Visually Impaired Children
- Deafblind UK
- National Deaf Children's Society (NDCS)
- Royal National Institute for the Blind (RNIB)
- Royal National Institute for the Deaf (RNID)
- Scottish Council on Deafness
- Sense (The National deafblind and Rubella Association)
- [Scottish Sensory Centre](#)
- [SIS](#) (Sensory Information Service)

British Deaf Association

Just under a hundred years ago a small group of people concerned at the prejudice shown against deaf people and widespread public ignorance about their language founded the British Deaf and Dumb Association, now the British Deaf Association. Its purpose is to protect and advance the interest of deaf people, challenging in particular the suppression of British Sign Language. It learns from their 18,000 members and other deaf people the important issues and needs of the day, clarifying them to a wider public through research and public information programmes.

British Deaf Association, 1-3 Worship Street, London EC2A 2AB
TEXTPHONE: 0171 588 3529
TELEPHONE: 0171 588 3520
FAX: 0171 588 3527

LOOK

LOOK is the National Federation of Families with Visually Impaired Children which has recently been set up with contacts throughout the UK. LOOK aims to support parents groups in enhancing the education, welfare and leisure opportunities of children with visual impairment and the coordination of services relating to visual impairment.

LOOK, Queen Alexandra College, 49 Court Oak Road, Birmingham, B17 9TG
TELEPHONE: 0121 428 5038
FAX: 0121 428 5048
CONTACT: Helen Connor

Deafblind UK

Deafblind UK (the National Deafblind League), founded in 1928 by a small group of deafblind people and their sighted-hearing friends, has grown to be recognised nationally and internationally as an authority on matters relating to adult deafblind people. The League offers hope and encouragement to deafblind people, bringing them

together through Regional group activities, Rallies and "The Rainbow" - a quarterly magazine in Braille, Moon and print. Special help is given where needed!

Deafblind UK, 100 Bridge Street, Peterborough PE1 1DY
TELEPHONE: 01733 358100
TEXTPHONE: 01733 358858
FAX: 01733 358356
CONTACT: Maureen Jobson, Advice/counselling Coordinator

The National Deaf Children's Society

The National Deaf Children's Society, founded in 1944, is the only national charity specially concerned with the needs of deaf children. The society represents deaf children's interests nationally and locally, supports parents through a large network of self-help groups, provides advice on welfare and education, publishes information on all aspects of childhood deafness, runs a Technology Information Centre including a Lend- an-Aid Library, and awards grants for holidays, research and education. The Society is a voluntary organisation, entirely dependent on donations. The Society:

- provides essential information on all aspects of childhood deafness;
- gives independent on education, including preschool services, placement in schools and units, Statements and Records of Special Educational needs, further education and careers;
- provides an advice, advocacy and counselling service to families of deaf children;
- gives welfare and holiday grants to families of deaf children; gives independent advice on state benefits;
- organises a Festival of Performing Arts every year;
- awards an Annual Scholarship and other bursaries to help train teachers of the deaf, and to help others improve their skills in working with deaf children;
- runs courses for parents and professionals. produces a wide range of publications, videos and children's books;
- gives grants for educational and medical research;
- lends radio hearing aids to deaf children, or donates them to schools and individuals;
- advises families and deaf children on hearing aids and environmental aids;
- works with other national and overseas organisations;
- represents the needs of deaf children and their families in parliament and government departments;
- trains and organises a network of voluntary Welfare Representatives across the UK;
- helps run a support group for children with Teacher Collins Syndrome or allied conditions and their families;
- has awarded a major grant to Birmingham University to support research into the integration of deaf children in mainstream schools.

National Deaf Children's Society, 15 Dufferin Street, London EC1Y 8UR
TEXTPHONE: 0171 490 8656
TELEPHONE: 0171 490 8656
HELPLINE: 0171 250 0123
FAX: 0171 251 5020
EMAIL: ndcs@ndcs.org.uk
CONTACT: Michelle Thew, Assistant Chief Executive

Royal National Institute for the Blind

The RNIB is Britain's largest organisation working for blind and partially sighted people. There are 300,000 people in the U.K. with a severe visual handicap. RNIB aims to improve their quality of life by promoting the same opportunities and choices that sighted people enjoy - in education, training, employment, health and leisure. It also aims to make the public more aware of the needs of visually handicapped people.

It provides a wide range of practical services, advice, information and special equipment. RNIB's many services include:

- the Talking Book Service with 67,000 members;
- over 500 special items of equipment at subsidised prices;
- publications in braille, Moon, Tape and large print;
- schools and colleges for students of all ages;
- two rehabilitation centres for people who lose their sight, and a consultancy service for local authorities;
- advice on benefit rights;
- residential care homes for elderly people;

- advisory services for parents, teachers and education authorities;
- Braille and tape lending libraries, and a reference library;
- four holiday hotels and a London hostel;
- a training centre for mobility officers; A school of physiotherapy;
- training courses and conferences for professional workers;
- help and advice to find jobs, run a home, take part in sport, and other leisure activities;
- research on new equipment;
- grants for research into the prevention of blindness.

The Royal National Institute for the Blind 224 Great Portland Street London WIN 6NA
 TELEPHONE: 0171 388 1266
 FAX: 0171 388 2034

Royal National Institute for the Deaf

The RNID aims to promote and encourage the prevention and alleviation of deafness and generally to promote, safeguard and protect the interests of deaf people

The following is a list of services throughout the country provided by the RNID:

- employment, training and educational advisory service;
- hearing advisory service;
- information and publications;
- library (on all aspects of hearing, speech, and language);
- medical information and advice;
- speaker service;
- speech therapy advisory service;
- technical awareness service;
- Television for the Deaf Fund;
- British Tinnitus Association.

Royal National Institute for Deaf People (RNID), 19-23 Featherstone Street, London EC1Y 8SL
 TEXTPHONE: 0870 603 3007
 TELEPHONE: 0870 605 0123
 FAX: 0171 296 8199

Sense

Sense is the national voluntary organisation which provides services, advice, support and information for children and young adults who are deafblind, their families and professionals in the field. The charity was founded in the 1950's as a self-help organisation for parents of rubella handicapped children. Today, Sense seeks to enhance the quality of life for all deafblind young people, whatever the cause of their dual sensory impairment, and campaigns for their needs to help them become as independent as possible.

What does Sense do?

- offers advice and help from birth to children who are deafblind and their families;
- supports families through a national network of parents' self-help groups;
- advises on suitable schooling and after school placements;
- helps families to obtain disability benefits and provides information on training, respite care, new legislation and other relevant areas;
- runs holidays for children and young adults who are deafblind
- advises teachers and local authorities on how best to educate and provide for people who are deafblind;
- provides rehabilitation, further education and training for deafblind young adults, and runs courses for others seeking to do so;
- runs rehabilitation courses for people with Usher syndrome;
- provides long-term residential care in group homes for deafblind adults;
- campaigns to ensure that legislation recognises the specific needs of deafblind people;
- works with local authorities and other voluntary organisations to develop services for people who are deafblind;
- seeks to raise awareness of deafblindness and provides information on the main causes, such as rubella and Usher syndrome.

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MODULE 4 Learning and teaching : Introduction

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Module descriptor

Aims

This module is the first of three modules which consider issues in teaching and learning. It will deepen the course members' understanding of the aims of education, methods used to teach, and the content of the curriculum. It also provides information on the auditory and visual aids available to help such children. It is expected that the course member will have some experience before proceeding.

Objectives

On completion the participant will:

have some understanding of the terms: aims, methods and curriculum;

have been introduced to the aims, methods and curriculum used in a school for children who are deafblind;

be aware of the various technical aids available to these children;

be aware of the contributions of microtechnology to the education of children who are deafblind.

Topics

1 The Aims of education for children who are deafblind

2 Introduction to the curriculum

3 Introduction to methodology

4 Assessment-Part One

5 Aids to hearing and vision

6 Learning mobility skills

7 Microtechnology

Style and Modes of Learning

Reading, practical exercises, discussion.

Topic 1 The aims of education for children who are deafblind

Generally speaking we find three questions coming to mind when we reflect on education:

WHY do we "educate" children?

WHAT do we "teach" them?

HOW do we "teach" them?

The answer to WHY? will give you THE AIMS OF EDUCATION

The answer to WHAT? will provide THE SPECIFIC CONTENT OF A SCHOOL'S CURRICULUM The answer to HOW? will give you the way this content is taught. In other words THE METHODOLOGY

"The Whining schoolboy with his satchel And shining morning face, creeping like a snail Unwilling to school". As You Like it II vii 139

How often have most of us felt like this as we reluctantly faced another day of education? Granted, there were times when the thought of the classes for the day excited and thrilled us. Why was this?

Activity 1

Reflect on the above passage, identify the subjects that you found difficult and those you sailed through. List the reasons (in some detail) why you learned some things more easily than others.

Do not say to yourself "Oh, I know that there's no need to put it on paper". The actual discipline of writing will help you clarify your thoughts.

Among some of your reasons you will hopefully have mentioned, your interest in the subject, the way it was taught, and its relevance to your life, either now or in the future.

What are the aims of education for a child who is deafblind?

The Warnock Report makes the following statement about Education for the handicapped child:

"The criterion by which to judge the quality of education provision is the extent to which it leads a pupil... towards understanding, awareness of moral values and enjoyment and towards the possibility of independence. It is progress towards these goals which alone can justify a particular course of education for anyone, whatever his abilities or disabilities. For some children, enjoyment and understanding may be coined to the hard-won, taught capacity to recognise things and people, and perhaps to name them. For some, independence may in the end amount to no more than the freedom of performing a task for oneself rather than having someone else do it, even if the task is only getting dressed or feeding oneself. For others the concepts of imaginative understanding, enjoyment and freedom have an infinitely richer content. But the direction of progress is the same." (DES, 1978, Chapter 1)

Basically, therefore there is little difference in the general aims of education for any child.

Let us look again at the aims of Carnbooth, one school for children who are deafblind.

"The overall aim of a school for deafblind children is to enable each child, according to her/his ability, to become a happy individual and an integrated member of society."

That is:

one who can make sense of her/his experiences and environment and use them to continue the life-long learning process;

who has an effective means of communicating;

who can experience satisfying relationships with others;

and has enough personal independence to give her/him a sense of their own value and worth.

Can you see the similarities? The Carnbooth aims are the same but emphasis has been put on the particular difficulties facing children who are deafblind. To enable such a child to become a happy individual and an integrated member of society, special emphasis is put on the areas of communication, personal independence, socialisation and concept development (making sense of her/his experiences). But as each child has different abilities, the level of achievement will vary accordingly. However, the aims for all remain the same. If we help the child to relate to, and communicate with others, to have some understanding and appreciation of things, of other people and of her/himself in relation to them, then we have started the process of learning which should continue for the rest of her/his life.

Activity 2

Discuss the aims of your particular school with your headteacher. Are they appropriate for the child who is deafblind? eg, who wrote the aims? When? With whom were they discussed? Now general are they? How do they relate to the Warnock statement? How do they relate to the Carnbooth aims?

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Module 4 Topic 2

Topic 2 Introduction to the curriculum

What do we mean by Curriculum?

There is no single accepted definition but one by Neagley and Evans (1967) states that curriculum is

"All of the planned experiences provided by the school to assist the pupils in attaining the designated learning outcomes to the best of their abilities."

How do we decide what the children need to learn?

To begin with we will, through experience and observation, have gained a knowledge of the general disabilities and developmental delays common to most children with the dual sensory impairment. This should form the basis of the school's curriculum. However, it is extremely important to bear in mind the differences that exist between children and also their individual preferences and strengths. Children who are deafblind do not have the ability to express these needs and preferences, so close observation by the parents and school staff is crucial. Having therefore a general outline of areas needing development, the school's curriculum must, as far as is possible, be planned to cater for the individual needs of each of the children and at the same time be open to the possibility of the unexpected. This calls for a willingness to be adaptable and flexible on the part of staff and the administration. The child must not be made to fit into the organisation of the school, it must be the other way round; the school must be geared to the pupil.

Keeping all this in mind, we will now break down the general aims of education we have already identified (see last topic) into the curriculum areas most commonly needed for the child with the dual sensory impairment. These are:

Concept and cognitive development, ie making sense of experiences which will enable the child to interact creatively with his/her environment.

Language and communication, ie giving the child a means of thinking and developing intellectually, of expressing self and of understanding others.

Socialisation, ie giving the child a sense and appreciation of self and others. Enabling them to understand and experience satisfactory relationships so that they become emotionally mature human beings.

Personal independence, ie building up a sense of personal value by enabling the child to look after his/her own needs in so far as they are able.

Concept and cognitive development

Early learning for all young children is dependent on the acquisition of concepts. As the child is exposed to the world of objects around, and begins to explore and use them, s/he will slowly come to some internal understanding of what they are. Concepts of the functions of things and people, and how they relate to each other, form the basis of further learning. Unlike the child with sight and hearing, the child who is deafblind will need to be taught how to form concepts; concepts of self and others, and of objects, their function, size, quantity, weight and shape. Concepts of the relationship between things, of location, of cause and effect. Concepts of space and time, and exposure to symbolic play would also come under this heading.

Having acquired concepts and a method of expressing them (language) the child who is deafblind has thereby been given the means to interact constructively with, and eventually understand, the results of his/her interaction on the environment.

Activity 1

Turn to the chart at the end of this topic (see Appendix A) and, having photocopied it complete the breakdown of Concept Development.

Language and communication

We all very easily fall into the trap of forgetting that we need to understand what a symbol is before we can make sense of the spoken, signed or written word.

Before the young child can meaningfully name something s/he will have gone through the process of acquiring some concept of the object. Then s/he will need to understand that something (another object, a movement, or a sound) can represent or stand for the original object. This is an extremely difficult process for the child with the dual sensory impairment and will be treated in greater detail in Using Experience to develop Communication and Language ([Module 5, Topic 4](#)). For the moment all you need to know is that the child who is deafblind has to be taught how to communicate; to understand the process of giving and receiving messages which may be of needs, moods, feelings, ideas or information. They need to know that they do not have to be in direct contact with an object, person or experience before information about it can be communicated. In other words they need to have a means of representing the information in a symbolic form. They need a method of communicating apart from basic body language which according to their ability, may be natural gestures, formal sign language, fingerspelling or speech. They need to know that drawings, pictures, writing and braille can be other means of communicating. They also, at a later stage, need to be taught the formal structure of a language; eg English, French or whatever.

Activity 2

Using the same chart fill in the section on the breakdown of language and communication into curriculum areas.

Socialisation

Human beings are social creatures. One of our most basic needs is to have close relationships with other people. We depend on each other, we seek out companionship, we tend to view ourselves in the light of how others treat us. Every area of development is related to and dependent on the others and each in some way is affected by deafblindness. The development of social relationships is intrinsically dependent on the ability to communicate, which is a major difficulty for one who is deafblind. The social isolation which results may well be the greatest damage done to the individual.

Activity 3

Jot down what you think needs to be developed in the child who is deafblind in order for them to experience good relationships with others.

We will start you off with the following:

an awareness of self as separate from others;

an awareness of another person.

What else can you think of? Fill in the appropriate section in Appendix A

How did you do?

We have already mentioned

an awareness of self

an awareness of others

So, what about the following?

toleration of another's intrusion into their self-contained world

a sense of self-worth

a capacity to feel a range of emotions

an ability to identify and name emotions

an awareness of the correct emotional response to a situation, ie crying when sad, (some Rubella children need to learn this)

an ability to recognise the emotions of others and give them support

the experience of giving and receiving affection

an awareness of the appropriate behaviour in situations

an understanding of dependence and independence

The development of emotional and social skills could easily be overlooked in a school's curriculum. We must be extremely careful to give it the place it deserves.

Personal Independence

Personal independence for the child who is deafblind means that they have developed the skills, practical and otherwise, necessary for them to control their own life, as far as they are able, without continuous help from others.

Activity 4

Now write down what areas of development would come under the heading of Personal Independence for the child who is deafblind.

Your list of self-help skills will probably include some, or all, of the following: eating, drinking, toileting, washing, dressing, cooking, shopping and cleaning.

Did it strike you that other skills could come under the heading of Personal Independence?

What about mobility skills and making the best possible use of their residual visual and hearing? And again, the need for self control and knowing how to motivate themselves? All of these are necessary if the young deafblind child is to grow into an integrated and mature person.

Add these points to your chart if you have not already done so.

How do these areas fit into the day to day curriculum of the school?

We have already mentioned that it is through the ordinary everyday activities of washing, eating, dressing, household tasks, etc. that we teach the child who is deafblind. These daily activities are the means by which we develop the child's language, concept of self, relationships with others, etc. For example:

Meal times should develop

concepts; eg different types of food and eating utensils; an idea of location, cause and effect

an integrated use of the senses

language and communication

personal independence

social interaction eg appropriate social behaviour

Shopping should develop (in accordance with the level the child has reached)

concepts ie the purpose of a shop, different types, use of money

an integrated use of the senses

language and communication

personal independence eg mobility

social interaction eg coping with crowds, relating to strangers. Control of emotions, appropriate social behaviour.

Of course the child will not automatically learn from these experiences. S/he will need consistent structured guidance from a knowledgeable adult, and a list of back-up work.

Can you now see how the broad aims of education mentioned on page 1 of this Module can be translated into what we teach the children? So far we have only presented general outlines of what we teach, we will go into more practical detail in Modules 5 and 6.

To sum up

The young child who is deafblind will

learn to make sense of her/his experiences

interact creatively with the environment

develop language and communication

establish a sense of self

learn to relate to others

and build up personal independence when the curriculum consists, on the whole, of ordinary everyday activities

We will look at how this is done in the topics on Methods (Module 5) and Curriculum (Module 6).

Activity 5

In the light of what has been said you may like to look at your child's timetable. Discuss your queries with your headteacher as you may not yet understand the reasons for it being as it is.

Appendix A

This chart is for you to photocopy

CURRICULUM OUTLINE

Main Development Areas	Breakdown
Concept development	Knowledge of self, others, objects relationship between things
Language and communication	
Socialisation	
Personal independence	

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Module 4 Topic 3

Topic 3 Introduction to Methodology

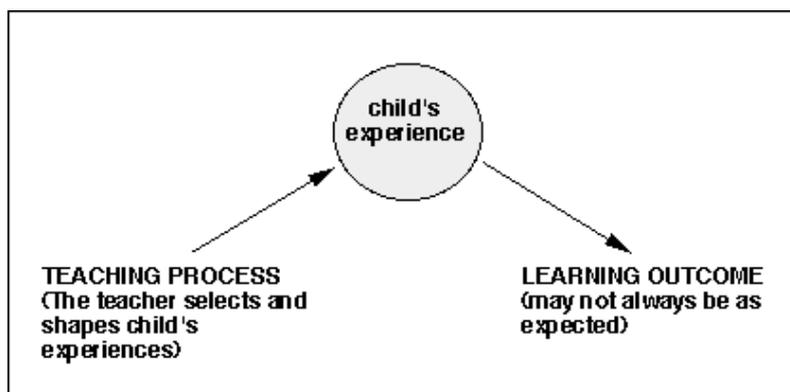
How do you teach children who are deafblind?

Where do you start?

How often have you asked, or indeed been asked, these questions? People find it hard to imagine where you begin teaching when the two major channels of communication and learning are damaged. It is as if each time you think of a way through, you come up against the same obstacles, "But he needs his sight" or "She needs her hearing to understand that".

Before we begin to look at possible ways of teaching children who are deafblind let us look at teaching and learning in a very simple way.

The teacher (not necessarily the professional, but anyone who wishes the child to learn, even the child herself) takes the child's experiences, selects those relevant to the situation and uses them to try to achieve the desired learning outcome. These ways will vary depending on the knowledge, technique and skills of the teacher.



Look back at your answers in [Activity 1 Topic 1](#) of this module. There you will have found that you enjoyed learning and found it comparatively easy when it interested you and was relevant to your present and future life. But an important element was also the way you were taught.

Activity 1

The description below shows how one person was taught to ride a bike

My Dad gave me a present of a new bike for my 8th birthday. Although I had seen bikes before, I was unsure of all the different parts so that evening he explained what they were and showed me how they worked. The next day he with his own bike, and I, with my smaller one, went to a quiet lane where there was no traffic. He showed me how I must hold the bike, then put one foot on the pedal and start moving before I put the second one on. As he rode off slowly, he showed me how I needed to turn the handle bars and also keep moving if I was to keep my balance. Then I tried to do the same on my bike but he held the saddle for me for the first few attempts. Then after a few times I suddenly realised he was no longer holding me, that I was away on my own - what a thrill it was.

try to analyse the way the child's father taught her to ride a bike. In addition to demonstration what other methods were used?

Now, cast your mind back a few years and write down how you were taught the following:

to drive a car, use a typewriter or make a bed

to tie your shoelaces

to swim

to subtract

to knit a jumper

to recognise, to distinguish between two similar animals, eg a lion and a tiger

Here are the most common methods used to teach:

DEMONSTRATION which you observed, imitated and practised; eg riding a bike, driving a car

VERBAL INSTRUCTION

WRITTEN INSTRUCTION

IDENTIFICATION; eg parts of the car

COMPARISON for example when distinguishing between the lion and tiger

CORRECTION

REWARD/PRAISE

SEQUENTIAL STEPS; ie simplifying the task by learning in stages; eg learning to write.

USE OF PROPS; eg armbands in swimming

PHYSICAL HELP eg while making a bed the adult may need to help the child with blankets etc. Over time this help will be reduced.

CONTROL OF DISTRACTIONS; ie concentrating on the elements essential to the task and eliminating the unimportant or distracting ones.

Did you realise there were so many methods? Were you aware that your newly acquired knowledge or skill was always based on your previous experiences? These were selected, shaped and presented by using some or all of the methods already mentioned eg before you learn to knit a jumper you must know what it is; you must have some idea of its composition. You must also have some basic knowledge of the different types of stitch and, even before that you must have had experience in using your hands to do fine motor movements. Then after the initial instruction, practice and repetition are needed to consolidate your learning.

There are other skills you will have acquired without even being 'taught'. Many social skills such as tactfulness, etiquette, etc. are learned indirectly by example. In a way the behaviour has been demonstrated but this is rarely put into words, or even recognised.

Over the years, you have acquired the ability to shape your own experiences and you developed the capacity to acquire knowledge and skills independently.

Activity 2

Look back at your accounts of how you were taught (Activity 1). Mark all the examples of demonstration you can see by putting an asterisk in the margin. Then go through all the other methods listed above, coding each as shown in this example.

* Demonstration

X Identification of different parts

O Verbal instruction

+ Presenting in sequential stages

{ Physical help which is then reduced

> Control of distractions

My Dad gave me a present of a new bike for my 8th birthday. Although I had seen bikes before, I was unsure of all the different parts so that evening he explained what they were and showed me how they worked (OX). The next day he with his own bike, and I, with my smaller one, went to a quiet lane (>) where there was no traffic. He showed me how I must hold the bike(*), then put one foot on the pedal and start moving before I put the second one on (+). As he rode off slowly, he showed me how I needed to turn the handle bars (*) and also keep moving if I was to keep my balance. Then I tried to do the same on my bike but he held the saddle for me for the first few attempts ({}). Then after a few times I suddenly realised he was no longer holding me, that I was away on my own - what a thrill it was.

Activity 3

Fill in this chart identifying the methods which could or could not be used to teach children who are deafblind. The first two are completed to give you a start. (Use a copy of the chart)

Teaching methods and the young child who is deafblind

	Suitable method	Reason why
Demonstration	X	The child's hearing and vision are damaged and they are therefore unlikely to be able to imitate easily
Physical manipulation (reducing)	✓	Sight and hearing are not needed for this
Verbal instruction		
Written instruction		
Identification of parts		
Comparison		
Sequential stages		
Correction		
Reward/praise		
Other specialised methods		

You could show your answers to your tutor or headteacher, or discuss them with other members of staff.

You are now ready to move on to METHODS of teaching children who are deafblind but before we do that, we will look at the aids we can use to help them and some of the methods used in assessing these children.

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 [Topic 4 Assessment - Part one](#)

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Module 4 Topic 4

Topic 4 Assessment - Part One

What is assessment?

Assessment is a broad term to describe various activities which attempt to gather information about a child. The reason for gathering information is in order to answer certain questions about the child, usually to evaluate some aspect of development or to provide evidence which can be used to inform teaching/learning, also to provide evidence and to indicate priorities. All the various professionals involved with children who are deafblind will carry out their own particular form of assessment but in this section we are interested in the educational assessment.

Any form of assessment tries to get answers to certain questions as objectively as possible; ie as free from bias as possible, but most tests are designed for "ordinary" children or for children who have only one major disability. So, unless in exceptional circumstances standard tests are inappropriate especially for younger children. If such tests are used the results must be interpreted with caution.

So if it is not fair, or useful, to compare children who are deafblind with other children, who can we use for comparisons when we assess a child who is deafblind?

Can we compare the child who is deafblind with other similar children?

You will probably have realised that the most appropriate course of action is to assess or evaluate the child who is deafblind by using the child himself for comparison - that is to say we can compare his/her current achievements with previous achievements. Of course, within a school for children who are deafblind it can be possible to compare one child with others but very often you will find discrepancies in ages, degrees of vision and hearing, etc, which make comparisons difficult.

Assessment and observation

In order to avoid duplication, it will be helpful at this stage if you re-read [Module 1 Topic 3](#) on Observation. Many of the key points have already been covered in that section which looks at the role of observation in assessment. Observation will be the key assessment tool for those working with children who are deafblind and you may be asked by other professionals (eg the educational psychologist) to collaborate in the assessment process by providing a systematic record of a child's behaviour or learning.

What is the purpose of educational assessment?

The main purpose of assessment for those involved in educating children who are deafblind is to decide on an appropriate educational programme.

In order to draw up an appropriate programme or plan we must have appropriate objectives and this is where assessment can help us. Through our assessment we should be able to:

obtain a reliable profile of a child's abilities at a particular time. This will be a baseline or starting point for future observations. It will be important to note how far these abilities are generalised or limited to certain situations.

monitor the child's progress over a period of time by comparing the child at present with previous observations. This will show the areas in which a child is making progress or is making little or no progress. Be aware that changes in some children who are deafblind may be very small and could go unnoticed so careful observation and careful recording or observations are vital

obtain a picture of the child's learning style, ie the individual characteristics which lead a child to respond in certain ways to certain situations (or activities or people). This is closely linked to below and it is often this knowledge which will lead to effective teaching.

plan the child's educational programme both in terms of the objectives set for the child and the methods and materials being used.

evaluate the appropriateness of the child's programme and make adjustments where necessary.

How can I assess a child who is deafblind?

First, remember that assessment is always for some purpose and you should be clear why the child is being assessed. Discuss this with your Headteacher or Team Leader to find out what your role will be. As a team, you can consider the best way of assessing the child.

Behaviour charts

If you think back to [Module 1 :3](#) (Observation) you will recall that we mentioned the use of Behaviour logs or Behaviour charts, which show how often a particular behaviour, (eg a seizure) occurs.

You can also assess how long the child engages in some behaviour; eg light gazing. For this, a stop watch is necessary.

Sometimes, to save time, you may decide to limit observations to several short periods; eg 5 minutes in every hour or 3 specific half hour periods in the day. In this way you "sample" the child's behaviour.

Systematic records can help assess a child's pattern of behaviour; eg toileting or eating or seizures. They also can show progress over time.

Specific observation record

You have already devised a schedule (or record form) to record and analyse a child's tantrums. You tried to ensure that all relevant information was included in order to try to understand what might be the cause of the tantrums. Sometimes we have to look very closely to see what lies behind a child's behaviour.

Activity 1

You have been working with a child, Rachel, for 6 months. There will be a review of her progress in 4 weeks time. Among other things, you will be asked how her communication skills are developing.

Rachel understands and uses some basic natural gestures for food, drink, etc. Over the past month you have noticed that she has started to use a new gesture which you did not teach her. She uses it in various situations, but you do not know what, if anything, she means by it.

How would you set about clarifying this situation and justifying your views to others?

You can compare your thoughts with some suggestions at the end (Appendix A)

Records can be made as detailed as required. Sometimes you may want to analyse a child's actual behaviour in detail (though be sure this is necessary before undertaking what can be a very time consuming task).

For example, you may decide to observe the extent to which a child visually explores the environment. You will have to decide what this means in terms of the child's behaviour. So you might end up with two (or more) categories of behaviour; eg visual scanning (looking around) or visual fixation (studying one object closely).

There is no need to go much further into this aspect at present but be aware of the fact that descriptions, which we use freely, often incorporate several different behaviours and we have to know what is involved before we can start trying to have some influence on one or more of these behaviours.

Observation checklists

These can be commercially produced or made up by staff. They are designed to assess a child against certain criteria or skills. Some checklists are in the form of a "normal" developmental sequence; eg the Callier Azusa Scales which are intended for use with children who are deafblind. Note that the authors specifically state that the checklists are not a teaching curriculum. They will include skills which children acquire through maturation, (eg sitting balance) rather than through teaching.

Other checklists are linked to the curriculum and require the observer to identify which stage a child is at within a specified list of curriculum objectives. Note that checklists often include items which must be tested rather than casually observed.

Look to see what checklists are available in your school. Common examples are checklists from the Portage Programme and the Oregon Project. These are intended for teaching purposes. They may not always be entirely suitable for children who are deafblind but you can often learn about the progression of skills through them.

There may be areas where you would like to try your hand at producing your own checklist; eg putting on socks.

This of course is a much smaller area than gross motor skills or language skills but it can be divided up into many steps

Activity 2

What are all the steps involved in putting on socks? Compare your answers with the list at the end. (Appendix B)

You have just completed a task analysis for putting on socks. Many other basic tasks can be broken up in this way. Analysing the steps involved can be helpful in setting objectives for the child and can also help in recording the small steps in progress made by some children who are deafblind.

Standard situation assessment

Although a lot of information can be obtained through observation in everyday situations it is sometimes necessary to give the child a specific task to see how s/he responds. This involves setting up a standard situation which can be replicated exactly on a later occasion and we assume that any changes we observe are real changes in the child (not just a coincidence).

One example would be to see how a young child responds to common objects without guidance; eg cup, brush, teddy, biscuit, rattle, crinkly paper, box or shoe. Does the child differentiate these things and use them appropriately? If you keep the objects and the situation the same you can see any change in the quality of the child's response when you repeat it later.

Another example, for older children with some vision, would be to show them a picture of a simple scene and record what they are able to tell you about it. In a year's time, it will be interesting to see if they can express their ideas more fully. (Do not show this picture to the child in between these times).

Try to think of another situation which you could set up and repeat at a later date.

In the course of any observation, you will often see some ability or assume some intention on the part of the child. Obviously there are many things which affect how a child behaves; eg the situation; time of day; familiar or strange objects; who is present at the time. Then again, it might be a sheer chance reaction. You would then have to try to see whether this behaviour or intention can be repeated by looking at this particular area further and possibly setting up a situation in which to observe the child.

When assessing a child's response to the same situation at a later date, it is important to have a brief written description within a structured record form. (See Appendix C).

Consider also the value of video tape for long-term records and comparisons. They can be a lot more interesting than written records! But don't end up with hours of tape and no time to look at them.

Standard tests

There are a number of tests of reading, spelling, arithmetic, etc and, for the older pupil, it may be appropriate to use these especially if Further Education is being considered. Your educational psychologist can advise on these matters.

The initial stage of assessment

When a new child is referred to your school you obviously will have little personal knowledge of the child. How would you expect to get information.

Written reports (if available) or information from the referral forms. A Record of Needs may have been opened for the child. (See [Module 1 Topic 6](#))

Verbal information from the parents. Try not to overwhelm parents with a barrage of questions. Try to discuss beforehand which members of staff will see the parents in the initial stages and what areas they will focus on. Often it is very revealing to observe the parent(s) with the child:

how they interact with the child

how they show objects to the child

how they try to get the child to perform a task.

Observation of the child

when left alone in an unstructured situation

as you work together or, even better, arrange for another colleague to observe as you work with the child. A second person can be more objective and can also write things down more easily. Some people find this a little embarrassing at first but, as roles will be reversed another day, and as you and your colleague are working jointly to assess the child, it is worthwhile persevering.

What specifically should I assess?

As was stated earlier, the primary purpose of an educational assessment is to plan for the child. However, you don't plan in a vacuum, you plan within the overall curriculum framework of the school. It is therefore essential that the assessment and the curriculum go hand-in-hand. Another way of putting it would be to say "If I'm not planning to teach it or utilise the information why assess it?" There is a little more to it than that but it's a sound principle to work on.

There are two broad strands to your assessment and these are interlinked:

The stage the child has reached within the various parts of the curriculum.

Those characteristics of the child which have implications for the educational programme.

The stage the child has reached within the various parts of the curriculum

It is important to consider not only which areas of the curriculum are most appropriate to the child's needs, but also what stage the child is at within these curriculum areas.

Both these elements need to be re-evaluated periodically but they are of particular significance when a new child is admitted.

There will be various factors which influence the content of the curriculum for any child. Generally speaking self-help, social skills and communication will be seen as an essential but even these areas are too broad and priorities must be selected.

The child's age is important. We must try, as far as possible, to provide an age-appropriate curriculum, in particular for the older child. Sometimes the fact that a child is leaving school makes it important to focus on areas which will best prepare her/him for a new setting.

Sometimes there are areas which parents wish very strongly to be developed, eg walking instead of being carried or feeding self with a spoon. These should be incorporated where possible

In addition to what is regarded as the areas of greatest need by the child at any time, it is also important to include areas which the child enjoys. Following through on enjoyable or interesting activities can often be a way into the teaching of other skills.

The second aspect to be looked at is the stage within the sequence of skills that the child has reached.

It is helpful here to have a curriculum guide or outline of curriculum objectives. These may give a broad overview or may take the form of a detailed checklist. Sometimes checklists will have to be broken down with smaller steps, but they do help to point the way to the next step for the child.

Checklists of skills in a sequence can therefore be very helpful and time-saving but they are not the entire answer to questions about curriculum planning. They usually include the kinds of skills and knowledge most useful to a child but they must be used sensitively and not necessarily applied rigidly. Children will differ in their ability to achieve the objectives. Some children will need adaptations, and some objectives may not be appropriate for every child.

Checklists can also create an oversimplification of the skills involved. It is up to educators to stand back and assess how useful or functional these skills are. Real life tasks are very complex. Skills need to be practised in many different situations. The child may have to be taught when to use the skills that have been acquired. Self-help skills can be at a very high level within the familiar routine of school but how will they stand up in different circumstances? How much of the wider world does the child know and how much is she or he ready to know?

It is therefore easier to assess what a child needs to be able to do in terms of eating and dressing than to assess what they must know in order to shop independently (ie appropriately, efficiently and economically). Checklists are best for the more straightforward skills. Building up a wider framework of knowledge becomes very complex once the child is past the early stages of self-help and communication.

Activity 3

A child may be able to pour a glass of milk, and know to go to the fridge to get more milk. Can you think of other knowledge and skills, in relation to milk, that would be needed to lead a basic level of independent life. Put in order of importance for everyday life. Compare with the list at the end (Appendix D)

Integrating basic skills into a context of interrelated experiences and knowledge for the older pupil becomes a task of insight and creativity on the part of educators. The amount of everyday knowledge which we possess to plan and organise our own lives can seem daunting for those who are trying to equip young people who are deafblind for as independent a life as possible. We cannot prepare the child for every aspect of every situation, For the moment, the best thing to do is to keep assessing the readiness of children to build up more complex skills and ideas about their world and the effects they can have on that world. Through appropriate and meaningful experiences, try to ensure that skills do not remain static and bound to a limited context. Be aware of the possibilities if spontaneously occurring events (as well as specially created situations) for both assessment and teaching purposes to see:

how a child can put acquired skills into use;

how much support is required;

what gaps exist in her/his experience.

Meeting a new person, going into a new building, going away for the weekend, buying new shoes, going to a brother's engagement party - all these make demands on children's concepts and skills. This is real life and as such is always the final assessment of what a child has or has not learned.

Those characteristics of the child which have implications for the educational programme

This is the second main strand to assessment. Each child will have certain individual qualities, preferences and habits which may be utilised to make learning easier or which may present barriers to learning. It is these individual characteristics which require us to adapt the broad principles of educating children who are deafblind to make a truly individual programme. Teaching methods cannot be applied in a blanket approach as the children who are deafblind are more likely than most children to be highly individualistic learners.

In order to know what aspects of a child can be used to make learning easier, we must find out about a child's likes and dislikes. We can often use the things a child likes as incentives or rewards to encourage him or her to try out new things and become more cooperative. However, some of the things a child likes may not be helpful (eg a fascination for light). Similarly some dislikes may be restricting to the child (eg disliking most foods). So, likes and dislikes may lead to individual objectives; eg to establish a reward system or to widen a child's range of accepted foods.

Similarly, a child may be able to use a particular sense or perform some activity but it may not be a constructive use. For example, some children may misuse their ability to perceive light and it becomes obsessional light gazing or self-stimulatory finger flicking. Obsessional or stereotyped behaviours may serve a function for the child in terms of stimulation but often they become barriers to learning as the child resists outside interference. So, it may be appropriate to have as an objective the reduction of such behaviour or the substitution of a more acceptable behaviour.

We can look at likes/dislikes and constructive/unconstructive use of skills across a wide range of areas. The sorts of characteristics which have significance for learning would include:

use of vision

use of aids to vision

use of hearing

use of aids to hearing

eating

toileting

sleep pattern

use of free time

Activity 4

Can you think of any others? Write them down and compare with those below.

You could also add:

use of touch

use of taste

use of smell

use of movement

interaction

Other areas which will affect the child's learning include:

memory (retention of what has been taught)

concentration on tasks

mood of child (may be specific or generalised)

negative behaviour (tantrums etc)

All this information allows you to draw up a behaviour management plan for each child. It is important that these areas are considered regularly as it is possible that children are making progress in how they approach the learning situation, and it is important to note these positive steps as well as progress in mastery of new skills, ie. what they have learned.

You should also have charts to assess functional visual and auditory skills in school. Practice in using these will make them easier to follow in future.

We will look further at assessment and the curriculum in Module 6.

Bibliography

There is no required reading for this topic However, for those who wish to read further and in more depth, the following are suggested:

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Appendix A

Rachel

The first thing to do would be to talk to:

her parents

other staff

to see if they have any thoughts about what Rachel means. If they have, you can test out their ideas by careful observation. If they have no idea, you must observe her throughout her daily activities to see if a consistent pattern emerges.

The next thing to do would be to set up a systematic method of recording when Rachel uses this gesture. The procedure would be similar to the one you devised previously for observing temper tantrums.

The following would be useful:

Rachel's gesture: (exact description to ensure everyone is clear about the gesture)					
Date	Activity (and those present)	What happened before gesture what did you do?	What happened after gesture	Rachel's reaction	Initials

Ask all those working with her if they will use the chart when she is with them. The chart should accompany her. Ask everyone to initial their entries in case you want to ask about a particular instance. DON'T FORGET to ask her parents if they will also join in and keep a chart at home.

Use the recording system until you have enough examples to decide whether this gesture relates to a particular situation, person or activity or if it has a more general meaning or if it is just a mannerism.

If you decide it has a special meaning put her in situations where she is most likely to use it to test out whether you think you are correct.

Discuss your conclusions with her parents and other colleagues.

Appendix B

Putting on socks

Locate socks

sit down

pick up one sock (may reverse order)

locate heel of sock with fingers

position sock on knee with heel to one side

find opening of sock

put thumbs in opening with heel facing body (or facing downwards if easier)

roll up sock until thumbs at top of sock

lift leg

put foot into sock

pull sock on over heel

pull up to ankle or knee

put foot back down (may reverse order)

repeat for second sock

Appendix C

Assessment of object recognition structured recording from

Task: Tom is sitting on the floor. A cup and a brush are on the table. Adult puts each into his hand

Date	Behaviour	Initials
March 5 (about 4 mins)	Flung objects away. Sucked his hand for most of the time	
June 3 (about 3 mins)	Held cup (not handle) for about a minute. Sucked the side, then threw away. Grasped brush briefly. Sucked hand for short spells.	
Sep 15 (about 4 mins)	Held cup by handle. Tried to drink. Hit cup against head. Sucked brush handle. Long vocalisations	

Task: As before, substitute own show for cup (no shoes on)

Appendix D

Your answers for Activity 3 might include:

carton or bottle - how to open

correct storage of milk

telling when milk is off

where to get more milk - shop, delivery

payment for milk

sell-by date

types of milk (skimmed , full cream, etc)

NB Knowledge about where milk comes from originally would be important if the child can comprehend such concepts. This would "round out" the child's concept of milk production and distribution though would not actually help the child in

terms of independent living.

Where possible, all knowledge should be integrated within the child's experience but how much to include (and when) is a sensitive educational decision and will depend on the child's ability to take in new information.

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Module 4 Topic 5

Topic 5 Aids to Hearing and Vision

There are many ways and means to help a pupil who is deafblind gain access to learning and the curriculum. Some involve the use of sophisticated equipment such as hearing aids. Others can be as simple as ensuring that an object contrasts with the background against which it is presented so that it can be more easily seen. This topic will consider some of these ways and means to helping hearing and vision.

Aids to hearing

Each pupil with a hearing loss has to be individually assessed to ascertain which aid(s) are most suitable. This is because while two children may have the same hearing loss it is how they use the hearing that is left - the residual hearing - which determines the most appropriate aid. It is very rare for a child to have such a complete hearing loss that no sound is discernible. Hearing sound is very different to understanding sound.

Hearing aids can be of great assistance to many deafblind children since the major sensory impairment may be of vision and the hearing loss one which of itself would not have been extremely detrimental. Hearing loss occurs along a continuum from slight but of little significance to so profound as to render speech completely incomprehensible.

It is very important for you to know the nature and extent of the hearing loss of each child for whom you are responsible. Only then will you be capable of assessing the suitability of different types of aids. The head teacher should have the audiological information which would be provided by an educational audiologist. Hearing aids will be individually prescribed but not the aids for use in the school. Different hearing aids can serve different purposes eg a child may wear a radio aid in the classroom but post-aural aids at home (see below for explanations).

Hearing aid systems

It is important to remember that a hearing aid is exactly what it claims to be - an aid to hearing. It is not a device which corrects a hearing defect. Its value depends on its use.

There are several types of hearing aid. For various reasons some people are timid of working with hearing aids. Basically all hearing aids are the same. They are composed of: a microphone which detects sounds, accepts them and transforms them into electrical energy; an amplifier to multiply the energy; a receiver to convert the electrical energy back into sound waves, but waves which are now much more powerful than when received by the microphone.

Whatever the type of hearing aid the same description applies. There are aids worn on the body and preferably quite high up on the chest; worn behind the ear and worn in the ears. These are called respectively

body worn aids (BW)

behind the ear aids (BE) i

n the ear aids

There are individual aids, group aids, induction loop systems, radio aids and infrared systems.

If your pupil has an individual aid it will incorporate an induction coil. You will know this because it will have a switch saying OTM O off, T=induction coil and this can be used in conjunction with telephones hence T, and M=Microphone representing the microphone visible on the aid.

Radio microphone systems

To avoid trailing wires from the teacher's microphone to the amplifier which would be dangerous for visually impaired children, in addition to restricting the teacher's movements, there are systems which are flexible, allowing pupils to move to different places with a minimum of fuss. These are easily wearable by both you and the pupils and will mitigate the effect of poor acoustic conditions which exist in most classrooms and any distances or barriers between you and the child. For example if you are working with a child wearing a body worn aid the microphone on that aid will be on the front

of the child while you are behind him so a baffle wall is between you and microphone. These systems are known as radio microphone systems and work through the principle of radio transmission.

In these systems the teacher's microphone (transmitter) transduces the speech signal into radio waves, which on reception by the child's unit are transformed back into a much amplified speech signal. It is not confined to an area served by a loop cut but can be used anywhere.

The radio waves are transmitted to your pupil's receiver in one of the following ways:

By a receiver incorporating an amplifier. This receiver is worn by the child instead of a personal hearing aid, although it can function as one when the radio microphone is not in use. The quality of sound received by this type of receiver through radio transmission is very good.

By a receiver worn by him and transferred to her/his personal aid by a lead or by a receiver worn by her/him and transferred to her/his personal aid through a portable induction loop worn round the child's neck. In this type of radio transmission the quality of the sound received depends upon the quality of the personal aid.

By a receiver connected to a loop amplifier so that the child receives the sound from the induction loop via coil in her/his personal aid (see section on loop induction systems).

Most radio systems use rechargeable batteries which require the use of a battery charger after a day's use.

NB If there are several children in your school with such systems then the adults in the different rooms require to use different channels (wavelengths) so that there is no interference between the rooms when the teachers are transmitting. The receivers can be supplied with the appropriate channels which can be changed quite simply by moving a switch or inserting a different coloured plug (oscillator).

The quality of the sound received is only one factor in choosing the most suitable system for a particular child as different makes vary in cost, size, weight, appearance and much depends on the individual child and adult's preferences and purse.

Loop systems

The 'loop' is a loop of wire running round the room or desk or part of the room and is usually built into the floor, ceiling or the walls. A magnetic field is set up by the electric circuit flowing through the loop. If the child's personal aid is set to the T position a coil in the aid picks up this field and the signal is converted back to sound.

This system does not require you to be in close proximity to the child neither is the child attached to trailing leads nor do headphones have to be worn by the child. The children hear from anywhere within the loop and probably from a little outside it. An added advantage is that background noise is eliminated.

There are disadvantages however. The magnetic field may "overspill" into adjacent rooms or even into rooms above or below the room in which the loop system is being used. If there is a child with a hearing aid on the T position in any such room then that aid will also pick up the signal.

In some situations different configurations of the loop have been used eg figure of eight but not often successfully. Such configuration may cause 'dead' spots so counteracting any benefits.

Another disadvantage is that if the receiver is switched to the T position only the teacher's voice will be heard so denying the child any opportunity of hearing other children's voices or environmental sounds.

A person who is hearing impaired requires good light on the speaker's face.

Care of hearing aids

Ensure every day that the hearing aid is working

Apart from opening the battery compartment you should not open the case of the hearing aid. (The guarantee would become void)

Hearing aids are not shock proof. Harnesses will help to hold the aid securely.

Keep the aid dry

Keep the aid clean. Try to avoid food or drink entering the microphone

Keep the microphone exposed. Clothing distorts the sound while clothes rubbing makes noise which is then amplified

Store batteries in a cool dry place

Always insert the battery so that the "+" end of the battery matches the "+" mark on the battery compartment

Remove dead batteries before they leak

Check the ends of the battery and the battery compartment for signs of leakage or corrosion (eg white powder). Clean any corrosion

Ensure cords of body worn or audio systems are neither twisted nor knotted. (Chewing is the quickest way to break a cord.)

Care of earmoulds

Check every morning to see the canal is free of dirt and ear wax

Remove mould from the receiver or tubing before cleaning

The ear mould should be cleaned every day - pipe cleaners and soapy water work wonders

Ensure the mould is dry before replacing as water left in the canal will block the sound Ensure there are no cracks on the mould or on the receiver. If there are cracks on either, replace

Ensure the earmould is not causing irritation or infection in the ear.

Batteries

Always keep spare batteries

Use a battery tester to check the power is not weakening

First aid for hearing aids

If you are not working in a school for hearing impaired children you may have to take most of the responsibility for ensuring that the aid is working in the most beneficial way for the child. As the pupil becomes older s/he should be able to take a bigger share of this responsibility. Since s/he cannot hear like other people, however, you will have to keep an eye on what is happening. S/he may not hear whistling etc. You will.

Since this is an aid it must be kept in as good working order as possible. The following are some basic tips to guide you. If these basic suggestions do not help, then call in an expert, as the fault will be beyond a simple first aid measure by you.

If there is no sound coming from the aid

Check the battery by trying a fresh one

The battery may be in the wrong way round - usually there are markings on the battery to correspond with markings on the battery compartment to ensure correct positioning

Check the earmould to ensure that the opening in the earmould is not blocked by wax - if so, pipecleaners usually do the trick

Check the receiver by trying a fresh one

Check the lead (body worn aids) by trying a fresh one

Check the tubing (BE) to see it is not bent or cracked or warped

Check the switch has not been moved to "T" (telephone or pick up coil position).

If sound is intermittent or scratchy

Try a spare lead, and/or spare receiver

Move all the switches and connections backwards and forwards. There may be fine particles of dust etc. interfering with the contacts. Sometimes this movement clears the matter up

Check that the battery contacts are clean not corroded.

If there is a whistling noise (known as acoustic feedback)

Does the earmould fit correctly? If not arrange for a new one.

To determine whether the earmould is the cause:

Take the aid and turn the volume up.

Now hold a finger over the opening. Should the whistling stop when the opening is covered then it is the fit of the earmould which is at fault, (the bad fit causes the amplified sound entering the ear canal to leak out, feedback into the

microphone and squeal). If the whistling continues then the problem is either with the tubing (post-aural) or in the hearing aid itself.

By repeating the above with the receiver minus its mould you may find the whistling ceases. In that case the connection or fit of the mould to the receiver is probably to blame. If there is whistling even when a new receiver is substituted then you should ask for the pupil to have a new earmould.

If none of these easy-to-carry out tests produce results the fault is in the hearing aid.

Ideally if you have hearing impaired children in your school you should have spare hearing aids. Unfortunately this is rare.

The owing tapes may be of assistance. Both may be obtained from Manchester University. Sound experience through radio hearing aids (Manchester University Television Unit) Hearing aids in the Classroom (Department of Audiology University of Manchester).

We have considered aids to hearing in some detail. Now let us think about aids to vision.

Aids to low vision

One thing it is important to know in order to create the most appropriate learning and living environment for your pupils is how each one functions visually. This is true whether you are a teacher, nursery nurse or member of the care staff. Certain questions have to be asked, does the child have no vision at all? Does the child see light, shadow, shapes, colours: Has the child good vision for mobility? Does the child have central vision which will enable detail to be seen and perhaps print to be read? (See [Module 2 Topic 2: Visual Impairment on assessment for further information on this.](#))

If you do not have access to information on the visual functioning of your pupil(s) ask your assistant head or headteacher. Make sure that any medical terminology is explained in terms you can understand. Find out if the child has had glasses prescribed, what they were prescribed for short sight, long sight, astigmatism. Should the child wear them for all activities?

Once you have some understanding of the type of visual loss and its implications you will then be in a position to consider which aids will be most appropriate.

These might be considered under the following headings:

Lighting

Contrast

Positioning

Enlargement and magnification

UV light

You may find it useful to refer back to [Module 2 Topic 3, The Visual, Auditory and Tactile Environment](#) during or after reading this section.

Lighting

This will depend on the child's eye condition. Some children will be sensitive to strong light and glare; other children will need very bright light positioned in such a way as to illuminate what the child is meant to see or be working with. Light whether it be natural or artificial should be directed towards the material being read or looked at so that it reflects away from the reader.

Angled Light

It is important to avoid sharp changes in light; eg moving from a lighted room to a dark corridor or vice versa. With some visual conditions there may be what is called "night blindness" where a person can see in good light but not in poor light because of poor peripheral vision, the type of vision on which we rely most in the dark. (see [Module 2 Topic 3 \(e\)](#)).

It is important to bear in mind that we all find it easier to see light things on a dark background and vice versa; eg black letters should stand out better on a yellow background than would orange letters. We must also bear this in mind not just in the "classroom-type" situation, but also when considering the colour of plate on which to serve food, the pot in which to heat milk or soup, or the wall colour or wallpaper on which you are going to hang something for the child to notice.

Positioning

This can refer to the positioning of objects materials or tasks for a child to perform or it may also refer to the position of the child for the task. No matter how little vision a child has it is important to encourage its use. This is another reason for knowing a bit about a child's vision so that you don't present visual tasks which are impossible for the child; eg a child

with poor central vision will not be able to make out small detail for a task such as threading beads or lacing a shoe. The child may well have to rely on touch rather than sight. Depending on the child's field of vision the material might have to be presented at a particular height or angle. Distance is also a consideration especially when considering objects in space such as furniture, or things placed on the wall.

Both lighting and positioning are important when communicating by signing or lip reading. The adult should not stand in front of a window or bright light. The child will not be able to see because of glare. The adult should be well illuminated, be in front of a plain background and should stand close enough to the child for the signs to be seen and make sure that the signs are within the child's visual field. (See [Module 3, Topic 2](#))

Enlargement and magnification

The simplest way to make things larger and easier to see is to bring them closer to the eye. The child will often do this naturally. Peering up close to an object or even TV screen may appear to you to be uncomfortable and "bad for the eyes" but is usually harmless and sometimes the best way for the child to "see", though it can be tiring and posturally uncomfortable if the child bends over the book or object.

If the child is learning to read and write a sloping desk or stand might solve postural problems.

Written material can be enlarged by hand eg large print letter or drawing, or by a **photocopier/enlarger**. Again care has to be taken to suit the needs of the child's residual vision. If the child has some central vision but restricted peripheral vision you don't want to make the image so large that it is outwith the child's most acute vision. You will have to try out different sizes of print or illustration with the child's co-operation.

Magnifiers or low vision aids (LVA'S) These are lens magnifiers that come in various forms; eg stand, hand-held, telescopes. Some have their own internal source of light (see school supply of, or illustration of. Not all children who are deafblind will be able to make use of such aids but if they are thought to be appropriate the child should be assessed for them at a LVA clinic. If you have some in school you may wish to try them out with your pupil yourself. If it seems an appropriate aid, the child will need to learn how to manipulate and make the best use of the magnifier. It won't come naturally. If the child is learning to read using a magnifier, depending on the strength of the lens, it may mean that only one word is seen at a time, This will affect fluency and speed. It will be virtually impossible if the pupil is using manual communication.

Closed Circuit Television (CCTV) is a most useful reading aid for those with visual impairment. If you do not have a closed circuit TV in your school, here is a simple description. It is basically a magnifying or reading aid which uses a camera with a video monitor or television screen. Its advantages are that the screen provides its own light source and provides greater enlargement than is possible by other means. It can also be used for reading, writing, tracing typing, looking at 3D objects near and at a distance, for visual stimulation and just for fun! A colour monitor is particularly useful for looking at pictures and illustrations. The image can be reversed e.g. white on black for reading if the child finds that easier. It can be used with a line marker, split screen or automated viewing table -handy for those with motor control problems. One drawback is that most models are not easy to move around unless on a trolley.

Ultraviolet light (uv)

One way of helping children with very low vision to use what vision they have is to use uv light and fluorescent objects. Fluorescent colours are many times brighter than standard colours. When these colours are illuminated by uv light visual acuity is enhanced. As with any other aid to the use of vision it is important to understand how it works and to what use it can be put for teaching and learning. The following activity - will give you more information on this aid to low vision and help you decide whether it would be useful for your pupils.

Read the following excerpt from an article by Mark Mabon (1988) in Information Exchange, RNIB

"The use of uv or blacklight lamp to stimulate residual vision.

PLEASE NOTE THAT PERSONS INTENDING TO USE uv LIGHT SHOULD FIRST CONSULT THE HEALTH AND SAFETY REGULATIONS IN THEIR AUTHORITY.

Fluorescent colours are five to eight times brighter than standard colours. When such colours are illuminated and energised by blacklight, visual acuity is enhanced many times. It has been estimated that colour saturation and brilliance is thirty times more visible than the same colour under normal white light.

Using fluorescence, luminescence and phosphorescence as a medium or catalyst, it is possible to encourage people with very little vision to make full use of what they have and to develop and improve their hand-eye co-ordination, understanding of motion, recognition of colour, size, shape and texture, near and distance, shape discrimination, body image and even self help skills. Activities denied in one way or another because of poor sight, such as art (eg painting drawing, modelling) and playing board games can quickly become part of their normal way of life. With a little foresight, adaptation and imagination the visual training techniques normally used under white light can successfully be used under blacklight.

The main problem with people whose vision is very impaired is that they do not know how to see - they fail to see because of poor lighting, improper distance, absence of colour, but most of all they have not built up the association and

referral centres in the optic section of their brains so that they can compare, accept, reject or associate. For example, until they have developed an ability to look for and distinguish between shapes and features, one face will appear the same as any other.

Using blacklight in a carefully thought out programme to compel/encourage people to make full use of their impaired vision will enable them to experience a totally new concept and awareness of light, colour and shape so that they will be prepared and programmed to continue the awareness of such things in normal lighting conditions. However, it must be stressed that blacklight is not necessarily the answer to all an individual's problems, nor is it successful with everybody. Much depends on the degree of residual vision, the ability and motivation of the person and the skill and imagination of the staff."

Write down specific activities that you think would be appropriate for your pupil(s) if you have (had) a dark room and uv equipment. The activities should be linked to the child's current curriculum and developmental need.

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A resource for staff working with children who are deafblind

Module 4 Topic 6

Topic 6 Learning Mobility Skills

Techniques outlined in this topic will be more meaning if explained by a trained mobility specialist in the first instance.

Good mobility means having the necessary skills to move from A to B, while orientation is knowing where you are in relation to the environment and to objects in that environment. The ability to remember landmarks and where they are in relation to other landmarks is essential to the learning of routes.

The main aim of this topic is to introduce all those who come into contact with the deafblind child to the basic mobility techniques, by experiencing moving about under sleepshades and guiding others who are wearing sleepshade, thus giving a very crude simulation of what it feels like to be deprived of visual input.

It must be emphasised that the following material is laid out as an introduction to staff and as such will hopefully make them think about difficulties and adaptations in skills and methods of teaching which will be necessary for teaching individual children. Indeed the individual child-centred approach is more important than the skills being taught. However these skills form a reference point or 'bank' for staff and must be used as such when working with children with dual sensory impairment.

A crucial point is to keep in mind those concepts needed to learn the skills being taught; eg turning to left and right, sitting in a chair, etc.

For the purposes of this topic two main areas have been identified:

Sighted Guide Skills **Coping Strategies**

Sighted Guide Skills

The main purpose of a sighted guide include:

leading the child safely from A to B

communicating information about the environment

When guiding or leading the child, this should be done in such a way as to teach her/him how to acquire the ability to make decisions and take the initiative or, indeed to take command of any situation. At almost every stage in the teaching of every new skill, the child has to follow a pattern of learning by "hands on" through to gradual withdrawal. Therefore, emphasis should be placed upon the child using the sighted person as a mobility aid which would normally respond to his wishes. In common with other mobility aids, the child should be made aware of his/her potential for picking up information about the environment.

In addition to developing the child's awareness of varying textures underfoot; eg carpet, concrete slabs, lino, cobbles, etc, s/he can be made aware of various features of the environment, including:

turns, the degree and direction of turns

incline, degree and direction

changes in level

when to pause and stop

This information can be passed from guide to child by means of correct positioning and the use of the correct grip, which make it easier for the child to "read" the guide's movements.

The key for the guide should be, where possible, handing without handling. From the above, it should be clear that THE ULTIMATE AIM is a working partnership with the child being in command of the situation where possible.

The ideal environment for commencement of this work should be an area known to the child; eg the bedroom, classroom or the corridors leading to dining room, and bathroom, etc.

As already stressed, various adaptations to the normal position and grip will frequently be necessary, but these should follow the principles which enable the guide to pass on the maximum information to the child whilst allowing scope for 'remaining in command' of the situation.

The following activities should be spread over a number of sessions.

Normal position and grip

Grasp the guide's arm lightly, just above the elbow, with the thumb on the outside and fingers on the inside. Both guide and guided must keep the elbow of the guiding arm touching their own sides and the child made aware of the fact that the upper arm is neither forward of, or behind the line of his upper body but hanging down from the shoulder.

The guide gently presses the CHILD'S fingers into her side so that all body movements and direction may be transmitted.

The result of this grip and arm position is that the child is half a pace behind.

Walking and speed control

Obviously the child with little or no vision must build up confidence in both the guide and in the techniques being used. Therefore much practice of walking on level uncluttered ground is recommended. S/he may also be taught how to control the speed of progress by merely pushing to indicate more speed or pulling or holding back to indicate less speed.

It is important for both the child and the guide to remember to keep the guiding arm elbow tucked into the side and the child should have her/his hand directly in front of her/his own elbow, pointing in the direction of travel.

Inward turn

Instead of turning 180 degrees by the guide gently turning the child round the long way, and taking up much more space and time than is necessary, an inward turn may be taught. They turn to face each other, the child grasps the guide's other arm with her/his free hand and releases the first arm. (Note the need for the development of concepts of parts of the guide's body.)

The child is now in position facing the new direction. This turn is performed without taking up any extra space, but care should be taken to stress the importance of the blind child avoiding stepping backward when moving into the correct position behind the guide.

Indicating with guiding arm

The child should be taught that whenever the guide raises her/his guiding arm s/he is indicating something of importance to her/him and wishes her/him to follow down the arm with her/his free arm to discover what is being shown or given eg a chair, door, etc.

Activity 1

In twos, each taking turn of wearing a sleepshade and being guided, practise walking and turning as described above.

Switch

This movement is necessary when for some reason the guide or child wishes to change to the other side; eg when going through doorways. The guide may tap the child on the shoulder as a signal that s/he wishes her/him to change sides. The child should then place her/his free hand on the guide's guiding arm, thus releasing the first hand which s/he runs firmly across the small of the guide's back to the guide's free arm. S/he then releases the original free hand and steps across behind the guide into the new position on the other side. The reason for the firm pressure on the small of the guide's back is to prevent the possibility of the guide drawing away during the course of this manoeuvre.

Narrow place

There are many occasions when progress may be difficult because of width limitations and this problem may be overcome by the guide moving her/his whole arm so that her/his upper arm is behind her/his back and the lower arm down the centre line of her/his body. (In order to achieve this uncomfortable position, s/he will have to turn her/his shoulder.)

This child then steps in behind and straightens her/his arm in order to increase the distance between them.. With her/his free arm s/he may check that s/he is behind the guide.

Doorways and assisting through

When guiding through a doorway, the guide must ensure that the child is on the hinge side of the door which may possibly necessitate a 'switch' of positions. This avoids the possibility of the child being hit by the outer edge of the door.

The guide opens, either pushing or pulling the door with her/his free hand and 'hands' the door to the child using her/his guiding hand as an indicator. It is very important that the guide places her/his guiding hand in the exact position on the door as this is where the child's free hand should hold it. Too near the hinge will result in the child being unable to hold a heavy door and may cause her/him to catch her/his fingers in the hinges. The position will either be on the handle or very near the opening edge of the door. On receiving the sign that something is being indicated, the child slides her/his free hand lightly down the guide's guiding arm until s/he is holding the door. S/he then follows the guide through the space and either allows the door to close or closes it behind her/him using the handle.

This technique is not only very effective, it is also very safe because the space available to child is clearly outlined by her/his hands, one on the door and the other on the guide's arm

Activity 2

Again taking turns being guided, practise 'narrow place', 'switch' and assisting through doorways.

Ascending and descending stairs

Before going up stairs the guide should get the child to switch to the inside of the staircase, pause and help child to square off or face in same direction. The guide then steps on to the first step and pauses again to allow him to swing his free hand forward to grasp the handrail. S/he then walks up the stairs followed by the child one step behind, stepping onto each foot alternately whilst running her/his free hand ahead of her/him up the rail. The hand is giving the child advance information about landings and half landings. When the guide steps up from the last step on to the landing, s/he takes a second and extra long stride, pulling the child with her away from the edge. This is very necessary as the child, being half a pace behind, is liable to lose her/his balance if the guide leaves her/him too near the top step.

If the staircase is a circular one with half landings, the guide, on walking across the landing would square up in order to keep the child behind her, pause at the bottom of the next flight and pause again on the first step.

On descending, the child should be switched to the correct side so that this time s/he is going downstairs on the outside of the staircase, and the guide once again avoids being overtaken by squaring up to the first step.

Having paused, the guide then makes the child aware that the handrail is going downward and is level with a speck part of his by depending on her/his height.

When enough confidence is gained by the child in ascending and descending stairs, s/he should be helped and encouraged to step on to the ball of her/his foot on each step instead of on to the whole foot. The guide may decide that it is unnecessary for the child to hold on to the handrail and this should be practised in event of a situation where no handrail is present.

Whenever a step or steps up or down are going to be made, the guide should ensure that the child is standing square to the line of travel. The same thing is important when going through doorways or narrow entrance ways.

This point is particularly important in the case of a rounded step or circular staircase where it would be possible for the child to be up or down the step before the guide. The guide must always pause before changing levels.

Activity 3

As this needs a lot of practice to help build confidence, staff may need to spend more time practising techniques of going up and down stairs.

Seating

The objective of teaching seating is to enable the child to cope with various ways of sitting down irrespective of the type of chair, the position of the chair in relation to other pieces of furniture or the direction of the approach.

Various types of seating

Chairs, like other pieces of furniture, should be identified for the child. S/he should never be pushed or manhandled into it but, having been guided to it, should be allowed to take the initiative and 'explore' it before sitting down.

When approaching a chair from the front, the guide places her/his hand on the back, telling the child what it is. The child slides her/his free hand down the guide's guiding arm on to the chair back, changes hands and, checking the position of the chair, ensures that there is nothing lying on it, then sits down. On standing up, s/he may place one hand on the back

of the chair until s/he is about to take the guide's arm.

The child is guided in the same way when approaching from behind, but uses the side of her/his leg to guide her/himself to the front of the chair, checking to see if it is free before sitting down.

Approaching from the side using the same procedure. NB the 'exploration' of the chair with her/his free hand involves sweeping the chair from back to seat and from side to side. In addition to telling the child whether it has anything placed on it, this action also tells her/him what kind of chair it is, whether it has arms, is soft or hard, upright or easy.

To indicate a low chair the guide, having placed her/his guiding hand on the back, would then slide it downwards to the seat, thus conveying information about the depth to the child. When sitting down, particularly on an easy chair, it is recommended that the child be taught to sit down carefully and with a straight back before resting backwards. The reason for this care is that sometimes such items as shelves can protrude over the top of the chair and catch the unwary.

The blind child, who may have little ability to imitate and probably has acquired a poor self-image, should be made aware of how he should sit and his position whilst sitting.

Table and chair

When guiding a child to a chair which is pushed in under a table, this information may be conveyed to her/him by the guide who spans both chair and table with her/his guiding hand. This not only allows the child to locate both, but to relate one to the other. With one hand on the table and one on the chair, s/he can pull out the chair (if it is an appropriate size for her/him) and sit down. On rising from the table with one hand on the table and one on the chair, the child should get directly behind the chair, slide her/his hands three quarters way down either side of the back and lift the chair forward until it is under the table and the backs of his hands contacting the edge. This method prevents banging and clattering.

Adaptations

Amongst the many individual needs requiring adaptations to techniques is the obvious one imposed by a difference in size between guide and small child.

As will be observed, the child is holding the adults wrist instead of her/his elbow. It should be emphasised that the guide will keep her/his wrist against his body in the same way as s/he would use his upper arm when using the normal position.

Activity 4

Having completed the sighted guide skills, using your knowledge and understanding of one individual child in your care, consider which of the above mentioned skills would be appropriate and what modification and adaptations would be necessary as follows.

(Use chart in Appendix A)

Appropriate coping strategies

All sighted assistance should be given and taught with a view to allowing the child to develop independent coping strategies which are safe and which utilise and reinforce positive movements.

Trailing

The purpose of using this technique which, like sighted assistance is a mobility aid, is to enable the child to travel along a line which is parallel with a wall or fence, to determine line of travel and to detect/locate landmarks and clues along that line. In trailing, the hand should be slightly in front of the body thus gaining advance information. If the hand is held too close to the body, no advance warning of any obstacle will be available, nor will there be any stopping distance. If too far forward, the hand will be so high that there will be a greater amount of low level information which will be missed and obstacles collided with. The back of the hand is towards the wall and the fingers pointing downwards. (If the fingers are pointing forwards, fingertips may hit door jambs and catch in tack pins, etc.)

The fingertips are used lightly and care should be taken to keep the distance between the hand and the body limited but not so limited that the child rubs himself along the wall.

At an open doorway, the child stops, swings the hand slightly forward and steps forward to find the other side of the doorway.

Corridors may be recognised as being distinct from doors as corridors leading into them are not of wood whilst the lintels of doors are recognisable as such.

Looking for doors and door handles should not involve groping if simple guidelines are taught when appropriate. It may be possible to apply simple principles; eg all handles in the building mean that the door should be pulled and all flat metal plates mean that the door should be pushed.

In order to find the handle or plate, both hands should be placed together on the door in front of face, raised to the appropriate height (depending on the size of the child and separated sideways to find the handle or plate.

Change of wall and floor surfaces for residual vision and draught from adjoining corridors. etc may be used as landmarks or clues.

Familiarisation of routes involves travelling in both directions so that landmarks must be reversed.

Notice stopping distance between front of fingers and feet.

Free walking

Although there are very specific techniques which have been developed for both upper and lower body protection whilst moving across open spaces, these are difficult for a young child to do properly almost impossible to maintain over any distance and unsightly to observe. For this reason the simple position with elbows tucked in and fingers loosely interlocked in front is recommended as being more appropriate for small children or those not moving too fast in a restricted environment.

Notice, stopping distance between front of fingers and feet.

Ascending and descending stairs

It is important that there should be a clear, unmistakable landmark on the wall immediately before the top of the stair so that the child knows when to stop reach forward and raise trailing hand to find bannister, then move forward to the top step. On ascending or descending the stair, the important teaching point is to make the child understand the value of the leading hand which, because it is ahead of his feet tells her/him when the stairs end and begin again after landings.

Activity 5

Wearing sleepshade, try moving about using trailing along walls and up and down stairs

Squaring off

One way to help the child to walk in a straight line is to get her/him to "square off"- This technique involves the use of two sides of the body, eg two heels etc so that the child is square with her/his intended line of travel, and may include following:

one hand on each side of an open doorway

heels, shoulders and back against a wall or cabinet etc

calves against bedrail, bench etc

heels against step, wall or mat

The child should be taught to point forward into his line of travel before stepping forward into the same direction.

It is very difficult to maintain a straight line of travel, especially when there is little information from the environment. Therefore it is essential that the child utilises any clues available; eg light reflected off wall or sound heard in front of him etc.

In free walking, sounds to left and right etc, should, if possible, be identified and care taken to avoid inadvertently being drawn toward source. It is also helpful if a reasonable pace is maintained as, the slower the pace, the more the child will wander.

At a more advanced level, if sound is available to the deafblind child he may use it to 'square off'; eg facing or standing with back to the main road.

Room familiarisation

Choose a fixed reference point; eg the door, continually reinforce the instructions and reassuring the child, allow her/him to move independently while exploring.

In order to help her/him build up some idea of the shape and size of the room, start at the door and get her/him to trail each wall separately. Next trail all the walls in sequence.

Identify and locate any furniture and fixtures around the walls. Note the position of windows, taps, switches, etc.

Explore the centre of the room by finding meaningful objects as landmarks and relating them to various points along the wall.

Make return trips from the door to various objects in the room.

Routes and mental mapping

Learning routes will always be easier if they are meaningful to the child and are taught at a time when it is appropriate, ie teaching works best when given in close conjunction with everyday routines.

Although the Peabody Mobility Kit can be a valuable resource as it contains many useful suggestions and checklists, it should be used to meet the needs of the child and not adhered to as if it were a bible.

The manual on mobility training for blind students has many helpful activities under Utilisation of Discriminable Landmarks. In this series of activities the child has the opportunity to practise relating himself to various objects in space and these objects to each other

Again, it cannot be over-emphasised that these activities should be taught using furniture which is meaningful to the child and, as with all new routes and skills, at appropriate times.

Activity 6

Look to see what adaptations have been made (or need to be made) in your school to assist the child who is deafblind to recognise his/her surroundings.

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A resource for staff working with children who are deafblind

MODULE 5 Learning and Teaching: Approaches and Methods

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by Ailish Massey

Module descriptor

Aims

This module continues the section of the course on Learning and Teaching. It concentrates on the key principles of teaching a child with the dual sensory impairment of deafblindness. It illustrates how we can teach the child, taking into account her/his particular difficulties and making constructive use of strengths and interests. The particular method presented is based on the theories of Pr J Van Dijk of the Instituut Voor Doven in the Netherlands.

Objectives

On completion the participant will:

- be convinced of the child's need to use her/his residual hearing and vision
- be aware of the importance of movement in the child's learning process
- have some insight into how the senses are developed
- have a means of structuring the child's relationships, environment, and activities
- have some understanding of how concepts can be developed in the child
- have some knowledge of how experiences can be used to teach communication and language
- know how to teach sign language and fingerspelling to the child who is deafblind
- be aware of the stages the child passes through when following the particular method presented.

Topics

Each topic is just one aspect of the overall approach. They are interlinked and dependent on each other they develop simultaneously there is a lot of overlap and, therefore, repetition.

1 Making use of the senses

- 2 Structuring the child's experiences
- 3 Developing concepts
- 4 Using experiments to develop communication and language
- 5 Following the stages of the child's awareness of the world

Topics 2 and 3 of the next module, Module 6, will show how the methods presented in this module link together and are used to teach curriculum subjects.

Style and modes of learning

Reading, video, practical exercises, discussion

Additional resources

[Video tape two](#): Learning and teaching

- Topic 1. Making use of the senses (3 mins)
- Topic 2: Structuring the child's experiences (4 mins)
- Topic 3: Developing concepts (4 mins 30 sec)
- Topic 4: Communication and language (9 mins)
- Topic 5: Stages the child passes through (14 mins)

Topic 1 Making use of all the senses

Before you begin, re-read the section on The perceived environment in [Module 3 Topic 2](#). This will remind you of the child's need to develop concepts of people, things and their relationship to each other. In order to do this the child must:

use all the senses together in order to become aware of the world around her/him and thereby develop concepts of people things and their relationship to each other

learn to use residual vision and hearing as fully as possible.

The child must use all the senses to ether in order to become aware of the world around her/him and thereby develop concepts of people, things and their relationship to each other.

We have already discussed the difficulties the child with the dual sensory impairment has with perceiving her/his environment. We are also aware that these children often demonstrate inadequate use of the near senses and, according to McInnes and Treffy often "function as if a far greater degree of damage exists than a medical examination will indicate". In addition they have difficulty integrating the information received from the various senses. They cannot understand or make sense of it, so they may be inclined to ignore the impressions coming from the environment and concentrate on their own bodies. The task before the teacher, therefore, is to train the child to use the input available to him/her through the damaged senses and to integrate it with the input from the other senses in order to form as clear an understanding as possible of the surrounding world and their interaction with it.

When you come to [Module 5 Topic 4](#) you will be made aware of a very important aspect of your approach to the child, namely:

always begin with whatever the child likes or finds the least threatening.

When drawing up the initial profile of the child, you may discover that s/he appears to use one sense more than the others. This could be your starting point. Remember though, these children are, more than likely, still in the stage of relating to the world through the near-senses. They still mouth and lick most objects or use them to bang their heads or wave about. You may therefore have to use these least threatening channels to get through to them. Of all these near-senses, movement is usually the best. The sensation of movement is conveyed via the kinaesthetic and proprioceptive senses. (see [Glossary at end of Topic 5](#)).

Movement

The young child with the dual sensory impairment is not aware of the distinction between body and non-body, that is, things that are not the body. Neither is the child aware of the limitations or abilities of that body. The world consists of making and receiving pleasure from movement. Therefore, we start with the child's principal interest, in other words, movement.

Many children who are deafblind, especially rubella children, have difficulty in accepting physical contact. It may therefore be necessary for you initially to lie or sit on the floor close to the child, joining in whatever movement s/he is making. This may appear fruitless for a time, but is often the breakthrough to the child accepting close contact with another person, especially as the interaction is neither threatening nor manipulative. It is the foundation for future learning and should not be overlooked.

In the second stage the adult and child are in close bodily contact and go through the child's favourite movements rhythmically. This may be swaying together, bending together, rocking or jumping together, etc. The child may be on the adult's knee or in whatever position is necessary for the favourite movement; what is important is the close body contact and the rhythm involved. At this stage the adult has entered into the child's pleasurable world and been accepted, but is still only an extension of the child's body. When the adult suddenly stops the movement and then follows the child's resumption of it, the child is slowly brought to an awareness of another human being, someone separate from her/himself who does the same pleasurable things; who moves independently but yet can be controlled. This other being is safe to be with because, to the child, what is happening is "understandable", acceptable, enjoyable and can, in a very limited way, be controlled.

Through the use of close body movement the child begins to

be aware of another person

tolerate another's intrusion in her/his self-contained world

experience a limited control over another

feel secure.

Staying in close physical contact with the child and, from behind, guiding her/his hands, directing him/her through all the simple day-to-day activities of dressing, eating and washing, is another aspect of movement which is essential to the early learning of the child who is deafblind. It is not a case of putting the child's hands, etc into certain positions. No, the adult moves naturally, having the child's hands, etc underneath hers/his. In this way the child learns the natural movements necessary to a task. (For some activities such as bathing this is not possible.) Co-active manipulation or "hands on" is the means of teaching new skills to the child who is deafblind. It is an extremely important means of getting to know and understand the world. If one of us was put into a dark, silent room and asked to identify it, our only way of doing so would be to get up, move around the room and feel the objects there. For example, if we identified a bed we could almost be sure we were in bedroom. The child who is deafblind would not have the advantage of our previous knowledge, but s/he will learn to identify in the same way. If we get the child involved in all the simple day-to-day activities s/he will slowly begin to recognise patterns and objects. The child will then be on the first step towards a development of concepts. (This will be developed more fully in [Topic 3](#).)

How do we help the child to use all her/his senses together?

Movement is one means of helping the child to come to know about her/his surroundings, but we have to remember that it is used in conjunction with all the other senses. Although you may need to concentrate unnaturally on one sense in order to intensify training, this should only be for a very short time each day. For the rest of the time you should deliberately use it in conjunction with the others. The senses function together, not in isolation.

The best way to ensure a balanced input from the senses is to involve the child, as we have already mentioned, in everyday activities. An example would be dressing. During this activity direct her/his attention to the sights and sounds around (this will depend on the residual vision and hearing), eg the colours of the clothes, where they are, their different parts, the banging of the wardrobe door, the clatter of the hairbrush if it falls. Make the child aware of the texture of the different garments and the smell of them. When lifting the garments with the child make her/him conscious of their weight and the movements necessary to get the clothes on. By drawing gentle attention to all these things, while going through the activity with the child, we enable her/him to eventually coordinate the various inputs and build up an inner idea of what dressing is, what clothes are for, etc. When you approach all activities in this way you slowly build up the child's concept of the surrounding world. Can you now see how it is possible to train the child to coordinate the use of her/his senses?

If you, yourself, can identify the senses used in a task and have some awareness of how they help and depend on each other, you will naturally draw the child's attention to them. It is therefore important that you reflect on each activity in this way before you introduce it to a child, otherwise the most valuable of all teaching opportunities will be lost.

In addition to encouraging the child to use all her/his senses it is necessary to draw up a concentrated backup programme on sensory development. Further information will be found in [Module 6 Topic 3](#) on Curriculum but there is also good material in the various books on the education and training of children who are deafblind. The important thing to remember however is that the best way to help the child to develop all her/his senses is to show him/her how to use them in everyday situations.

Activity 1

To start you reflecting on how your various senses are involved in an activity write an account of what you did at breakfast this morning. Then identify the senses you used and consider how each one contributed to your overall concept of breakfast. (It is sufficient to underline words or, write your comments in the margin) Remember to include movement.

Don't read any further until you have done this exercise

Now you might like to know how someone else tackled a similar assignment.

Before I even got to the table I was aware of what I would be having for dinner because I could smell the food cooking and hear the dishes being moved about. When I did sit down, having moved to the table and used my sight to locate my place, I was aware of my body being in a different position. No longer was I standing upright and looking down on most things, I was now sitting on a chair, the weight was off my feet and I was touching the seat of the chair and was close to the table. I then heard my sister coming behind me and the rattle of dishes told me the meal would soon be served. I used my sight to choose what I wanted while at the same time I took it from the serving dish. When I passed this to my sister I had to use both hands because it was rather heavy and hot. The steak tasted delicious and we all enjoyed it.

Now does your answer compare with this?

Reading

Now read Chapter 6 Perceptual Development pg- 152-157 in Deaf-Blind Infants and Children (do not read the section on assessment as this will be looked at later).

The child must learn to use her/his residual vision and hearing as fully as is possible.

Keeping in mind that no sense should be trained in isolation (except for very short periods) we must however pay particular attention to the child's damaged sight and hearing. People may ask you

"Why does this child wear hearing aid and glasses?" or

"Why, if s/he is deafblind do you encourage them to listen to sound and look at things?"

The fact of course is that most of the children have some usable sight and hearing. However due to a delay in development a child may not know how to use these senses to the fullest. You should always assume, unless there is strong medical evidence to the contrary, that there is the possibility of some sight and hearing and make every effort to train the child to use them. This will consist, at the beginning, in encouraging the child to look at what s/he is doing, to listen to the sounds around about and to draw the child's attention to the source of these sounds. When you come to Module 6 Topic 3 you will be shown how these senses may be developed further. As it has been repeatedly said, using these 2 senses to the full will enrich the child's perception of the environment and reinforce awareness of her/his effect on it.

Remember

Initially your concentration should be on the sense the child favours or at least the one that is least threatening to her/him. This is usually movement.

Do not confine the training to one/two senses or to specific times in the day. The child must be encouraged to use all her/his senses all the time (in so far as this is possible).

The child must only be given the amount of sensory input which s/he is able to tolerate. Don't overload the child.

Summary

Training the child to make maximum use of her/his senses will include:

Movement, which will, eventually, help the child's awareness of self and others, of space and time, turntaking, sequencing, and imitation

Training the child's touch, taste and smell

Visual training

Auditory training (Sound perception for the child who is profoundly deaf).

You should always keep in mind that :

The child with the dual sensory impairment will learn to use and co-ordinate her/his senses when trained to do so in natural everyday situations. Artificial, "classroom activities are only a backup, a reinforcement of the real learning.

Note:

An overview of how to develop the senses at particular stages of the child's progress and how methods and the curriculum are linked may be found in [Module 6 Topic 2](#) Overview of the curriculum and methodology. Visual and auditory training programmes are presented in [Module 6 Topic 3](#).

Activity 2

In order to focus your awareness of the child's sensory impairment fill in the following chart (you may like to refer back to [Module 3 Topic 2 Activity 1](#))

(Photocopy the chart at the end of the topic, Appendix A)

	Yes	No
Does your pupil wear her/his hearing aid all day?		
part of the day?		
Do you know what your pupil's hearing loss is?		
Is her/his hearing aid the most appropriate to her/his hearing loss?		
Did you check her/his hearing aid twice a week?		
once a day?		
before each major task?		
Has your pupil's hearing been tested in the last 12/24 months?		
Has your pupil's sight been tested in the last 12/18 months?		
Should your pupil be wearing glasses? (Check with records and parents). If so		
Does the child wear her/his glasses all day?		
If low vision aids are appropriate, is s/he using them?		
Does your pupil use smell to acquire information?		
stimulate self?		
Does s/he use touch to get information?		
stimulate self?		
Does s/he use movement for a deliberate purpose?		
to stimulate self?		

Reading

Some practical suggestions for the early stages of sense development may be found in the book "The Deaf-Blind Baby"

Listening pp 40, 68-70

Visual training pp 41, 58, 74-5

Smell, touch pp 39, 61

Motor development pp 55-6

Environment pp 42 (routines), 77-8, 91

Video

Now look at

[Video tape 2: Learning and teaching](#)

Part I: Making use of the senses

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Module 5 Topic 2

Topic 2 Structuring the child's experiences

Reading

Before you begin this topic re-read the section **What other aspects of development are affected by deafblindness?** in [Module 3 Topic 2](#).

To structure something is to organise all its various interrelated parts so that a desired goal is achieved. In order to do this we must:

have an overall concept of the desired goal

understand the various elements that make it up

be able to organise and link the elements to each other.

Our lives are made up of various events. We ourselves are the sum total of attitudes, beliefs, history, training, etc. In turn each of these is also made up of many parts or events, each having a structure. We don't need to think about this because we have unconsciously learned it. Our success or failure in what we undertake will often depend on our ability to organise, to identify and develop the key issues in events, and also to eliminate the unnecessary.

In order to help you become more aware of the structure of even very ordinary events in your life we have written a fictitious account of three young women's holiday. As you read it keep the idea of structure in mind.

One Monday in January, at the end of a long hard day, Joan started to daydream about long sunny days on the beach, and so decided that this year she would somehow try to get away for a holiday.

At work the next day she casually mentioned it in the staff room. To her amazement a number of people said they would like to join her. She was somewhat taken aback by this as she knew many couldn't afford it and even if they could, she wasn't keen on a crowd. So she gently dropped the hint that she needed a quiet holiday and finally decided on two friends who had similar tastes and whose company she enjoyed.

After much discussion they finally settled on Sorrento. The next important issue was the money and how to go about saving it. Joan decided to put £20 aside each week while Sally and Anne Marie felt that putting £50 into a holiday account when they received their monthly salary, was more realistic for them.

The three of them spent many happy evening discussing the clothes they should wear and what they needed to bring. Then, about a month beforehand they decided on how much they should take in travellers' cheques and how much in local currency.

The time eventually came and they had a wonderful fortnight. It was so relaxing not to have to get things done within a set time and to go to bed and get up when they felt like it. Anne Marie and Joan spent many hours on the beach but Sally was interested in history and so she visited local places of interest. They all enjoyed themselves and returned to work refreshed and ready to get back into the hustle and bustle of ordinary living.

Let us now look at the structure of this event which was itself part of the overall structure of the lives of these young women.

Firstly, the goal was decided upon ie a holiday in the sun.

The event was recognised as having 2 main parts - the preparation the actual holiday. Each part had to be approached differently; the preparation had to be more efficiently organised as they were still working. The actual holiday could be relatively free of structure, the aim being relaxation.

Then the various elements were identified eg the people, the actual place, the date (time), the things needed (clothes and money).

There had to be a logical sequencing of events eg the place had to be decided upon before they could book their tickets.

There was a certain amount of discussion so that their different needs and wishes could, as far as possible, be met; eg

how they would save their money and how Sally's interest in history could also be accommodated.

Throughout this process they were continually identifying and developing the key elements which would make up an enjoyable holiday, but they were also eliminating the undesirable.

Summary:

When structuring an event/activity we need to take into consideration the goal, people, time, place, objects, planning, doing and the motivation.

Activity 1

In order to help you understand the various elements involved in a simple event such as preparing an evening meal for the family look at it under the following headings:

What is your goal, the purpose of the meal?

Who and how many people will be present?

When will the meal be?

Where will it be?

What will you need? -List furniture, dishes and a general outline of the menu.)

How will you organise shopping for the necessary food?

How will you organise the cooking, preparing the room?

In answering these questions you will have eliminated certain factors eg deciding on cauliflower instead of cabbage, or preparing a meal instead of a "carry out".

Can you list others?

By now you will have come to understand that there are certain routines - rhythms we could call them - that we unconsciously develop in order to save us thinking about everything all the time. For example, in preparing an ordinary meal you normally would not have to think about your goal, who will be present, the furniture or the dishes, unless it was a special occasion. These would be part of the ordinary everyday occurrences; you would have developed a routine. This ability to structure is dependent on the manner in which you perceive the world, which in turn is dependent on your senses. The child who is deafblind will therefore have tremendous difficulty with ordering and structuring the many impressions which life offers. For the child, learning from experience is a major task:

S/he will have little idea of the desired outcome of an activity or a concept of a final product.

The child will not be aware of the components of any thing or event because s/he has poor concepts and has difficulty with comparing and contrasting.

These elements will be seen in isolation having no connection with the whole or final outcome.

S/he will have difficulty in organising stages or steps towards the desired end of a task because of problems with memory and anticipation.

How then can we help the child who is deafblind to make meaningful use of experiences and to organise her/his world?

We will look at this challenge under the following headings:

Directing the child's attention.

Structuring her/his environment, time, relationships and activities.

Directing the child's attention

We have already made reference to this point when we looked at how the child's senses are developed and helped to work together. When a mother points things out to the baby by talking about what she is doing, why she is doing it, etc, she develops the child's sense of anticipation and also makes her/him aware of the final outcome of an activity and all that leads up to it.

The interest of the child who is deafblind will be focused when s/he **experiences the outcome of something and the steps that are taken to achieve it**. The beginnings and endings of an activity must be highlighted. We cannot just use words or point things out to the child who is deafblind, so we must find alternative means ie use symbolic objects. So, if you take a child for a walk you should begin by drawing her/his attention to the end result by starting with a symbol for that outcome eg the wrapper from a chocolate bar (if you are going to the shops). Motivation is extremely important, so

the outcome should be concrete and attractive eg buying sweets, feeding the rabbits, visiting someone and having tea. We must always keep the child's interests in mind. There is no point in trying to encourage a child to walk to the shops for sweets if s/he doesn't like them!

The child's attention can also be directed by **breaking into and changing her/his routine slightly**. Suddenly s/he is surprised into realising that something different is happening and you will have an opportunity for new learning. However, it must be realised that **before this can benefit the child s/he must have experienced and trusted an established routine and person**, otherwise it will only add more confusion.

Remember

The child can be made aware of the beginning and end of each activity by using symbols.

The outcome must motivate the child.

The child must **experience** the activity, etc and all that leads up to it according to her/his level of ability.

Structuring the child's environment, time, relationships, activities and things

When we analysed the holiday plans earlier we mentioned that a necessary element was to eliminate, as far as possible, everything that could work against achieving the desired outcome. The same applies when we set out to help the child to understand and organise her/his life. We must initially remove everything and everyone that is not essential to the task. Then we can set about helping the child to be independent.

Structuring the environment

When the child is young her/his environment should be kept as simple and constant as is possible. Activities should always be done in the appropriate places because the child needs the specific environment to clue her/him into what the activity is. Therefore, the child should dress in the bedroom, wash in the bathroom, eat sitting at the table in the dining room or kitchen (whichever is the usual place for the family or school group) and urinate in the bathroom or toilet. It may be tempting to put the small child on the potty before the fire in the living room because the toilet is cold, but how does s/he know what is expected? The child might on the next occasion genuinely mistake a chair for the potty and you could start doubting her/his ability to be toilet trained. Or again, if you feed the child who is sitting on the floor "playing" with toys, you will interfere with her/his understanding of what can be eaten and what cannot.

To help the child to identify the items necessary to an activity, the environment should be kept as free as possible from clutter and unnecessary things. So, clear the decks if you want the child to learn!

Summary:

We structure the environment by keeping it very simple, by removing all distracting stimuli and keeping objects and activities in their appropriate places.

Activity 2

Spend some time looking at your child's daily activities.

Are these always done in the appropriate places?

Had you simplified the surroundings and removed all distracting stimuli such as bright lights or whatever else can attract the child's attention?

You might like to discuss some changes with your headteacher as a result of this exercise.

Structuring time

Creating a routine or daily rhythm is an important means of helping the child to anticipate, remember, form habits and organise events.

Using **daily-life activities** we order and structure the child's day. Activities are done (as far as possible) at the same time. For example, the morning could consist of

breakfast,

dressing,

"play" in ballpool,

auditory training,

drink, etc.

Each day you and the child together should put concrete representations of these activities into sequential boxes or pockets. This helps her/him to comprehend the beginning and end of each activity and how, together, they all make up the day. Over a period of time the child then comes to some understanding of day as opposed to night. From that the exercise is extended to give her/him an idea of week, and year. All of this will be developed in the topics on Concepts (Module 5 Topic 3) Stages (Module 5 Topic 5) and Curriculum (Module 6 Topic 2). What should be noted now is that this "day rhythm" is closely connected with the child's own biological rhythm. Timetables must not be imposed on the child **but should be geared to her/his needs and preferences**. This calls for great ingenuity on the part of the person responsible for the running of the school, but it is a necessary element in learning for the child with the dual sensory impairment.

Summary:

We give the child an awareness of time by establishing a daily routine and eventually a weekly and monthly routine.

Structuring relationships

When we set out to help the child structure her/his life we also have to look at the people in the immediate environment. Remember how Joan decided that she could only have 2 friends with her if she was to have the holiday she wanted? In the same way you identified the people to be present at the meal, otherwise you could not have organised the event.

The child who is deafblind needs help in the first instance, with

recognising her/himself as distinct from others

recognising individuals

and eventually

recognising the different roles people have.

The very first step in this process is to restrict the number of people involved with the child. These people must aim at building up a close relationship with the child. They will become involved in all her/his favourite activities. They, in getting to really know the child will be able to pick up basic bodily attempts at communication and will respond to these attempts. This will develop security in the child and the sense of being understood. The child will begin to recognise that the other person is distinct from her/himself but, at the same time is not alien or threatening. Trust in these familiar people will increase and the child will allow her/himself to be drawn out of an inner world and into the frightening and confusing world outside. We therefore advise that for the first few years, the people relating to the child should be restricted to the immediate family and, at the very most 2/3 people in the school (if it is a residential school this could be increased to 3/4 in total). As the young child will generally come to know a person through the activity they are involved in together, it is essential that the same people do the same things with her/him. If people are not consistent about this eg the child has a different person for the dressing programme each morning then, her/his ability to recognise individuals will be hampered. In addition to this, the process of learning how to dress will not develop as it should because, no matter how good the communication between staff, individuals are bound to approach the child and the task differently.

Although the initial reaction of the young child may be to put people into pigeon holes, there is no need to be concerned, we all do it and need to do it, to some degree. When the child gets older and is secure and clear about the roles of people, flexibility can be introduced. The child will appreciate interacting with different people because of the variety involved. S/he will come to distinguish people from their roles and understand for example that although Peter "teaches" in school, he is also a dad and has a home. The child will also learn to classify people according to role. However this is a long way down the road. What is needed initially is consistency.

Summary:

We give the child an awareness of others and their place in the world by initially restricting the number of people relating to the child to the barest minimum. Person and activity are linked in the child's mind. It is not desirable for a number of people to do the same activity with the young child.

Activity 3

Before you move on to the next section reflect on a typical day for one of your children using the following questions. (The questions apply only to the young or extremely handicapped child).

How many people interact (in an educational capacity) with her/him each day? (It may help to list them) If the number exceeds 4 (in a residential school) make a definite effort to do something about it

Look at the child's timetable. Are different people taking her/him for the same activities? If this is true you may like to discuss some changes with your headteacher.

Structuring objects and activities

We have already mentioned the importance of clearing the child's environment of unnecessary or distracting objects. In the very early days it will mean great consistency in the use of things, eg the child should always use the same chair and drink from the same cup (or the same type of drinking utensil; not giving her/him a beaker one day, a cup the next, a mug another time). However, as the child's awareness of the function of the object develops the necessity to keep to the same thing diminishes, although there is always a need to keep things in the same place to facilitate ease in finding them.

In [Topic 3](#) of this module we will look at some formal ways of backing up and reinforcing **concepts** of objects through sorting exercises. However, it should always be kept in mind that the ideal situation for learning is the real one.

How can we structure activities to help the child achieve independence?

Before beginning a task with the child the adult should have previously broken it down into simple steps suited to the child's level of development. (You have already done a Task Analysis in Activity 2 [Module 4 Topic 4.](#))

The child must be aware of the final outcome or end result.

The child's surroundings should be as simple and uncluttered as is possible.

The objects essential to the task should be obvious to the child, but it is not necessary to have them all in the one place. The opposite is, in fact, more beneficial because then the child has to be actively involved in collecting them. (Remember each item must always be kept in the same place).

An example of structuring would be the following preparation for going swimming:

To begin with the child would know s/he was going to the pool because the identification would be in the timetable boxes.

At the appropriate time (initially this would be **immediately** before the swimming session) the adult and child together collect the swimming costume, the towel and the swimming aids and co-actively put them into the child's special swimming bag.

Then, again co-actively, the adult and child put on her/his coat and go to the pool.

After the child is familiar with a routine activity (done jointly by the child and adult) we must then help her/him to carry out the activity alone. It is easier for the child to achieve independence in a familiar structured activity by doing the **last** action alone and working backwards from there. This utilises the child's ability to anticipate the remainder of an activity.

The process therefore, using the swimming example above, would be to help the child assemble the necessary things without help, so, the child is encouraged to collect the **last** item ie the swimming aids, by her/himself, then the second last item, then the third last and so on until independence has been achieved. Later on the child will be expected to "talk" about the process ie be able to tell the adult what s/he needs for the swimming session and how to prepare for it.

Although all the child's activities are broken down into simple consecutive steps the adult should initially concentrate on achieving independence in those tasks which motivate the child. When the child has tasted independence in these s/he will be more likely to cooperate with the less attractive ones.

Summary

We should be consistent in our use of objects with the young child.

Things should always be kept in the same place.

The child's surroundings should be uncluttered.

S/he should know the end result of an activity.

We should break down each activity into simple steps and be consistent in how they are carried out.

All activities should be structured but initially choose activities which motivate the child. Concentrate on her/him attaining independence in them.

Activity 4

Pause and reflect on the last section. How does it apply to your child? (It may help to jot down exactly how you structure activities for her/him.) Perhaps you would like to discuss it with a colleague.

In this topic we have looked at the necessity of structure in our lives and how it can help the young child with the dual sensory impairment to understand and relate to the world around about. What we must constantly adhere to in planning for the child is her/his individual needs, likes and abilities. No child can be forced to learn, although some may need strong encouragement to try something new. **Motivation** is the most powerful incentive to learning, so our planning must not be imposed on the child. We need to build on the child's personal strengths, preferences and characteristics at the

same time taking into consideration her/his level of functioning.

OVERALL SUMMARY OF TOPIC

When the child's daily life is structured:

It puts order on the child's experiences, building up expectations and anticipation and thus making life predictable.

It aids learning because the memory is developed through frequent repetition.

It develops independence by teaching the sequence of steps needed to achieve a desired goal.

It develops an awareness of time: past, present and future.

It leads to tolerance and responsiveness to people and activities.

It builds up confidence and security in her/him through being involved with familiar persons, things and in familiar experiences.

It gives the child an element of control; a sense of self.

The task before us as educators therefore, is to make the everyday world more understandable, manageable and attractive to the child so that s/he will be motivated and secure enough to become constructively involved in it.

Note

An overview of how structuring is applied at different stages of the child's development and how method and curriculum are linked may be found in [Module 6 Topic 2](#).

Activity 5

The following is a profile of a fictitious child, Sue.

Read the account first and then answer the questions.

(As this profile will be of use to you at a later date it is advisable to photocopy the account and keep it with your answers in your file.) (**Appendix A**)

Sue is a 5 year-old child recently diagnosed deaf-partially sighted. She has received no home training.

She can walk but refuses to do so unless highly motivated. She likes being on her own and will search out any shiny objects in a room and either gaze at them or flick them

Sue likes her food and will attempt to feed herself She rarely drinks from a cup, preferring a bottle.

She does not appear to recognise her parents and resists physical contact.

She is very tense.

Sue lives about 10 miles from the school.

Identify the factors which might interfere with **developing the structure** needed for Sue's development. Suggest possible solutions.

How would you expect **structure** to benefit Sue?

Answers may be found at the end of the topic (**Appendix B**)

Video

Look at

[Video Tape 2](#); Learning and Teaching

Part 2: Structuring the child's experiences.

Note

Before you start on the next topic, Topic 3, you should ask a colleague to look at Activity 1 and the instructions (Appendix A). S/he will need at least a day's warning in order to prepare for the exercise.

Appendix A

Profile of Sue (for you to photocopy)

Sue is a 5 year-old child recently diagnosed deaf-partially sighted. She has received no home training.

She can walk but refuses to do so unless highly motivated. She likes being on her own and will search out any shiny objects in a room and either gaze at them or flick them

Sue likes her food and will attempt to feed herself She rarely drinks from a cup, preferring a bottle.

She does not appear to recognise her parents and resists physical contact.

She is very tense.

Sue lives about 10 miles from the school.

Qn 1 Identify the factors which might interfere with developing the structure needed for Sue's development.

Suggest possible solutions

Qn 2 How would you expect structure to benefit Sue?

Appendix B

Activity

Suggested answers to question 1

Factors which could interfere with structuring Sue's learning	How these could be overcome or lessened
Resistance to physical contact Likes to be on her own Poor relationships	Concentrate on getting her to accept you; sit beside her; be happy when with her; join in her "happy" activities; give her space - don't crowd her but gradually introduce physical contact. Restrict the number of people dealing with her. Develop communication between home and school.
Tenseness	Use massage, jacuzzi or whatever you observe helps her to unwind. Be relaxed with her. Initially you could allow her to "play" with her shiny objects.
Light gazing	When trying to work on getting her attention use areas that are free from bright sunshine or lights (a UV room is ideal). Occupy her /distract her with other things. Keep directing her to the task in hand Initially use light as a reward and over time, gradually wean her from it.

Suggested answers to question 2

Qn 2 How would you expect structure to benefit Sue?

Points which should be included in your answer are:

an increase in security - more open to new experiences/training

an improved memory - anticipating

greater confidence in self - will become less tense

an awareness of self as separate from others

less confusion, therefore calmer.

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 [Topic 3 Developing concepts](#)

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A resource for staff working with children who are deafblind

Module 5 Topic 3

Topic 3 Developing Concepts

We have already looked at the normal development of concepts and how dependent this is on the distance senses of sight and hearing. We have also highlighted the difficulties children who are deafblind have in this area. This topic will hopefully help you to develop in these children an internal "picture" of their surroundings so that they can as far as their ability allows, come to "live" in the world and not be "at the mercy" of it.

Re-reading the following sections will help you to focus on the subject in hand.

What then is the importance of the two principal distance-senses, vision and hearing? ([Module 3 Topic 1](#))

Why does the deafblind child have difficulty in identifying and understanding objects and people? ([Module 3 Topic 2](#))

In order to form a concept of a person or thing we need to

use all our senses to get as much information as possible about him, her or it

have the experience of relating to the person or of using the object for a purpose

we can then

form an internal image/concept of the person or thing

and go on to

integrate it into whatever concepts we already have of the world

use it to **form the basis for new concepts**

name it

(Of course it should be remembered that the person who has full use of her/his senses does not need to actually experience an object or person in order to form some concept of them. Using the senses to read about the subject, or hear another talk about it, would be sufficient. However, experience is the ideal means of acquiring clear, accurate and realistic concepts.)

The child who is deafblind will obviously have difficulty using all her/his senses to acquire information. We have already dealt with this in [Module 5 Topic 1](#), so now we will concentrate on the following issues:

The child's experiences should be meaningful

The child should be helped to form an internal image, or concept of the world around and to integrate her/his experiences

(Further ways of naming objects and persons and of integrating concepts will be developed in [Module 5 Topic 4](#) and [Topic 5](#))

The child's experiences should be meaningful

If experiences are to have meaning for the young child who is deafblind the activities ventured on together should be either interesting for the child and/or be related to her/his basic needs ie eating, washing, toilet training, etc.

New experiences should be connected with familiar interests or experiences. For example the child who is moving reluctantly from a bottle to a cup may go through the many stages of drinking from

a covered plastic cup with a spout and no handle

to a cup with half a lid and a spout

then to a cup with a slit in the half lid instead of the spout -and so on.

As far as is possible the outcome of these activities should be obvious to the child and the steps taken towards their completion be as simple as possible and suited to her/his developmental level. It is also important to have consistency in

the approaches and in the places these activities are carried out.

Above all and in addition to this is the need to get the child to experience doing things, firstly with help, then independently. The various stages the child will go through will be discussed in [Module 5 Topic 5](#) and in the topic on curriculum, [Module 6 Topic 3](#). Short-cuts; ie doing things for the child because you are in a hurry and s/he is slow, only underline and confuse the child. You reinforce the sense of things happening to her/him. Our aim is rather to instil a sense of self-direction and worth. So remember, **involve the child**, that is the way s/he learns.

Another important element in making experiences meaningful for the child is **the interest of the adult involved**. It is desirable that this person be **affectionate, firm organised and conscientious**. S/he must have the ability to break a task down into learning steps suited to the ability of the child. There must be a certain attachment between the two if the adult is to know the child and the child is to allow the adult to draw her/him out of self and into the exterior world. At the same time over-attachment must be guarded against as this could result in the adult becoming a part of the child's inner world and would stunt the child's further growth.

Remember

In the case of the very young child who is deafblind, objects and people may have little meaning unless they are in some way a means of stimulating her/his own body. Very often this meaning will bear no relation whatsoever to the object or person so we have to be careful about how we interpret the child's interest in a person or thing.

(You might like to look at **How does the young deafblind child interact with the environment?** [Module 3 Topic 2](#) in order to refresh your memory of this subject.)

Summary

Experiences will have meaning for the child when they are
connected with basic needs ie eating, dressing, etc
simple and suited to her/his developmental level
interesting and attractive to the child
done with a trusted and familiar adult
and when
the child is involved in the activity
the outcome is known to her/him
new experiences are based on familiar ones.

The child should be helped to form an internal image or concept of the world around and to integrate her/his experiences.

Reflect for a moment on how you distinguish one activity from another. Hasn't it something to do with these?

What you do

what you use (objects)

where you do it (places)

when you do it (time)

who you do it with (people)

how you feel when you do it (emotions)

Therefore, if the child who is deafblind is to recognise an activity, co-operate and learn, s/he must first of all have some internal picture of the objects used, the place the activity is carried out, the time it is done, the person it is done with and be involved in doing whatever is entailed. In other words we must then look at how we characterise (identify):

objects

places

persons

emotions

activities

time

How do we characterise these objects?

The following exercise will give you some insights into this.

Activity 1

For this activity you will need

a blindfold and
the help of a colleague.

(Instructions for this activity are in **Appendix A**. Your colleague should read them)

Your task is to identify by touch the objects presented to you. They will be given to you in pairs.

You must try to identify and name each object and then remark on how they differ from each other.

If you cannot do this within 30 seconds you should put them to one side and examine the next set.

During this time your colleague will say nothing to you, neither prompting you or responding when you are correct. When you have examined all 6 objects, the blindfold will be removed.

As you look at the objects name them and feel each one again to help reinforce the tactile impression.

You may now wish to discuss with your helper how you identified each object and how you distinguished the paired objects from each other.

What did you do to enable you to identify an object?

How did you distinguish one object from another? You may now like to look at the suggested answers in **Appendix A**.

The child with the dual sensory impairment will need to be helped with this process, which is sometimes called **characterisation**, if s/he is to form concepts. Therefore, s/he will need

to **touch** objects

to **move** objects or move her/his hands over them

to **use** objects

to be given help with identifying its **characteristics** so that it can be distinguished from other similar objects.

However, it must be kept in mind that while you allow the child to explore objects as fully as possible it is also necessary to limit her/his use of them to the appropriate situations. So, you must never allow the young child who is deafblind to play with cups, shoes, spoons, nappies etc in her/his playpen - this will confuse the development of concepts. (You may give the child objects that are not used for teaching eg egg boxes, balls, shiny paper or whatever is of interest).

When you are using an object with a child always emphasise the features or characteristics which identify it, by directing her/his hand over them. Always use the same identifying features and make sure everyone (staff and family) know what they are and use them.

The following examples may help you

The identifying features of a hair brush would be the bristles and the handle. Therefore, when you co-actively (your hand moving the child's) lift the brush, you should, together, feel the bristles and the handle and then use it to brush the child's hair.

To identify the child's jumper you would together feel the texture of the body, then the 2 long sleeves.. Then together with the child put it on.

A shoe can be differentiated from a slipper by together exploring the space for the foot, then feeling the texture, then the laces (or straps) to distinguish the shoe, or the pom pom to distinguish the slipper.

Can you also see how important it is in the **early** stages to keep to similar things? It will not help the young child to have shoes with straps one day, shoes with laces the next and so on. **After a time**, however, it will be possible and indeed necessary to introduce some variety as otherwise the child's concepts would be extremely limited.

Activity 2

Write down what characteristic you would use to help the deafblind child to recognise the following objects. (It may help you to close your eyes so that you are more aware of the tactile and moving features of each object.)

a cup

a plastic beaker

ajamjar

a plastic container for paint

How would you help the child recognise the following and distinguish them from each other?

a child's vest

T-shirt

jumper

your jumper

You may like to discuss this with a colleague or your headteacher.

Once the child has some internal "picture" of an object you can introduce her/him to sorting exercises. This is ideally done in the natural setting. So, the child will be directed to putting away the cutlery after the wash up spoons with spoons, knives with knives and so on. S/he can do the same with the dishes. Another excellent means of helping to broaden concepts is to put away the clothes after the laundry ie all the socks in the top drawer, pants in the second, etc.

When the child is involved in an activity which is taught in the natural setting of bedroom or kitchen or bathroom and is using the appropriate objects in an organised way s/he will also slowly build up and internalise the other qualities necessary for forming concepts. The child will come to an appreciation of space and location by participating in structured household tasks. Her/his sense of the disappearance and recurrence of objects and people will also develop when **the adult is alert to the natural opportunities for teaching these and draws the child's attention to them.** Sorting exercises will, at a later stage, reinforce these concepts. The natural setting however, is the ideal learning situation for the child. Enabling this to happen calls for continuous communication between all the people relating to her/him. It is important that everyone knows the concepts being taught so that they can be reinforced in all areas, thus enabling the child to generalise what s/he is learning.

Summary:

The child can be helped to develop a concept of an object when:

s/he **uses** it

for its proper purpose

in its proper setting

and when the adult has:

previously drawn the child's attention to the object's characteristics

and continues to do so in every appropriate natural setting.

How do we help the young child to characterise places?

The identification of places ie rooms, buildings, playgrounds, shops, etc can be approached in the same way as objects.

If you could not see, how would you differentiate between a bedroom and a kitchen? Would it not be similar to the way you identify objects? eg:

by **moving** in it

by identifying objects peculiar to it eg a bed in a bedroom, a cooker in a kitchen

by having particular experiences in it?

So, always perform activities in the appropriate room with the young child and identify the room by pointing out its characteristics. At the same time you should encourage the child to explore and discover the similarities with other rooms.

Following this procedure the child will gradually internalise the idea that a bedroom is the place which her/his bed can be found. The bathroom is where the bath, sink, and toilet are, the dining room is where s/he eats, etc. Over time the child will begin to realise that there is more than one bedroom in the house, that some bedrooms are shared etc. All of this will broaden her/his concept of bedroom and eventually lead to an understanding of the wider concepts of home, school, shop, etc. Each step should be based on the characterising features and gradually built on the child's previous knowledge. In [Module 5 Topic 4](#) we will look at how symbols can be used to help the child name the concept being taught. For the moment we will concentrate on the concepts.

Activity 3

Write down what **features** you would use to characterise the following for the child (use features which may attract the child and restrict them to 2 at the most).

the school gym

the playground

her/his own bedroom as opposed to another

the toilet

a sweet shop

Again you may like to discuss this with a colleague or your headteacher.

Summary:

The child can be helped to develop a concept of a place when s/he

moves around freely in it

experiences using it for a particular purpose

and when the adult has

previously drawn the child's attention to the features that identify it; eg the climbing frame in the gym

and continues to do so on every occasion the young child uses it.

How do we help the child to recognise individual people and self as distinct from them, in other words develop a concept of others and of self?

The young dual sensory impaired child has difficulty distinguishing other people from her/himself and from each other. There may be little or no difference for the child between mother, father, school staff or travel escort, and even if s/he does there is no way of expressing it. One way of helping the child to differentiate is to highlight a characteristic; a way of identifying each person. ([Topic 2](#), the section on **Structuring relationships** has already looked at some aspects of this).

When we characterise a person we bring something typical of that person to the child's attention each time they come together. This may be some distinguishing feature; eg a moustache, a wart, something different about their hair (very curly), etc. Or the person could wear a distinctive item such as a certain type of brooch, ring, bracelet, belt attachment, etc. What is important is that the characteristic is suited to the **child's level of development** and that movement is associated with the distinguishing feature. The child is being touched or touches many things throughout the day, so unless there is a deliberate attempt to make the child aware of this distinguishing feature s/he will not notice it. In addition to being able to move it the child should be attracted to the identification (ID). What you think is artistic may make little impression on the child.

So if the child is inclined to touch the teacher's beard the teacher can use this to identify himself. When he goes to work with the child he should direct the child's hand to the beard and either stroke or gently pull it with her/him.

Ideally the characteristic used should be something that attracts the child to the individual but as this is not always likely, other distinguishing features or items can be identified. What must be remembered however is that the characteristic remains constant ie every time the child and adult come together the ID (identification) is present and used. It is also important that it refers to an individual; there is no point in using a wedding ring to identify the child's mother when every other woman s/he comes in contact with has one.

At a later stage the movement associated with the ID will alone become the means of naming the person and the use of the identifying feature or items can be faded out. The teacher can afford to shave his beard and the child care worker leave off that horrible brooch!

It is always difficult to think up different IDs for people especially in the school setting. Some of the following may stimulate your creativity.

necklaces - chain, bead, solid (use different movements if you have a number of people wearing something around the neck)

badges or brooches - all shapes, sizes and textures can be worn on various parts of the clothes

belt attachments - these, like the brooches can be variable and can be attached closely to the belt or worn hanging loosely

bracelets - solid, chain, bead, even an elastic band or a sweat band could be used.

Remember also that the child will develop a concept of you by what you do with her/him and how you relate to her/him. So, be happy with the child, stay interested in what you are doing together and keep to the same activities as far as possible.

What about the child's awareness of self?

At the same time as drawing the child's attention to the characteristics of others it is important that s/he begins to build

up an image of self. We do this by initially "massaging" the child gently with either lotion or different textured materials or the warm air from a hair dryer or soapy water when s/he is in the bath. There should always be a sequence to this and you should speak at the same time

eg:

face - say "John's face"

head - say "John's head"

shoulders - say "John's shoulders", etc

right arm/left leg - say "John's arm", etc

body (front and back) - say "John's tummy" etc

After some time the child will recognise the sequence and will anticipate the next part to be touched.

Having spent some time on this, the parts of the body are then matched co-actively with the adult's, eg:

This is John's face (child)

This is Ann's face (adult)

This activity will be further developed in [Module 6 Topic 3 Curriculum](#). For the present it is sufficient to remember that the child must be made aware of her or himself. In addition to body awareness it is also helpful to draw the child's attention to something which characterises her/him eg a distinctive feature or movement, at the same time reinforcing who it characterises by touch in her/his chest. Remember, everyone must do the same thing.

Summary:

We can help the child to identify people by emphasising individual characteristics or using distinctive items as IDs. The IDs must be constant and have "moving possibilities".

We help the child become aware of self as distinct from others through massage, body matching, and a distinctive movement or object identifying self.

Reading

Confrontation between the Young deafblind child and the Outer World page 35

Activity 4

For your own interest you may like to reflect on how you distinguish people one from another - what characteristics do you use?

How do we help the child identify emotions?

Another area which needs defining for the child with dual sensory impairment is the one of emotions. A child with sight and hearing receives information from our facial expressions and the tone of voice used. A child who is deafblind misses all these clues; the only way s/he can experience our emotions is through the tension in our bodies, our movements and the way we treat her/him. So we must be careful about how we relate to the child. But we must do more than this. We must draw the child's attention, in the natural situation, to other ways of characterising the various emotions. So, when we are happy, when we laugh, we direct the child towards our mouths, the vibrations in our chests, the noise we make. We hug the child, dance with her/him and generally exaggerate the signs so that the child gets the message. We identify a "happy movement" such as clapping hands, to help her/him develop a symbol for the emotion. Again, when on another occasion such as going home, the child appears to be happy, let her/him feel their own mouth, chest, etc. and co-actively give them the "happy movement". In this way all the "simpler" emotions; happiness, sadness, anger and fear can be identified. More complex ones such as jealousy, loneliness, frustration, etc can be tackled when the child has some grasp of formal language.

In addition to identifying emotions we must also help the child to understand the underlying causes. Even at a very basic level we can help the child understand why s/he is happy, sad, etc. We can reinforce it at the beginning by showing the sequence of events which caused it. So, we can identify "going home" with the happy feeling, or "now swimming" with the angry or sad feeling. Later on a movement or sign can be introduced for "because" and we can use it to clarify the situation even more. We can then let the child know "I am happy because..."

Always remember to use every situation, including your response to the child's work as an opportunity to identify emotions.

Summary:

The child can be helped to identify emotions when the adult

draws her/his attention to facial expressions, to vibrations and sounds made by both the adult and child

by exaggerating the emotion eg clapping hands, etc

by drawing the child's attention to events which led up to the particular feeling

by using every possible situation to identify them.

Activity 5

Take one day, say tomorrow, and record the various emotions you experienced while relating to your child who is deafblind. You may then like to identify those you feel the child's attention should be drawn to. (Even with the young child it is helpful to them if you explain why you are feeling tired; eg because you didn't sleep).

How can all this help the child to identify activities?

Do you remember us saying that the child can be helped to identify activities when s/he recognises

what is used (objects)

where the activity is done (place)

who it is done with (persons)

how s/he feels when doing it (emotions)

when it is done (time)

and how it is done?

Consistency is then the key note. The child needs to have some recognition of all the things that go to make up an activity but s/he must also be physically involved in doing - it and recognise the simple steps leading to the expected outcome. (See [Module 5 Topic 2](#) (iv) **Structuring Objects and Activities**.)

The child recognises the activity through what happens but, as in the case of "which comes first, the chicken or the egg?" the child also forms concepts of objects, places, time, persons, self and emotions by having them identified within activities.

All of these things (time will be looked at in the next section) are the characteristics of the activity. However, there are far too many to allow quick and easy reference so one particular thing needs to be pinpointed to identify and label the whole activity. This ID should be

an intrinsic part of the activity

and, as far as is possible be identified by the child and/or be attractive to her/him.

Thus we must initially **observe** the young child when s/he is involved in something eg what object interests the child during meal times? Is it the spoon, the dish, the apron bib or is it something apparently irrelevant such as the place-mat? Whatever it is, that is the object you use to identify meal times. If the child is totally uninterested put emphasis on something obvious such as the spoon and use that to identify what is happening and then what is going to happen. This "label" this "key" is given to the child **before** an activity begins and the child is helped carry it to the activity. In this way s/he begins to associate it with the activity and can "think" about it before being physically involved. These objects are then used to help the child organise her/his day.

How can we fix these symbols in the child's consciousness?

Memory is an important means of helping us to think, to compare, to conclude, to discover, to recognise similarities and to experience joyful anticipation and perhaps, sad experiences. Memory is needed if we are to discuss, to imagine, to re-live situations. It has a vital role to play in the development of language; it is necessary for communication. One of the ways of "fixing" memories in order that they may be recalled, is to introduce the child who is deafblind to either a **memory box** (if s/he is blind) or a **memory book** (if partially sighted). Objects are identified as symbolising activities or events and these are stored in their own boxes. To begin with some regularly occurring events that strongly appeal to the child are used. For example, one of the boxes could contain things the child needs for going home on Fridays ie her/his bag, a favourite home toy, her/his home-school diary. Eventually one of these is identified as representing the entire event and the "home" box can be discontinued.

Before long the child will cease to need boxes for the day-to-day events and focus can be on the more irregular ones ie birthday parties, holidays, trips to the beach, etc. Over time these too can be reduced to a symbolic object, or drawing or a written or brailled word (as well as the signed, fingerspelt or spoken word). Photographs can also be used to prepare a child for an unpleasant event such as the hospital, but, when doing this it is important to also give her/him something to look forward to afterwards eg a visit to a favourite person or a promise of favourite food.

The importance of diaries for the older child's development of communication and language cannot be stressed enough. This is a natural development of memory boxes and will be developed in the topic on Curriculum Module 6 Topic 3.

Reading

Summary:

The child can be helped to recognise activities through identifying and using the appropriate objects, places, persons, emotions, time and steps being involved in the activity and having a means of identifying it ie an ID

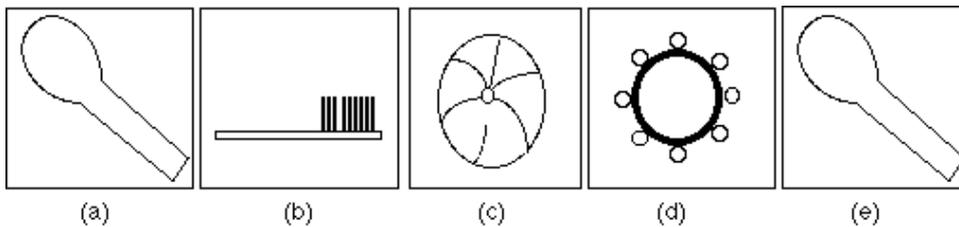
How do we help the young child to identify time?

In **Module 5 Topic 2 Structuring time** we emphasised the importance of creating a "day rhythm" ie organising the young child's day into simple activities which are repeated in the same sequence each day. But how can we give the child a tool to enable her/him to label time? How can we give the child an awareness of time such as day and night, a week, a month, a year, etc?

We have already learned how to teach the child to use "objects of reference" for activities (last section). These objects are now used to order the child's day; in other words we create a concrete, tangible timetable.

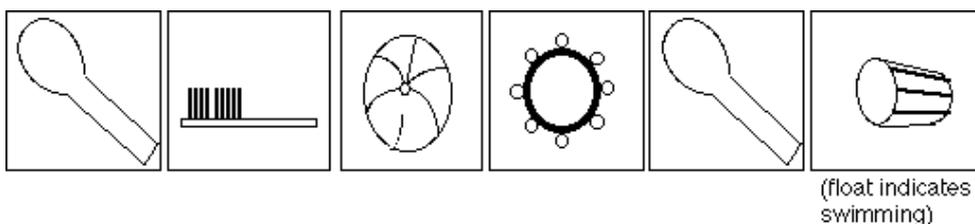
In the early stages we simply use the same rhythm or sequence for part of each day. So, as far as is humanly possible this little sequence is adhered to during the time in school/home until the child has some idea of what it is about.

The objects of reference for the morning's activities are put into connected sequential boxes or pockets with the child each morning, so, the timetable boxes should look something like this.

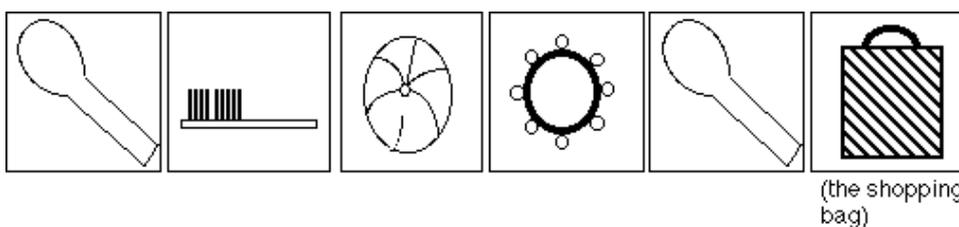


- (a) a spoon representing a meal
- (b) a toothbrush representing time for brushing teeth
- (c) a ball representing movement time
- (d) the child's favourite object representing time on her/his own
- (e) the spoon again representing the next meal.

The next step is to help the child distinguish one day from another. So, keeping the same sequence, an object to identify a specific activity to mark the day is added to the timetable. So, the timetable boxes for Monday could look like this



and for Tuesday, when the child goes shopping, like this



and so on.

For the residential child the Friday box will hold something portable that characterises home or the child's mother or father. This could be, for example, part of the mother's identification bracelet or something the child only plays with at home. This ID for home is carried by the child on the journey home. In the same way a school ID is given by the parent to the child on her/his return to school. Gradually a concept of weekday (when s/he is in school) and weekend (when at home) builds up in the child. The simpler the pattern the easier it is for the child to grasp it. The child can only learn these concepts through experiencing them. So whatever your system, be it a day-school, weekly-boarding or term-boarding, use some means of identifying the various divisions of time. What is important is consistency. As far as is humanly

possible, keep to the timetable and the activities characterising each day. If an emergency occurs and, for instance, you cannot go swimming on Mondays, go through the Monday sequence with the child, putting the ID into the appropriate box, then, indicating, "NO SWIMMING" to the child (one way of doing this is to place her/his hands each side of your head as you shake it), remove the swimming symbol from the box and put in something to characterise what is replacing it. (The child will eventually understand "change" through this).

At a late stage, when the child has internalised her/his basic daily timetable and has some concept of the days of the week variations can be introduced without confusing the concepts. Simple diaries can record (using tactile symbols, or later brailled written symbols) the various different things that happen. Past events are the first to be understood but, if there is some exciting event constantly happening once a month then the child will begin to look forward to birthdays, holidays, to Christmas, etc and the year will begin to take shape. That however, is a long way away for the near-sense child; the gradual progression will be presented in detail in the topic on Curriculum (Module 6 Topic 3, Timetables). -

Reading

Confrontation between the Young deafblind child and the Outer World pages 39-42 Structuring time

Summary

The young child can be helped to identify time by

having the same simple structured sequence of activities each day

using objects in sequential boxes/pockets to identify her/his timetable

having one different activity inserted into this daily rhythm to identify the days from each other.

Sorting and classifying

We have stressed time and again the importance of teaching concepts in the natural situation if the child is to integrate her/his learning. However in order to reinforce these concepts, backup exercises will eventually need to be done. These in no way lessen the primary obligation to use every available, practical opportunity to broaden the child's concepts.

How do we teach the child to sort objects?

By this time the child will be able to identify familiar objects and will have had experience of matching them ie putting spoons with spoons in the cutlery drawer, putting her/his socks together after washing, etc in the appropriate situation. Now is the time to remove some of the props and see if the child can do the same in an unrelated setting - so we take it to the formal work area. To begin with use 2 sets of dissimilar but 'familiar' objects

eg:

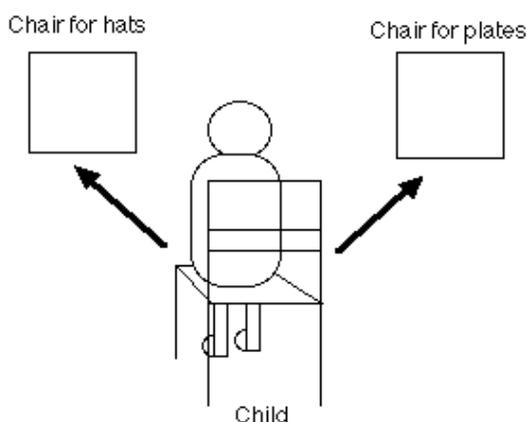
hats - child's hat, other similar hats

plates - child's plate, other similar plates

(the hats are similar, the plates are similar but there is a great difference between the 2 groups - in texture and purpose).

In teaching the child to match and sort it is important that s/he move in space and explore the object fully. So, use baskets to hold the objects, putting these on opposite sides of the child on separate chairs. Then co-actively put the child's plate on one chair and the hat on the other.

eg:



Do the same with the next hat and plate. Then, hand the child another plate, explore it together and indicate that s/he is to move towards the correct chair. Once there you will co-actively gesture "the same" while feeling both objects and gesturing what they are. Remember to vary the positions of the objects ie don't always put the hats on the left-hand side.

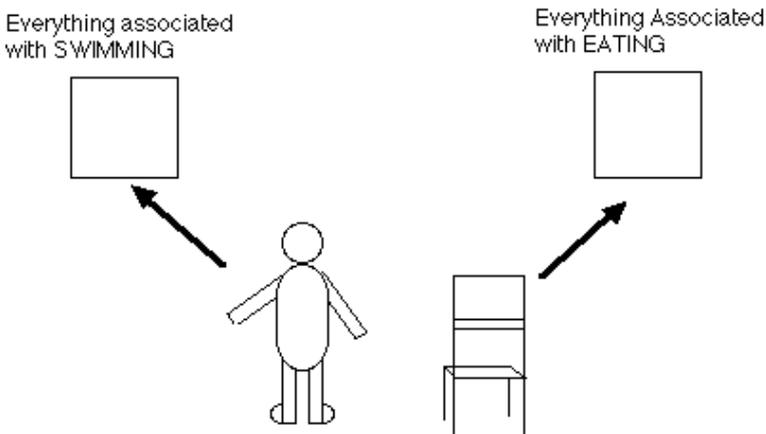
Gradually you can increase the number of objects used and then lessen the differences between them eg you could sort different kinds of clothes or different kinds of dishes. After some time, and having drawn particular attention to the identifying features it may be possible to introduce miniatures to the sorting eg doll's clothes, etc.

Reading

Confrontation between the Young Deaf-blind Child and the Outer World page 20.

How do we classify objects, activities, places with the child?

The next step in helping the child broaden her/his concepts is to put together all the objects used in a particular activity. We have already made reference to this when we talked about memory boxes for activities. Now we distance the child from the natural setting and help her/him to identify the objects for 2 very different activities eg:



Then, as in the case of sorting objects, the number of activities can eventually be increased and you can use similar activities. Be careful though, the child might get confused, don't tell her/him that the things are the same, rather signal "eating" (things) or "swimming" (things) or "going home" (things), etc.

When the concept of "room" is introduced you will have great fun moving furniture! However, as soon as the child begins to understand miniatures, you can make it more controllable and use a dolls' house.

A further means of classifying is to introduce concepts such as food, clothes, etc. Before this is done the child must know the names of the individual items. Drawings are a great help here.

People can also be classified - in fact this could be the beginnings of sex education for the child. Using familiar people you can put drawings or photographs, or, for the child who is blind, IDs into the different groups eg all the boys, the girls, the men, the women and so on. Eventually the child will be able to differentiate between the sexes and classify according to occupation.

How can we classify/sort emotions?

Earlier in this topic we recommended that you help the child to identify the various emotions through particular facial and bodily movements. You will also have used drawing to reinforce this eg:



Barbara is **happy**



John is **sad**



Mary is **angry**

Now is the time to broaden this concept. You may approach it in the same way as that used for activities:

For the deaf child with no residual sight:

Identify situations where there is an extreme example of a particular emotion by starting an angry, happy, sad, etc box. These should contain a few things which remind of what happened. Give the child a natural gesture at the same time. When the next similar situation arises, give the child the gesture and direct her/him to the appropriate box. Make sure the child associates the objects with the previous situation and is not just naming the objects used.

For the child with some residual sight

Start a happy book, sad book, etc and, with the child draw the particular event when s/he experienced the emotion. (Story drawing will be explained in [Module 5 Topic 4](#)). Each new occurrence is added to the appropriate book and the child is constantly reminded of these experiences and, the means of identifying them.

What about behaviour?

From the earliest days the child will have been made aware of the times you were angry or happy. You will also have given some simple explanation of the reason eg

(mimed) You finished your food - I am happy

(mimed) You kicked Andrea - I am angry. Andrea is sad

It is important to exaggerate these by hugging the child, swinging her/him around, etc when happy. Stiffening your body, maybe holding the child firmly by the shoulders or putting her/his hands on each side of your face while you say "NO" loudly will indicate when you are angry. Eventually some abbreviation, some natural gesture may be used, but still continue to exaggerate the emotion in your body. Then the good and bad experiences can be put into a book and linked with the appropriate emotions. So, the child's record of the times s/he was good will contain happy emotions and will be put the happy book. The occasions when the child upsets others, etc may be entered the adults unhappy book.

As the child's awareness increases so will her/his ability to understand the outcome of a particular behaviour:

when it is exaggerated

when there is consistency

when the natural results are brought to her/his attention and the reward or punishment is in some way linked with the action

eg:

John kicked Andrea -

Andrea is crying, she is sad, her leg is sore, she cannot walk.

The adult is sad.

John will not go to the shops with Andrea.

John must say "sorry" to Andrea.

It is important to remember that all of this must be made clear to the child. S/he must understand that "not going to the shops" is linked with the kicking and that after that they episode is finished. And it must be finished - should not be brought up again by another adult or child, the only connection being the reference to it in the unhappy book.

Overall summary of topic

The child who is deafblind develops concepts of the world around;

when we make experiences meaningful for her/him,

when objects, places, time, activities, persons and emotions are identified for her/him and are given a characteristic or label,

when we fix events in the child's mind (using objects to help her/him remember),

when we encourage the child to communicate using these identifying objects.

when we provide motivation.

Note

An overview of how concepts are developed at different stages of the child's progress and how method and curriculum are linked may be found in [Module 6 Topic 2](#).

Video

Now look at

[Video Tape 2: Learning and teaching](#)

Part 3: Developing concepts

Bibliography

Jungens MR (1977) Confrontation between the Young Deaf blind Child and the Outer World Swets & Zeitlinger BV - Amsterdam and Lisse

Appendix A

Activity 1

Instructions for the colleague presenting objects to the student

The purpose of this exercise is to give the student an experience of identifying objects through touch and of comparing similar objects so that s/he will recognise the specific characteristics which distinguish similar things from each other. When collecting the suggested items, or others, choose those which are alike, otherwise the student will not have to think and will identify them too quickly. (This is the opposite of what you would do with a child who is deafblind; when objects for sorting should, in the early stages be as dissimilar as is possible).

Suggested objects

teapot and small watering can (these are basically similar)
large torch and rolling pin
pencil and ballpen without cap '
bracelet and napkin ring
necklace and belt
a paper hanky and a piece of kitchen roll with perforated ends
or anything else you may think of.

These objects should be presented in pairs to the student allowing about 30 seconds for identification. Give no clues, verbal or otherwise and do not respond when s/he names the object, just present the next one. There should be silence on your part, throughout the exercise.

After the student has been presented with all the objects ask her/him to remove the blindfold and look at each object as s/he again touches and names them.

It would be helpful if, after the exercise you both discussed how the objects were identified and how the objects in pairs were differentiated from each other.

Did you come to the following conclusions in your discussions?

When your sight and hearing are restricted an object can be identified by

touching it

moving your hands over its various parts

noting the characteristics which makes it different from other things

This again emphasises how important it is for the child who is deafblind to be involved with objects, to be allowed to touch them, explore them in as many ways as is possible and to use them for a purpose. All of this will give her/him an internal "picture". How did you recognise the teapot? Probably it was because the object you were investigating had a spout, a lid and a handle on the side opposite from the spout. But what distinguished it from the watering can? Wasn't it the size, the length of the spout and the fact that it had no lid? Or again, how did you recognise the paper hanky? Was it not its size and its texture? The piece of kitchen roll will have been larger and will have a rougher texture. So, in order to identify and distinguish an object from a similar one you need to have some previous experience in using the object, at the same time you will have to pick out (for you this will be unconscious) some identifying **characteristics** in order to store it internally for future reference - to have a peg to hang your information on. You are then ready to name the object so that, in the future you can use that name to express and receive further information.

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[Topic 4 Using experience to develop communication and language](#)

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A resource for staff working with children who are deafblind

Module 5 Topic 4

Topic 4 Using experiences to develop communication and language

One of the dangers we could easily fall into when teaching language is to isolate it from the real life situations it applies to. We must always keep in mind that the child who is deafblind will only learn to use language when s/he is

- motivated to communicate
- and taught in and through every little daily occurrence.

Communication is contact between people so our first step in teaching language is to initiate dialogue between the adult and the child.

In order to communicate a child ideally needs the following

- an adult to relate to
- the use of her/his senses (especially the distance senses)
- a reason (a personal need or a response to a stimulating environment)
- an ability to manipulate or move within this environment

As you well know the dual sensory impairment affects each of these key factors. The child who is deafblind will often have difficulties

- bonding with mother or carer
- developing perception of the environment
- motivation
- turn-taking
- distancing her/himself physically from an object
- imitation

Most of these points have already been looked at in [Module 1 Topic 4 - Communication](#) and [Module 3 Topic 3 - Effects of deafblindness on language and communication](#). (It would be advisable to have a quick look at these before you go any further.)

How will the child who is deafblind communicate?

Generally speaking the child's communication will develop along the following lines:

initially

- screaming
- pulling the adult's hand

then after training

- using objects
- using natural gestures
- using drawings and pictures (early graphic conversation)
- using formal gestures or signs
- using words (spoken, written or fingerspelled)

Motivation

One of the great dangers in teaching a child who is deafblind through our suggested methods, is to create too secure an environment. Initially the child needs to understand and anticipate what is happening, but once s/he shows signs of recognising routine, etc, an element of surprise should be gently introduced. If the child has no need to express her/his wants, because they are all met, or has nothing to attract her/his attention because events are too predictable, then the child will become bored and will fail to communicate.

So as soon as the child shows signs of familiarity with routine and a tendency to anticipate introduce small changes within the

structure. An example of this would be during the dressing programme when a necessary and obvious item, such as a shoe, "disappears" from the activity. The child, used to the routine and familiar with the items, will be stopped in her/his tracks and will, hopefully, search and even ask the adult for it. Another suggestion would be to replace the item with either another dissimilar one, such as putting a spoon where the shoe should be, or replacing the shoe with an adult's one. Or again, wrapping one of the items needed for a familiar activity into a parcel and asking the child what is inside it (when it is something to do with the activity the child has some chance of getting it right). Or, for example, when dressing, comparing the child's clothes with the adult's, and so on. Lots of simple situations can be created to encourage the child to communicate and to keep her/him and the adult alert.

Of course following the child's interests is another way of getting her/him involved and communicative. In the early days the child will be inclined to scream or pull you to what is wanted, as the natural gestures will not be understood as a means of communicating needs. Here, familiarity with the child and her/his likes and routine will help the adult to interpret what is wanted and so the "name" can then be co-actively gestured with the child and her/his needs satisfied. The time will come when, having repeatedly gone through such a performance the adult gradually withdraws help and waits, possibly even through a temper tantrum, for the gesture to "click" with the child. Any slight attempt by the child to do this should be instantly rewarded both with the object required (if this is possible) and by praise (in whatever form suits the child). The waiting time needed for the child will vary, only an adult familiar with her/him will know the dividing line between frustration and a possible fruitful response.

You will of course realise that this is the approach used naturally by any mother with her child. It is called the seizing method by Van Uden. If you have the opportunity, observe how a mother follows the gaze of her child and, if possible, gets the child into close physical contact with the object, naming it encouraging the child to repeat the word and talking about it in simple repetitive sentences. Or again, the child might point at something and make an attempt at the name, whereupon the mother gives it the correct version and goes on to enlarge the experience by talking about it in simple sentences. Van Uden discusses this in detail in *A World of language for Deaf Children* (a book you are encouraged to have available for easy reference). He calls it the maternal-reflective approach. He maintains it is the way of teaching language to the child who is deaf. However, when that deaf child also has a visual difficulty s/he will not be attracted to the environment. Therefore we make even greater efforts to "seize" whatever the child shows an interest in and is secure with, or can understand ie within her/his daily routine. We, like the mother, give it a name (using natural gesture and speech) and, when the child is more advanced, incorporate it into the situation by the use of simple sentences.

"The most important thing is that educators develop a natural approach of constantly translating things and activities into gestures for and with the child, trying to "seize" on whatever the child tries to indicate and feed it back to the child again through gestures." (Visser T, 1985).

Where do we begin?

We will look at the development of language for the young child who is deafblind under the following headings:

- Resonance
- Co-active movement
- Distancing
- Early graphic conversation
- Structured language (fingerspelling, signing, later graphic conversation, speech)

(See footnote)

The child who is functioning through her/his near senses is caught up, as we have already said, in her/his own body and understands and relates to the environment only in so far as people and objects give physical pleasure.

Our initial aim is to be accepted by the child and so give her/him the security needed to venture into the world round about. To do this, we attempt to enter into the child's world. Remember what was said about the mother of the "normal" child? She relates to the young baby through her/his body by tickling, playing games, etc? She does this because that is where the child's interest lies. So too, with the child who is dual-sensory impaired, we begin with the child's movements, the things s/he is interested in and use them to help the child become aware of her/himself as having an effect on the things round about.

Footnote: [Module 5 Topic 5](#) may help you understand these stages more fully.

The Glossary will explain the terms used.

Resonance

The first step in entering into the child's world is to resonate the child's movements. (Van Dijk uses the term "resonate" to describe the response the adult makes to the child. To resonate means to "vibrate in sympathy with"; to reflect what someone else is doing.) We reflect the child's movements back to her/himself so that an awareness of self grows. One way of doing is to sit on the floor, (or wherever the child is), close to her/him and gently and sensitively imitate the her/his movements; eg:

the child is banging the table
the adult joins in the banging
the child stops
the adult stops
the child begins

the adults begins
and so on

At this point the child's movements are only reactions to stimuli. When the adult resonates/reflects/echoes the child's movements, the child is encouraged to shift self-stimulatory behaviours to behaviours that involve other persons and objects.

This stage of resonating applies not only to the child's movements but to all other areas of her/his life. We observe and enter into the child's likes and interests; doing the same things, echoing her/his sounds, following where s/he is looking and gently interrupting the "flow" every now and again, checking for awareness and a signal to continue. At this stage the child's day will consist of all her/his favourite activities (even if they seem bizarre to you), essential care skills and body awareness activities.

(Further information on this may be found in [Module 5 Topic 5.](#))

Remember

- Keep the day simple, follow the same routine as far as is possible
- Respect the child, give her/him space
- Don't force yourself into the child's world; be sensitive, gentle yet firm and s/he will slowly begin to accept and trust you.

Summary:

Resonance helps the child to communicate

- by helping her/him become aware of self and another
- by initiating turn-taking
- by using motor activity to initiate signalling through the adult responding to this signal behaviour.

Co-active movement

Co-active movement is an extension of resonance, the difference is that now the child is more conscious of the adult and the turn-taking interchange/dialogue.

Initially the movements used will be the child's favourites. The adult and child should be in close body contact eg

- the child on the adult's knee, or
- between her/his legs while sitting on the floor, or
- while walking, the child having her/his back to the adult, or
- the child lying on top of the adult (back to chest) while rolling.

The movements are done in sequence, and this is continued until the child is familiar with it.

A possible sequence of favourite movements could be (child on adult's knee facing each other)

- Child and adult say from side to side, perhaps about 6 times
- Adult bounces child on knee again, about 6 times
- Child holding adult's hands sways backwards.

All through this sequence the adult should pick up any vocalisation the child makes, putting emphasis on the intonation; making it into a little "song" for each separate movement. If the child remains silent the adult could initiate this, at the same time being alert to the child joining in or changing it. It is important to keep in mind that the "songs should remain the same for the same activities, otherwise the child will be given the incorrect clues.

After some days (or longer) of doing this, the child will have internalised the pattern and so evoking of **signal behaviour** can begin ie

The adult

- interrupts the sequence ie pauses before or eliminates the child's favourite movement
- observes the child's reaction, being alert to any signal from the child indicating her/his desire for the favourite ie the child might touch the adult's hand for the backwards-movement
- responds immediately to reinforce the signal

When child does not appear to be using a signal the adult should direct her/him into a carefully chosen one, again, reinforcing this by responding immediately with the desired movement.

Gradually the sequence can be added to; each new movement coming at the end of the familiar chain. Then the physical distance can be increased, the adult and child making contact only through hands. The sequence could look like this (child on knee to begin with).

- child and adult sway from side to side
- child bounces on adult's knee
- child, holding adult's hand, sways backwards
- child and adult clap hands together
- child is "jumped" off adult's knee

- holding hands, child and adult twirl together
- child and adult crawl together

etc

Remember

These are only suggestions, the ideal ones are those you have noticed the child enjoying at other times and incorporated into the exercise. The child is not imitating, s/he and the adult are moving co-actively.

(Further information on this may be found in [Module 5 Topic 5](#))

Helping the child to signal for an activity

We have already mentioned the importance of the child's routine in the learning of language. In [Module 5 Topic 5](#) we talked about using objects to identify activities and how these can be used as a concrete means of identifying the sequence of events. While doing all this we must be constantly on the look-out for any movement the child uses to signal what is to happen to her/him; eg:

putting a finger into the mouth or rubbing the tummy before eating

If this happens reinforce the signal immediately by doing what the child wants. If after close observation there is no evidence of signalling, look out for any movement the child makes during the activity which could possibly be used as a signal

So, the steps towards helping the child to signal for an activity are:

- identify an object to represent the activity (see [Module 5 Topic 3](#)); eg a spoon for meal times, a sponge for bathing
- carry the ID (identity) to the appropriate place for the activity
- isolate a movement which is part of the activity or one the child initiates and use it to identify the task eg bringing both hands to the mouth could represent the drinking action, while touching the mouth with one hand could mean eating. This is called a **natural gesture** (see glossary)

Later

- the child carries the activity ID to the appropriate place
- immediately before the activity the adult co-actively makes the natural gesture with the child
- the activity proceeds, but at various points during it the adult directs the child's movements into the gesture so that **s/he becomes aware of it** as being closely associated with this activity.

Remember

The objects and movements selected should ideally be initiated by the child.

Helping the child to signal for an object

Now we can start to look more closely at the objects being used within the activities. The ideal one to begin with is dressing. Later on, in the topic area on curriculum [Module 6 Topic 3](#) you will find details of the development of this area; for the moment we are just identifying it as a means of teaching language.

The child will already have some familiarity with the sequenced steps in the dressing programme. Now before each garment is picked up the adult makes a movement coactively on the child's body to represent the garment coming next; eg:

The identifying features of a jumper would be the body and the long sleeves. So, holding the child's hands the adult moves the hands down the child's body, then one hand down the left arm, then down the right arm. Then the jumper is co-actively put on the child.

Remember, each garment must have a distinctive movement and the natural gesture, as it is called, must always be done the same way with the child.

Slowly other activities can be looked at. When the child shows some familiarity with the routine, natural gestures for the objects involved can be given coactively.

Summary

Co-active movement helps the child to communicate

- by furthering the child's awareness of what s/he is doing
- by isolating movements as IDs for activities
- by initiating signal behaviour and thereby starting communication
- by reinforcing memory and anticipation

through

- the adult moving co-actively and directing the child into the desired movements and activities

- the adult responding immediately to signal behaviour
- the child identifying activities through movements.

Distancing

We have already made reference to the tendency of the child who is dependent on the near senses to be "at one" with the things and people round about. There is little awareness of the sense of otherness which is the beginning of symbolism. The child cannot refer to something or someone unless s/he sees them as separate and has a means of referring to them. So far we have examined how this can be initiated in the child who is deafblind. Now we will look more closely at how the physical distancing between child and person or object can be developed and slowly replaced, to some extent, by communicating through symbols.

We will discuss our approach under these headings

- withdrawing help
- drawings (a new type of symbol)

Withdrawing help

Up to now the child and adult have been moving co-actively through a series of familiar movements. When the child has reached the point of recognising the sequence and is secure in the movement the adult should gradually withdraw support and increase the distance between him/herself and the child. Slowly the adult "drops out" of the movement allowing the child to continue independently. It can happen that the child will interpret this as a clue to discontinue the movement. The adult should then maintain some slight pressure on the child's hands eg touching the back, as an indicating to continue. The child will eventually get the message!

Naturally the child will still use the natural gestures within the sequence of movements. However, to enable the child to ante a gesture with a particular movement outside the sequence the adult should occasionally give it to her/him in another setting, doing the appropriate movement after it, coactively if necessary.

The natural gestures used to symbolise an activity can also be distanced in space and time. Slowly, over a period of a few weeks, the gestures can be given at a greater distance from the activity and not just immediately before and during it. Eventually the child can be given the gesture when s/he collects the ID from the timetable boxes. In fact the child having reached this stage, will probably start using the gesture to indicate her/his wants - something which, as you know, needs to be responded to immediately.

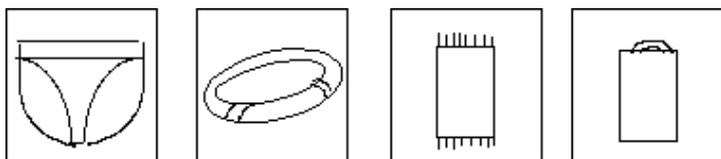
Up to now the child will have functioned in a highly structured, organised environment. S/he should be secure in that and with the adult concerned. But, the aim is to get the child to control that environment, not to be at the mercy of it so, in order to get her/him "thinking" and communicating, elements of surprise may be gradually introduced. For example, before the child starts the dressing programme remove an obvious or favourite article. What does the child do? Hopefully start "looking" for it and signalling - maybe even turning to you with the gesture. This can be and should be fun for all concerned and will not only encourage communication and socialisation but also put an element of excitement into an activity that otherwise could be monotonous.

The development of symbols (something that represents or stands for something else) is basic to the development of language, and hence learning. At this early stage of distancing we can introduce the child (with some sight) to another type of symbol, namely drawings.

Drawings (a new type of symbol)

(Further development of this may be found in Module 6 Topic 3 Drawing)

You will know that while we are concentrating on all this movement we are also helping the child to use whatever residual vision and hearing s/he may have. We are also training the child to integrate the many sense impressions being received in order to gain an adequate perception of the world. Drawings are another means of fixing symbols in the child's mind. Once there is a basic understanding of them they may be used to "seize" what the child is trying to say. Equally the child learns to use drawings to organise an activity eg all the things the child needs to go swimming:



the child's swimming trunks, float, towel and swimming bag

Drawings are initially introduced to the young child through outlining familiar objects and gradually drawing freehand. (Details of this method may be found in Module 6 Topic 3 Drawings.)

Of course, once the child has achieved some mastery in this it can be used to help communication. Very often the dual sensory impaired child finds it easier to explain their wants when they can be drawn. Little games can be used to help the child understand this; eg:

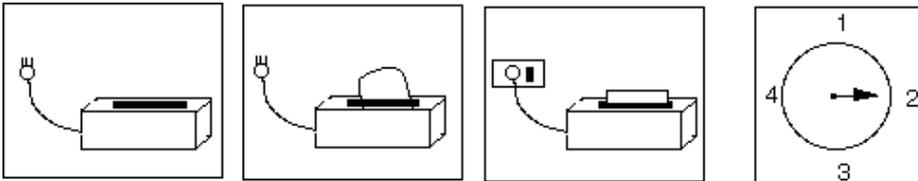
- Put a number of small familiar objects before the child.
- Draw one of them and ask the child to match it with the correct object.
- In the same way get the child to draw one of the objects and you match it

(The child will enjoy the exercise more if you match the drawing with the wrong object.)

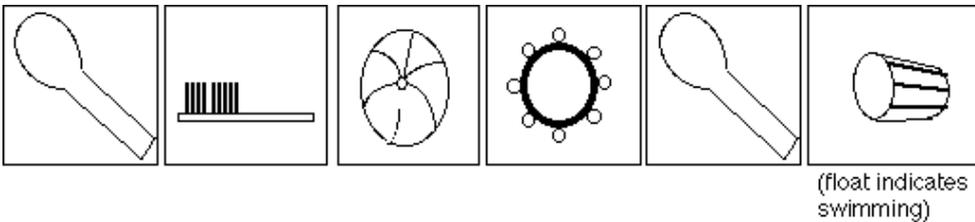
Another game to reinforce this would be to hide for example, one of the child's shoes. On reaching that stage in the dressing programme the child will, hopefully, search for it. The adult then hands the child a felt pen and clip board and asks her to draw what is wanted. Once this is done the adult gestures the name of the object and shows the child where it is.

At a later stage drawings may be put on small cards and used to demonstrate the sequence of events within an activity; eg:

the steps involved in making toast:



In addition to this the child's timetable can now be drawn daily. This will replace the clumsy boxes or pockets necessary up to this stage.



Drawings therefore

- develop the child's understanding of symbols
- lead to an understanding of 2 dimensional representation
- assist in communication
- lead to reading

For the child who has no usable vision a thermoformed copy of the object is used. However, this is a much slower process and will only come after the child has a good inner "picture" of each object.

Remember

This use of drawings is, first of all, a method of teaching the child to understand her/his surroundings and to communicate - it is not a means of teaching art.

(Further information on this may be found in [Module 5 Topic 5](#))

Reading

A World of language for deaf children pages 29 172-179

(This is for the child with some residual vision)

Summary

Distancing helps the child's development of communication and language

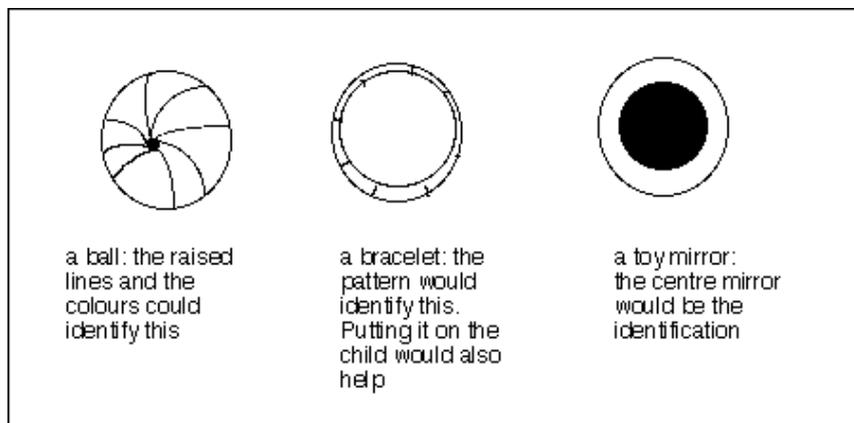
- by developing symbolism in the child
- by encouraging communication
- by bringing the child closer to imitation
- by communicating without being physically involved through the adult
- gradually increasing the physical distance between her/himself
- and the child
- introducing a time element between the activity and its ID

- using drawings as another form of representation
- communicating through natural gesture

Activity 3

Perhaps you would like to practise some simple drawings yourself before attempting them with your child. Remember, artistic sketching is not what we want, it is a simple outline which you trace with your finger, line by line. You then fill in any major aspects that were not included in the outline. Emphasise the identifying feature.

Here are some examples:



Try the following yourself

a table and a stool,
a cat and a dog
your friend/mother/father and yourself

How do we use "graphic conversation" in the early development of communication and language?

Before we go any further it is necessary to point out that graphics should only be used at this stage if they are a help to communication. If, on the contrary they slow up the whole conversational process they should be left to a later date or simply as a back-up exercise. The child who is dual-sensory impaired with some vision often finds it easier to explain what s/he wants to communicate, or to understand what the adult is saying if there is a means of drawing it.

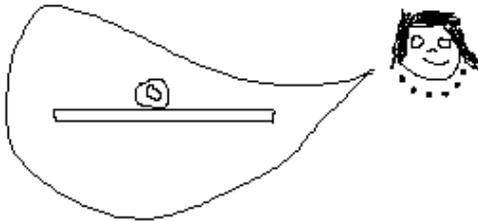
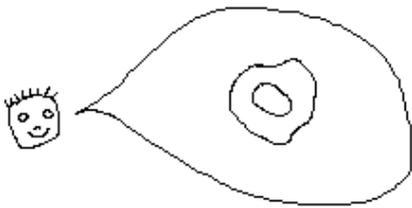
We have already mentioned the little games that may be played to help the child understand that drawings can be used to communicate what is needed. But they can also be used to illustrate the conversation and reinforce the adult's seizing and expanding of the situation.

This is the beginning of graphic conversation and, in many cases the point when conversation "clicks" with the child. If given a felt pen and paper or white board when obviously wanting something the child will, more often than not attempt to draw the required object. Hopefully, someone will be able to recognise what is needed and get it for the child, then the dialogue can be developed somewhat on these lines.



Child attempts to draw his favourite toy - a mirror.

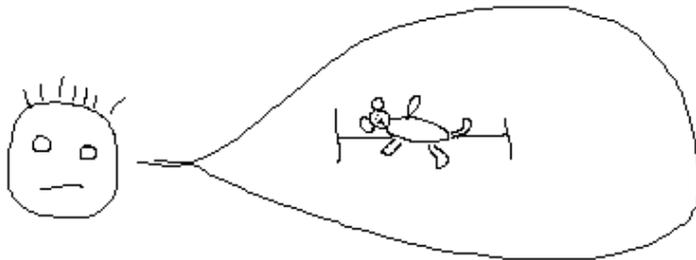
Adult then responds, putting the interaction into conversational form ie a balloon around what each person is saying. Then colours it co-actively with the child.



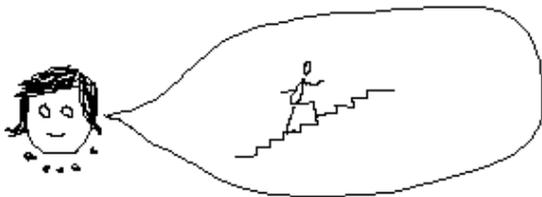
"The mirror is on the rug"

Sometimes the child is unable to draw what s/he wants but can mime it. The adult will then do the drawing for the child, allowing her/him maximum involvement.

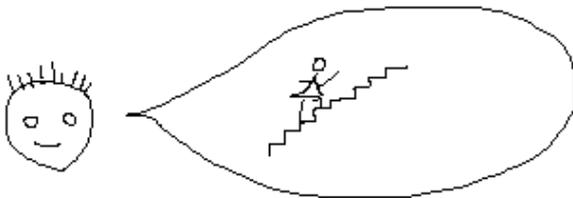
Little stories about daily or unusual happenings will eventually develop. An example would be



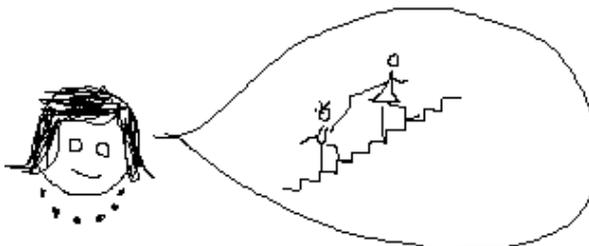
The child through the drawing indicates that he wants his teddy which is upstairs on his bed. The dialogue then begins and is recorded like this;



(Adult) "You go upstairs and get teddy"



(child) Child wants adult to get teddy



(adult) "We will go upstairs together"



It is a good idea to keep these conversations in the child's file along with drawings about experiences. They not only supply information to home and school but are a concrete means of initiating further conversation.

Remember

- As far as possible keep the flow of signed conversation going; don't stop to draw in the middle of it unless either party needs to clarify something.
- Use balloons to identify what and who is communicating.
- Use a simple drawing for both persons and objects incorporating the IDs.
- Involve the child in the activity whether by encouraging her/him to draw, or co-actively drawing the child's part or by colouring the drawings.
- Be quick or you will lose the child's attention.

Reading

You will have greater insight into this subject if you now read *Confrontation between the Deaf-blind Child and the Outer World* pages 21 - 25

How we help the deaf child who has no residual vision?

Drawings will of course, be of no assistance in helping the young deaf child who does not have residual vision. There is therefore a need to continue to use objects of reference, gradually making them smaller and more abstract so that they can eventually be used on a board. The following interaction could be recorded as follows:

The child "asks" for a drink
The adult takes her/him to the fridge and gestures "in the fridge"
They take it out together
The child has the drink



Wire ring symbolising child



part of the handle of the cup

(child is already familiar with these symbols)

Adult and child co-actively touching the adult's chest and saying "Judy said, "The drink is in the fridge"" and recording it thus:

Symbol for Judy



Cold oblong of metal to symbolise the fridge with the symbol of the cup on top



Then, co-actively touching the child's chest again the adult says "Mary has the drink" and recording it like this



The symbol for the drink on top of the symbol for the child

Thermoformed copies of the symbols may then be used.

Naturally this form of recording is extremely crude and has many drawbacks, but it is necessary to the development of communication and an important introduction to

braille. This is approached in much the same way as the child is introduced to fingerspelling (see next section), initially using the first letter of a word to replace the previous symbol and using a combination of brailled "words" and abstract symbols to illustrate conversations.

So far we have brought the child to the point of using natural gesture, drawings or abstract symbols to communicate basic needs and simple day to day experiences, but there is still a long way to go. We now need to introduce her/him to structured language

How do we introduce structured language to the child?

Up to now we have been attempting to develop symbolism in the child through the use of natural gesture and drawing. What we must keep constantly in mind however, is the absolute necessity of backing this up through repeated exposure to the symbols being taught in as many and varied situations as is possible. At this stage sorting in the natural situation putting away the child's clothes, the dishes, etc as well as formal backup sorting exercises are essential to the child's development of concepts and therefore symbols.

The name we give something is the outcome of what we do with it, what it is for and our experience of it. It has meaning in a context.

Word symbols are therefore developed

- through conversation and
- in sentences

This applies whether our "words" to the child are spoken and/or signed.

We must therefore guard against using single words. We must pick up the child's attempts at using a symbol to communicate and give it back to her/him in a simple sentence.

Having acquired a vocabulary of natural gestures (and probably some BSL signs) we should, unless the child has a physical disability or a recognisable motor disorder, then introduce her/him to fingerspelling.

In the particular approach we are presenting, one handed fingerspelling is the method used because it is more rhythmical and contained than the two handed version. The transition from natural gesture is also smoother.

We will look at the various aspects of the development of word language under these headings:

- Introduction to fingerspelling
- Using speech
- The combined use of fingerspelling, speech, and writing for communication.

Introduction to fingerspelling

Fingerspelling is, in the early stages, closely linked with and built on natural gestures.

To begin with the first letter of the word is incorporate into the natural gesture the child uses. So for example, if the child's natural gesture for swimming is to move her/his arms then, as s/he is making the swimming movement her/his hand is shaped into the letter S. To begin with only gestures for words beginning with different letters are used so the child would be given; eg:

S with the swimming gesture

D with the drink gesture

B with the bathing gesture

M with the gesture for Mummy

or whatever words are best suited to the particular child.

Gradually more and more gestures have the first letter included until the child automatically puts her/his hand into the correct letter position before gesturing. All this time, as a backup exercise, the child will have been playing games of imitating the different hand positions of first one letter; eg:

d / i / l / m / r / s / u / a / o / h

and then paired letters; eg:

sh / ho / mu / ba

(in preparation for SHOE, HOME, MUM, BATH)

The letters chosen are those easiest for the child and in preparation for the introduction to fingerspelling complete words. It is important that these paired letters are formed with rhythm as this will aid the child's memory: pauses between letters should be discouraged from the beginning.

These paired letters are now introduced in place of the gesture. So, for example, instead of forming an M and gesturing Mum (whatever the movement is) the adult co-actively replaces it by MU or MUM depending on the child's ability. This carries on to all the other gestures until finally the child is fingerspelling the first 2/3 letters of words and eventually entire words.

Points to remember when introducing fingerspelling to the child with some sight

- Teach the child to move rhythmically into letter positions - so that the word is not a series of single letters but an overall, single unit.
- Never say the letters as you form them co-actively with the child, say the word, or if practising positions (always of 2 or more) make the appropriate sound they symbolise.
- Use short and contrasting words to begin with eg Mum, Ball
- then you can introduce similar ones eg Ball, bike, Dad, drink then Ball, bath, etc.

Note: If the child is having great difficulty with fingerspelling, signing must be developed further, in as elaborate a form as the child can master. Make sure that you have access to help to develop your own signing skills.

How does the child who has no usable vision learn fingerspelling?

The child who has no usable vision will naturally experience greater difficulty in learning fingerspelling because s/he will have no visible feedback to reinforce memory for movements or to correct inaccurate finger positions. This child will therefore need a thorough knowledge of body parts before they will be able to grasp the fingerspelling positions and remember them. Initially it is not necessary for them to imitate but, if they are eventually to become proficient at reading back words from another person's hand they will first of all need to be able to imitate them themselves.

Basically we use the same structured approach as that for the child with some sight, ie we start by incorporating the first letter of the word into the gesture and then, over time, replace the gesture by the complete fingerspelt word. However, we must remember that this child will be much slower to assimilate and remember these letter positions.

Finger games are a very important basis. We should spend lots of time playing with the child's fingers, putting them into all sorts of positions and getting her/him familiar with the adult's fingers doing the same things. Slowly the child is introduced into the formal letter positions and the other play movements are faded out. After the child has for some time used the combined fingerspelt letter and gesture they are gently phased into simple fingerspelt letters, then simple words into the adult's hand. This is done by gently manipulating the child's fingers with rhythm rather than waiting for the child to do it independently. This will prevent her/him getting into the bad habit of pausing between letters. Remember it's the overall pattern of the word the child must absorb not individual letters. After this the adult should feed back the fingerspelt word into the child's hand. Eventually the child will make some attempt at fingerspelling independently. When that time comes, allow her/him the space to attempt the word - but repeat it afterwards manipulating the child's fingers with rhythm, then fingerspelling into her/his hand.

It is extremely important that everyone relating to the child (particularly parents) should know how to do this. Constant practice in interpreting what is being said into your hand will not only highlight the child's difficulties and thereby make you more sensitive to them but will also prevent you from becoming slipshod and fuzzy in your movements.

In addition to what has already been said about introducing fingerspelling to the child with some usable sight the following should be kept in mind

Remember

- Repetition, repetition, repetition.
- Ongoing practice and interpretation for yourself and everyone the child comes in contact with
- have patience

and, at the risk of being boring

- use rhythm in fingerspelling individual words (everyone must use the same emphasis) and in sentences (this will vary according to the meaning)

If the child has little vision and has great difficulty with fingerspelling, signing should

be developed further in a tactile manner; eg the child's hands should lie over (shadow) the adult's hands while they are signing.

Using speech

Deafness is a severe impediment when a child is learning to talk but, when s/he also has restricted vision there is a strong likelihood that speech will not be her/his future sole means of communication. This is because

- the child cannot locate, identify or distinguish individual sounds to make sense of them
- the child may not have sufficient sight to lipread.

Yet speech is not impossible, especially if there is some residual hearing and the child has the appropriate training.

Whatever the degree of hearing loss we must always talk to the child because in that way we are treating her/him in a normal manner. In addition to this the speaker must direct the child's attention to her/his face, throat and chest, talking into the child's hearing aid or hand or near her/his head so that the child feels the vibrations and breath. Or again if the child has the ability, the Tadoma method may be used when the child interprets the lip and throat movements by holding her/his hand on the speaker's face. If there is some residual vision, one-handed fingerspelling done rhythmically, close to the speaker's face and/or writing will be of tremendous assistance in helping the child to recognise and remember language.

An intense programme of sound perception for the child with a profound hearing loss ([Module 6 Topic 2 Sound perception](#)) is essential if the child is to make use of her/his residual hearing. In addition to directing the child towards an interpretation of what is heard it is also important to make her/him aware of the sounds s/he is making. We do this by initially imitating what s/he is reproducing, in fact following through all the methods already discussed in Module 5 ie

- resonating/seizing the child's own sounds
- directing her/his attention
- structuring our approach
- involving her/him motorically (firstly in gross movement then in finer)
- integrating sounds heard and made with the other senses, especially vision and movement

In time the child will be able to make sense of most of the sounds heard so lessening the world of chaos around about. The child may also, with time, be able to cope with a speech training programme similar to that used by her/his deaf peers.

Reading

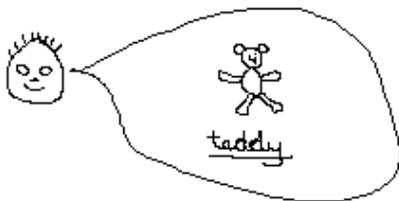
We suggest that you now read *Confrontation between the Young Deaf blind Child and the Outer World* pages 25-26

Structured language develops through the combined use of fingerspelling, talking and writing about daily experiences

The written form is almost an indispensable means of acquiring good language. It has the advantage of being more or less permanent; it can be viewed even after a period of time has elapsed. In the case of speech and fingerspelling once the word is spoken or fingerspelt it is gone. However, it must also be kept in mind that the child may have difficulties in understanding the written or brailled word. It is advisable therefore to present the child initially with a combination of all 3 methods as they will reinforce each other.

If difficulties arise adaptations may be made accordingly (see de Leuw *Exceptional Disorders in the Language acquisition of Deafblind and Multiply Handicapped Children*).

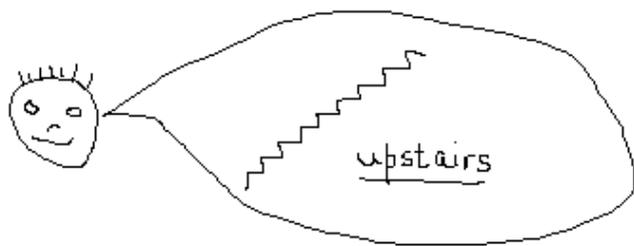
We have already mentioned how graphics can illustrate conversation. Introducing the written word replace the drawings is only a matter of gradually fading the latter away. So now graphic conversation, after the dialogue may look something like this:



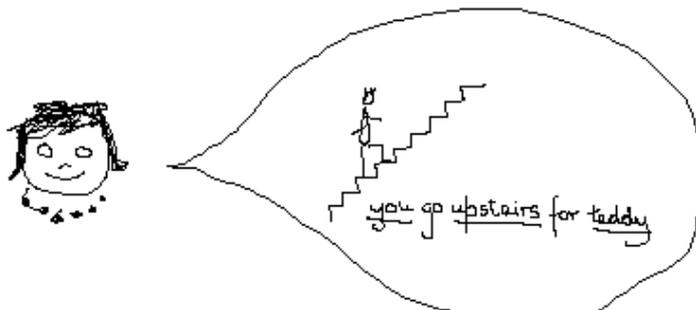
Child may gesture, fingerspell, or draw the teddy. Adult fingerspells the word and writes it, matching it with the teddy.



Adult elaborates on the sentence and perhaps after using a combination of gesturing and fingerspelling writes the sentence putting emphasis on the key words.



Child points upwards and/or draws stairs. Adult puts the new word in.



Adult elaborates on it and again adds the written words emphasising the key ones.

Remember

- Speak and fingerspell with rhythm.
- Put emphasis on the key words, perhaps repeating them afterwards.
- Keep the child involved through colouring and drawing.
- Keep a flow/a rhythm going through the whole exercise so that there is a sense of continuity for the child and her/his attention is sustained.

In addition to all this there is another very important aspect to keep in mind, namely

the child must be exposed to as many different experiences of these words as is possible so that the concepts will develop.

Therefore the child's attention will be constantly drawn, during experiences and using speech, fingerspelling and graphics, to

- all the different places and situations teddy may be found
- the word downstairs (the opposite to upstairs)
- the rooms and things that may be found upstairs and downstairs
- the situations when the child needs the teddy ie when s/he is happy or sad



How does the child develop her/his understanding of a word (sign)?

Every child needs to experience a word in many situations before s/he develops the concept, but the child with impaired sight and hearing must be exposed to a word in dozens, even hundreds of different ways because this child does not naturally learn from experience or environment. This is why it is essential to the child's learning of language that everyone relating to or dealing with her/him knows

- the stage the child is at
- what concepts and words are being emphasised (so that they can be reinforced in as many situations as is possible and by different people)
- how to communicate with the child.

If the child's exposure to language is restricted to "teaching" times learning will be delayed. That is why we have placed such emphasis on teaching the child in the natural situation and have avoided using the word "teacher". Just as the non-handicapped child learns within the family but then broadens out to include and learn from a wider group, so the child who is dual sensory impaired learns new words/concepts from her/his "teacher" but has them reinforced and developed by a wider circle.

What about misunderstandings?

The young child who is dual sensory impaired is likely to become extremely frustrated in the early experience of language.

This may be because

- The child's intention is misinterpreted. S/he may sign/fingerspell/draw/say "coat", meaning "I want to go outside to play on the swing. The adult may take it to mean "Where is my coat?" and then go ahead to give words and sentences that are not in accordance with the child's thoughts.
- The child is not understood quickly enough.
- The child asks for an impossibility; eg to go home **now**.
- The child with little sight is communicating with "thin air" because there is nobody near. (To avoid this it is useful to train such a child to make contact with a person before they start to communicate.)

To avoid this frustration it is important to keep in mind all the possibilities the child's world could have (the will not be too subtle but connected with familiar experiences).

Mary Rose Jurgen strongly believes that

"The child's first expressions mostly demand affirmation. he expresses whatever he knows and wants us to confirm it. If we answer him with a negation, this produces an unsettling effect upon his knowledge and affects his sense of security. Therefore, as long as the child is not able to express himself accurately, we must banish the word "no" from our vocabulary. Concurrently we must meet each expression in a positive way, formulating in our answer the different aspects we suppose the child means to say. Even if we have not caught exactly what is meant, we will not frustrate him this way" (Jurgens, 1977)

Reading

You will find this subject developed further in pages 54-57 of the above book. It is suggested that you read it reflectively.

How does the child's language develop?

We have already mentioned ([Module 5 Topic 3](#)) the importance of a diary for the child as a concrete record of her/his experiences. This is an essential tool in the development of the child's language and will be looked at under curriculum ([Module 6 Topic 3 timetables](#)). A photograph album is another marvellous way of evoking conversation for the child with some usable sight.

How do we start to teach the child sentence structure?

Again, we emphasise that the child who is deafblind should not be taught principally through formal grammar lessons. Experience, conversation, graphic conversation and records of experiences are the basis and the means. This also applies to the child at a later stage when you need to present information to her/him. Van Uden distinguishes different types of conversational approaches.

- i. "Conversation from heart to heart". These are spontaneous dialogues where flow and freedom are the most important aspects although incorrect forms are seized and presented accurately. (see appendix C)
2. Conversation which present information. An example would be a geography lesson when the adult does most, but not all of the talking. This should also be presented to the child in conversational form. (Various examples of these may be found in Van Uden's book *A World of language for deaf children* Appendix I pages 21-279.)
3. "linguistic conversation" when the children are encouraged to reflect on language using diaries, letters etc.

(For examples of this look at Van Uden's book pages 226-227, 231-249.)

- The development of language in the child who is deafblind is extremely complex and the entire process could not possibly be presented in this package. However, keeping in mind what you have learned and experienced through working with the child who is dual sensory impaired, the approach used in The Instituut voor Doven, St. Michielsgestel for children who are deaf, can easily be adapted for the child who is dual sensory impaired. It is strongly recommended that you always have his book readily available for reference. But remember, it is geared to teaching oral language to a child with a hearing loss and not to the dual sensory impaired child who hasn't got the advantage of lipreading.

Reading

The following extracts should help you

A world of language for deaf children (Van Uden)

page 32 the process of language acquisition

pages 34-36 45-47, 126-128 Formal approach & conversational approach compared

pages 53-59 The importance of sentences

pages 60-63 introduction to the breakdown of sentences. (You may like to continue reading this section at a future date)

pages 76-77 The graphic form of language
pages 84-87 Some dangers we should avoid when teaching nouns and verbs
pages 152-154 Reading, questions
pages 159-166 Difficulties that may arise in conversations
pages 226-7, 231-249 Learning grammatical forms through reflection
pages 251-279 Various examples of graphic conversation and diaries

It will also be of help to you if you look at the following extracts in *Teaching and Talking with Deaf Children* (Wood, Wood, Griffiths & Howart)

pages 48-64 Conversation
pages 65-93 Asking questions
pages 104-111 Teaching reading (remember, with the exception of simple stories our children will be reading their own story books).

Remember

Every day and in every way communicate with the child!

Summary

Van Dijk's Anticipatory Approach to Teaching Language

- The child is helped to discover the connection between the
- communicative sign and the meaning through
 - objects of reference
 - natural gesture
 - drawings or 3D abstract shapes (for the child with no residual vision)
 - graphic conversation
- Memory is aided by the child recognising similarities between the gesture and its meaning. Drawings reinforce this.
- Instruction is repeated throughout the child's day in all the natural situations that present themselves and in all the formal back-up sessions.
- Generalisation is mainly promoted through natural situations
- Natural reinforcers are always used before artificial ones
- The learning process is based on motivation

Video

Now look at

[Video tape2](#) Learning and teaching

Part 4: Communication and language

Note

An overview of how communication and language are developed at different stages and how the method and curriculum link may be found in [Module 6 Topic 2](#). Appendix F summarises it.

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Appendix C

Example of Graphic Conversation, a spontaneous dialogue

The child fingerspelt the words in italics, the adult wrote the sentence in the correct form.

Child: I want to visit you at home

Adult: When do you want to come?

Child: On Wednesday

Adult: I'm taking baby Jenny to the doctor's at 2 o'clock

Child: Is the baby sick?

Adult: No, she will get an injection

Child: Poor Jenny, she'll cry (mimed)

Adult: Yes, poor Jenny.

When will you visit? (directing child back to original question)

Child: I cannot visit on Wednesday

Adult: No, what day?

Child: I've lots of work

Adult: Yes, maybe you should come after tea

Child: Yes, Tuesday

Adult: Yes, you visit me on Tuesday after tea.

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 [Topic 5 Following the stages of the child's awareness of the world](#)

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A resource for staff working with children who are deafblind

Module 5 Topic 5

Topic 5 Following the stages of the child's awareness of the world

Note You will notice that parts of this topic have been considered elsewhere in this module. This is because there it is impossible to deal with the various aspects of methodology in isolation. There is overlap.)

The very young infant's relationship with the outside world is primarily, though by no means exclusively, one of reflex reaction to stimuli. But slowly, through the mother's intervention and responsiveness and by means of motor activity the child begins to observe, experiment, explore, imitate, generalise and symbolise, and then relate purposefully to the world around her/him This is the basis of learning and eventually leads to independence.

The child with the dual sensory impairment of deafblindness follows this same progression but unlike the child who has sight and hearing s/he will need a lot of help along the way. In attempting to do this the adult will be constantly observing how the child is relating to and learning from the structured environment and input, and also to the preferences and strengths the child is developing.

The learning stages for the child who is deafblind may be identified as follows:

- a. Resonance stage
2. Co-active movement and manipulation - consecutive stages
3. Distancing
4. Imitation
5. Generalisation - simultaneous stages
6. Symbolisation
7. Self direction

However, we must remember that learning is also determined by the child's individual preferences, physical impairment and cognitive ability. S/he may be at different learning stages simultaneously eg the child may be quite independent in eating but still be dependent on co-active manipulation when it comes to dressing.

The young child who is deafblind is enclosed within a world of self: a world of pleasure and discomfort. Her/his relationship with the external environment is generally speaking one of reflex reaction. (see [Module 3](#)).

Our initial step is to attempt to enter into the child's world in a non-threatening way and then to draw the child out into an understandable and to some extent, controllable environment. We do this through movement.

As Jan van Dijk states

- *"The purpose of education is to develop in the child images, concepts and communication. This is only possible, however, when the child has a solid basis of motor experience"* (Jurgens, 1977)

Resonance

Note: This has already been referred to in [Module 5 Topic 4](#). Further development may be found in [Module 6 Topic 3](#).

Our first means of entering into the child's world is to resonate the child's movements. (Van Dijk uses the term "resonate" to describe the response the adult makes to the child. To resonate means to "vibrate in sympathy with"; to reflect what someone else is doing.) We reflect the child's movements back to herself so that an awareness of self grows. One way of doing this is to sit close to the child on the floor and gently and sensitively imitate her/his movements; eg:

the child is banging something with her/his hand
the adult joins in the banging
the child stops
the adult stops
the child begins
the adult begins
and so on ...

At this point the child's movements are only reactions to stimuli. When the adult

resonates/reflects/echoes the movements, the child is encouraged to shift self-stimulatory behaviours to behaviours that

involve other persons and objects.

This stage of resonating applies not only to the child's movements but to all other areas of her/his life. We observe and enter into the child's likes and interests; doing the same things echoing her/his sounds, following where s/he is looking and gently interrupting the 'flow' every now and again, checking for awareness and a signal to continue. At this stage the child's day will consist of all her/his favourite activities (even if they seem bizarre to you), essential care skills and body awareness activities.

Remember

- Don't force yourself into the child's world; be sensitive, gentle yet firm and s/he will slowly begin to accept and trust you.
- Respect the child, give her/him space.

Summary:

Resonance helps the child

- become aware of self and another
- accept another into her/his "world" and lay the foundations of a trusting relationship
- initiate turn-taking

by

- the adult observing, joining in with the child's movements, picking up her/his interests and using them to structure the day.

Activity 1

If you have not already done so you should record, over a period of a week, all the movements you notice the child enjoys. This is the initial step in attempting this programme with your child.

Co-active movement and hands-on manipulation

Note: This has already been referred to. Further information maybe found in [Module 6 Topic 3](#), the section on movement.

Co-active movement

Co-active movement is an extension of resonance, the difference is that now the child is more conscious of the adult and the turn-taking interchange/"dialogue".

Initially the movements used will be the child's favourites. The adult and child should be in close body contact; ie

- the child on the adult's knee or
- between her/his legs while sitting on the floor or
- while walking child having her/his back to the adult
- child lying on top of adult (back to chest) while rolling

The movements are done in a sequence which is continued over some time until the child is familiar with it.

A possible sequence of favourite movements could be; (child is on adult's knee facing her/him)

- Child and adult sway from side-to-side, perhaps about 6 times
- Adult bounces child on knee, again, about 6 times
- Child holding adult's hands sways backwards

All through this sequence the adult should pick up any vocalisation the child makes, putting emphasis on the intonation; making it into a little "song" for each separate movement. If the child remains silent the adult could initiate this, at the same time being alert to the child joining in or changing it. It is important to keep in mind that the "songs" should remain the same for the same activities, otherwise the child will be given the incorrect clues.

After some days (or longer) of doing this, the child will have internalised the pattern and so the evoking of signal behaviour can begin.

The adult

- interrupts the sequence; ie pauses before or eliminates the child's favourite movement
- observes the child's reaction, being alert to any signal from the child indicating her/his desire for the favourite ie the child might touch the adult's hand for the backwards-movement
- responds immediately to reinforce the signal

When the child does not appear to be using a signal the adult should direct her/him into a carefully chosen one, again reinforcing this by responding immediately with the desired movement.

Gradually the sequence can be added to; each new movement coming at the end of the familiar chain. Then the physical distance can be increased, the adult and child making contact only through hands. The sequence could look like this (child on

knee to begin with)

- child and adult sway from side to side
- child bounces on adult's knee
- child, holding adult's hand sways backwards
- child and adult clap hands together
- child is "jumped" off adult's knee
- holding hands, child and adult twirl together
- child and adult crawl together

etc.

Remember

The movements used must be attractive to the child and/or instigated by her/him. The child is not yet imitating.

Summary

Co-active movement helps the child

- to further an awareness of what s/he is doing
- to initiate signal behaviour; the beginnings of communication
- to remember and anticipate

by

- the adult co-actively directing the child into desired movements and activities
- the adult responding to all signal behaviour immediately

"Hands on" manipulation

A principal means of helping the child who is deafblind to understand and to be positively involved in her/his environment is through "hands on" manipulation. This consists of close physical contact between the adult and child, the adult, from behind, guiding the child through the simple day-to-day activities of dressing, eating, washing, etc. The adult's hands over the child's, guiding her/him through all the natural movements necessary to a task. This body shadowing is the means of teaching new skills to the child who is deafblind.

Note: Body shadowing is not possible for an activity such as bathing; however "hands-on" manipulation is.

Summary

"Hands on"/co-active manipulation helps the child to understand and become constructively involved in her/his familiar environment.

Distancing

Note: Again, there is some repetition of [Module 5 Topic 4](#) here. The subject will be referred to again in [Module 6 Topic 3 Movement](#).

The ability to distance oneself from immediate physical contact with persons and objects; to be able to them from a distance is an important stage in learning. The child who is deafblind will develop this activity if s/he is introduced to it gradually.

Up to now the child and adult have been moving co-actively through a series of familiar movements. When the child has reached the point of recognising the sequence and is secure in the movement the adult should gradually withdraw support and increase the distance between her/himself and the child. Slowly s/he "drops out" of the movement allowing the child to continue independently. It can happen that the child will interpret this as a cue to discontinue the movement. The adult should then maintain some slight pressure on the child's hands; eg touching the back, as an indication to continue. The child will eventually get the message!

Within the various daily activities distance is also introduced when, as the child grows familiar with the simple movements necessary to a task, s/he becomes capable of performing them without help. As soon as there is the slightest evidence of this, withdraw direction. Many children who are deafblind will however still need some contact with the adult. This in no way indicates inability to perform but is rather a sign for reassurance or, for the child who has no usable vision, an indication that they should continue what they are doing.

The natural gestures used to symbolise an activity can also be distanced in space and time. Slowly, over a period of a few weeks, the gestures can be given at a greater distance from the activity and not just immediately before and during it. Eventually the child can be given the gesture when s/he collects the ID from the timetable boxes. In fact the child having reached this stage, will probably start using the gesture to indicate her/his wants - something which, as you know, needs to be responded to immediately.

Up to now the child has functioned in a highly structured, organised environment. But, our aim is to enable the child to have some control over that environment, and not to be at the mercy of it. So, in order to get her/him "thinking" and communicating, we introduce elements of surprise into the routine and structured surroundings. One example of this would be to find a favourite article of clothing before the dressing programme begins. Hopefully the child will start looking for it and perhaps signalling.

Summary

Distancing helps the child

- to develop the first steps towards independence
- to start the process of concept development
- to begin to develop symbols
- to come closer to imitation

by the adult

- gradually increasing the physical distance between her/himself and the child
- introducing a time element between an activity and its ID

Imitation, generalisation and symbolisation

By now the child has begun to refer to familiar persons, objects and activities from a distance. S/he no longer needs to be physically involved, or in touch with them in order to communicate. There is the beginnings of concept development and the understanding of symbols. There is also an increasing awareness of the environment and a growing tendency to interact with it. Independence in daily self-help skills is increasing.

The child should now be ready for a lessening of structure; a broadening of experiences in order to deepen concepts; further exposure to symbols and an acceleration of learning through the acquisition of imitation.

Imitation

(For further detail see Module 6 Topic 3 Imitation)

The ability to imitate is a natural developmental stage for all children. Those who are deafblind can be taught to imitate but will, depending on their individual ability and handicap, always need some extra assistance. Most new skills will need to be taught co-actively but once acquired most children who are deafblind will be able to imitate them in other settings and circumstances. Naturally, this will be easier for the child who has some residual vision or hearing. The child who is profoundly handicapped in both senses will be entirely dependent on touch and the existing internal "picture" s/he has acquired from previously doing the movement co-actively.

So, encourage all kinds of movements and use objects to help; pushing a pram or truck up a hill, pulling a card, jumping into the swimming pool, climbing a tree, packing a suitcase, reaching for something on a high shelf, stretching for something behind the bed, etc. Introducing each one

- first co-actively
- then, by gradually withdrawing support.

Having been exposed to a multitude of movement experiences the child will have acquired a good working knowledge of her/his body in relation to objects and other persons. From this point we slowly bring the child to imitation through the following stages:

- parallel movement
- continuing a movement begun co-actively
- turn taking
- repeating body positions
- imitating movements

(See Imitation, Module 6 Topic 3 for details of these stages)

Fine motor skills can also be approached in the same way, through co-activity, distancing them and then imitating. Again, the natural situation is the ideal one for learning: fastening buttons and belts, zipping up jackets, tying shoe laces, etc can all be done when dressing or undressing, while cutting, (un)screwing, (un)locking, etc are developed while helping in the kitchen. Again, although it is sometimes necessary to create formal training sessions for each of those skills this should only be done if the child is experiencing difficulties with motor control, (and even then it should be pleasurable for the child). When the skill is taught as part of a purposeful activity the child picks up the reason doing it and is therefore motivated. It also prevents the development of splinter skills; ie skills that are independent of others or of an activity. We cannot expect a child who, is deafblind to automatically transfer knowledge learned in isolation to appropriate situations. S/he must experience the reasons for doing what they are asked do if they are to retain movements, and skills and use them appropriately.

Having reached this stage the child is now ready for fingerspelling, either 1 or 2 handed. This has already been referred to in

Remember:

Never expect a dual sensory impaired child to copy a new movement. There needs to have been previous co-active experience of that movement if the child is to translate what is felt on the adult's body on to her/his own.

Summary

Imitation helps

- the child to acquire greater speed and independence in learning new self-help and communication skills
- to develop symbolism.

Generalisation/broadening concepts

In [Module 5 Topic 3](#) we looked at possible ways of developing concepts in the child who is deafblind. When the child has reached the stage of being less dependent on structure we can accelerate our input and expose her/him to a broader range of objects, experiences and people and so aid the development of concepts. At this point backup exercises in sorting and classifying objects, activities and places play an important role. The child is also ready to understand more about her/himself and the various emotions and outcomes of behaviour can be explored. S/he should be introduced to a wider range of people with special reference to a peer group.

Symbolisation

A symbol is something that represents or stands for something else and is usually associated with it in some way. It can be an object, a person, an idea, a movement, a letter, or a number. Symbols are the basic tools needed by the brain for learning and communicating.

In [Module 5 Topic 3](#) we underlined the need to have a way of identifying concepts. If we are to think, reason and plan, we need a condensed means of storing concepts for quick recall and future use. In other words we need symbols. IDs are the first step towards symbolisation for the child who is deafblind. The next, slightly less primitive symbols, are the natural gestures. Drawings are another development. However, as the child begins to relate constructively to the environment s/he is going to have an increasing need for a more sophisticated and formal means of doing so. If the child is to attempt to create inner structures for her/himself, formal language will need to be the accepted mode of communication. So, at this stage concentration is on developing the formal method most suited to the child's needs.

This may be:

graphic conversation
British Sign Language (BSL)
fingerspelling (1 or 2 handed)
speech

or it may be a combination of some of these.

Reading and writing or braille will be introduced through "graphic conversation". (See [Module 5 Topic 4](#)) and the section on Graphic conversation in [Module 6 Topic 3](#).)

Yet another development of symbolisation at this stage is the introduction to number. The child, through being involved in everyday activities such as dressing, washing, setting the table, simple cookery, shopping, etc will have experienced amounts, weights, classification etc. Now s/he can be given a symbol, a name for these concepts and be introduced to number and simple money.

The child with the dual sensory impairment who has reached this stage of development will now continue for some years to deepen established concepts and continue to acquire new ones. s/he will increase in independence, in an ability to communicate with and relate to others. The child's language, because it is taught in natural situations and thoroughly reinforced, will be the channel through which new horizons will open. The basic concepts have been established, the particular approach is continued and the child, depending on her/his innate ability, should continue to learn.

Self-direction

One of the aims of education is to enable the young person to eventually become self-directed; in other words to find her/his place as an individual and a member of society. In order to do this one must:

- know one's personal gifts, limitations and circumstances
- be able to have opinions, preferences and an ability to make choices
- be able to listen to and consider others
- be interested in and informed about the world in general
- be able to persevere in some personal code of values
- be able to plan one's life while adapting to unforeseen circumstances
- to be able to learn from life's experiences and not be damaged by them.

This is the work of a lifetime - all schools can do is to start off the process. The young person who is deafblind will need an experiential means of developing as a person and freedom to learn through mistakes in a supportive environment. The ideal setting for all this to develop is within a supervised bed-sit or flat within the school ([Module 6 Topic 2](#)). Parents must also be willing to allow this supervised freedom in the home if the young person is to transfer learned skills to new situations once they have left their formal education behind.

The key factors in the approach are:

gradually decrease the support given until the young person's maximum level of independence has been achieved (supervision continues)

- allow the young person the space and freedom to experience personal achievement and also failure (within reason)
- intervene only in safety matters or when a situation can be used to further learning
- use "hands on" approach to teach a new skill (if necessary)
- build new concepts on familiar ones, making sure the young person has grasped a concept before moving on (identify and structure the approach to each new area/concept)
- present them with numerous and varied exposures to a new concept (don't shy away from repetition)
- always approach new learning through practical involvement and base it on experience
- discuss experiences and the result of choices made - also alternative choices
- use every situation to develop, promote and use language
- use the conversational approach and teach language structures as you go
- follow the young person's interests and build on their strengths by developing topics of their choice
- encourage peer group interaction
- communicate regularly with the young person's home.

Note: An overview of the links between the particular stages of development and the curriculum may be found in [Module 6 Topic 2](#)

Video

Look at [video tape 2](#): Learning and teaching
Part 5: Stages the child passes through

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Glossary of Terms (used in whole module)

circuit - a series of motor activities within the student's motor capabilities, and which are learned co-actively then performed independently by the child. As the child moves through the circuit three times at each presentation, memory and anticipation are reinforced. Once the circuit is familiar to the child, the adult uses it as an opportunity to encourage communication by "sabotaging" the circuit or presenting unexpected changes.

co-active (hands-on) manipulation - hands-on technique by which the adult (from behind) directs the child through an activity. The adult moves naturally and so the child learns the correct movements needed. As the child shows awareness of movements support is decreased.

co-active movement - the shared moving through an activity which allows the child who is deafblind to learn through the most efficient avenue, the body. It is used within the attachment relationship between the deafblind child and a primary figure.

graphic conversation - a reinforcement of conversation between the adult and child whereby the conversation is drawn or written using balloons around the words or drawings of objects.

ID - see object of reference

imitation - one of the learning strategies commonly used by all children. Development of this strategy in children who are deafblind requires development of a relationship from which the child chooses to participate and then imitate. It also requires an awareness of self and of the other person.

kinaesthetic and proprioceptive senses - the means by which a person, through position and movement, becomes aware of self in relation to her/his surroundings.

object of reference or ID - a symbolic concrete representation for a specific person or activity which is chosen based on the child's experience, motor meanings, and preferred modality (tactual or visual).

resonance - a non-intentional response which resembles imitative behaviour. In early stages of teaching, the adult may offer the child a movement (or sound) which is one of the child's typical behaviours, in the expectation that the child will pick up and do the same. The child is then rewarded appropriately. This is not imitation.

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A resource for staff working with children who are deafblind

Module 6: Learning and teaching Curriculum and Assessment

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by Elizabeth Bryson

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by Ailish Massey

Module descriptor

Aims

This module concludes the section of the course on Learning and Teaching. The course member will gain further knowledge about the application of assessment and methodology in the practical work situation. Detailed early curriculum guidelines are provided.

As CONTACT was developed prior to the introduction of the 5-14 Reforms in Scottish Schools, there is no reference to the Guidelines on Curriculum and Assessment produced by SCCC. Any region, school or individual using CONTACT is therefore advised to bear this in mind and act accordingly.

Objectives

The specific objectives are to

consider the relationship between assessment and curriculum planning.

provide a reference summary of the links between curriculum and methodology.

provide a reference for practical guidelines at the early stage of the curriculum.

Topics

Assessment - Part Two: Assessment, programmes and timetables

Overview of curriculum and methodology

Early curriculum guidelines

Note: Topic 2 is an overview of the child's curriculum at each developmental stage showing how it is linked with the particular methodology we are explaining. The Guidelines (Topic 3) are for reference and as for Topic 2 are not intended to be read in one session.

Style and modes of learning

Reading, practical exercises, discussion

Topic 1 Assessment Part Two: assessment, programmes and timetables

We have already discussed assessment in some depth in Module 4 and now we will look at assessment in relation to the curriculum and the ways in which the child's curriculum is planned and recorded.

Initial educational assessment

Initial assessment can best be described as introducing the child to specific areas of the curriculum and observing his or her response. In this way as stated in Module 4 Topic 4, assessment and curriculum go hand-in-hand. This period is only likely to last between 2-4 weeks.

Assuming that most children will either be quite young (or functioning at an early stage of development) when you first start to work with them, the following areas are suggested as the basic constituents of the initial assessment curriculum.

The main areas are self-help skills:

Eating/drinking

Dressing

Toileting

Washing

Movement

Play (unstructured by adults)

At this time, a daily period of observation will be needed, in a variety of situations and activities, to provide further information about the child as an individual since the initial curriculum should also take into account the child's individual characteristics (see Module 4, Topic 4) namely:

the child's likes (interests) and dislikes

the child's strengths and weaknesses: ie taking account of constructive use of skills (eg carrying out auditory training because s/he responds to sound) and unconstructive use of skills (eg avoiding shiny objects because s/he uses them obsessively).

Remember that in order to get as full a picture of the child as possible, it is important to ask the parents for their opinions. Conclusions about the focus of the ongoing curriculum (and all subsequent decisions) should be fully discussed with parents so that they are kept informed about their child's education and are advised about what they can do to help at home.

Information from observing the child's response to initial assessment should indicate what the focus of the ongoing curriculum should be and possibly how soon new elements should be introduced.

For example, it may be that, for one child eating and dressing and mobility skills are the initial focus with toileting and washing left till later. Visual skills training may be appropriate if the child has some vision remaining and shows interest, while auditory training may not be specifically introduced in the initial timetable. Movement may be limited to movement on apparatus rather than movement on the adult's knee - again following the child's preferences. (Note: this is just one example for an initial selection of appropriate curricular areas based on particular assessment information.)

In the process of assessing the skills of a child within all the areas listed on the previous page it will also be possible to assess other important skills, although these would not be specifically taught at the outset:

Use of senses

Relating to others (interaction skills)

Communication skills

Mobility

Use and recognition of common objects

Body image

Awareness of time/routine

At the appropriate time, these skills will be taught through the everyday self-help activities.

Remember

There must be consistency in:

the approach to each task;

the people working with the child (ideally two at most);

the daily routine

Summary

The initial assessment provides information about the child's response to everyday situations (noting when the child shows anticipation ie attempts the next step in the activity). From this information, an individual programme of work grows out of careful - and ongoing - observation.

Activity 1

Profile of child on admission for a trial period

Name: Sally

Age: 6 years

Notes from the previous school

Rubella, partial sight (light gazes). Appears to be profoundly deaf, has not been tested, does not wear hearing aid. Had been introduced to Makaton in school and made signs for BALL, TOILET and WATER when on her own but not in relevant situations. Shows no awareness of other children or recognition of familiar adults. Sits in corner of classroom if it is very busy but will "explore" if quiet. Likes water and being outside in the playground. Has shown an interest in yellow things but quickly loses interest in them.

Information from Home

Sally dislikes being held. Sometimes shows fear when touched. Poor eater - is fed mainly with baby food and drinks from a bottle. Poor sleeper at night; likes to take short naps during the day. Mother thinks the child recognises her as she always goes for the gold bracelet she wears and smiles. Although she can walk a few steps, mother tends to carry Sally a lot because she is inclined to bump into things and Mother thinks she will get hurt. She is not toilet trained and wears a nappy

Draw up an initial profile of Sally from the information given on admission

use of sight:

use of hearing:

tactile awareness

mobility skills:

eating/drinking:

dressing:

toilet:

washing:

awareness of others:

awareness of self:

likes/strengths:

dislikes/weaknesses:

communication:

What areas should you pick up and develop? How would you do this?

What behaviour would you allow to continue at the beginning but would gradually try to fade out?

What would you use as a reward?

Keeping in mind the points to be considered when a child is admitted, what would be your initial programme for Sally? (general points)

Show your answers to your Headteacher or Staff tutor for discussion. Some suggestions are given in Appendix A.

Aims and objectives

There is often some confusion about the words used to describe the purpose of teaching; eg aims, objectives, goals, targets. We find it helpful to use just aims and objectives as these can be used to cover the main ideas.

When we set out to teach children, we might have a view, possibly an idealistic view, of our underlying purpose, eg "to create useful members of society". But what do we actually teach? We still have to define what is required to be a useful member of society (and not everyone will agree).

Sometimes people worry that stating aims may result in too great an expectation of the child. Remember that an aim is not a guarantee. It merely directs your work so that the child can achieve the best of her/his ability.

Do you remember in Module 4 Topic 1 the aims of education for the deafblind were described? Let's take one aim:

"To have enough personal independence to give her/him a sense of their own value and worth."

Could you start work on that tomorrow morning? It is very doubtful. You will probably be in agreement with the spirit of the aim but it does not really help with your immediate work with the child. Such aims give us the general direction of which way education should go, but we need to be a lot more precise in describing what specific skills the child needs to be independent, and how these skills are expected to develop. This is why we have been referring to educational objectives. After you have assessed the child's response to certain curricular areas, you will have a number (probably a large number!) of objectives for the child. Some of the objectives will be for the long-term, others will be short-term. It might be useful at this point to think what an educational objective means.

Activity 2

Read Teaching the handicapped child Chapter 3 pp 47-53, then consider the following:

Which of these is an objective

To stop Bobby being aggressive

To reduce the number of times Bobby scratches Jim

State which of the following are aims, long-term objectives or short-term objectives:

To reduce light gazing in 1:1 situations

to eliminate light gazing

to reduce light gazing in movement activities on adult's knee

to be independent at mealtimes

to accept food from a spoon when adult loads it

to feed self with spoon

(answers are given in Appendix B)

An educational objective should therefore be:

specific not general

describe what the child should eventually do;

describe the circumstances in which the teaching will be undertaken

be broken down, if necessary into smaller steps.

It will often depend on the individual child whether a particular objective is long-term or short-term. The main point is to set workable objectives for the child, otherwise you may feel you are not getting anywhere. However, it is not always wise to predict how easy or difficult an objective will be. Don't be too concerned if your initial plan is over ambitious. Usually by the first or second review, you will feel more confident in your level of expectations for the child. Also, as the behaviour in question becomes more complex it is not always easy (or helpful) to be too specific - for example in the area of social skills training there are many strands to the kind of learning which you are hoping for eg;

knowing what behaviour is socially acceptable/unacceptable;

knowing when it is acceptable (eg perhaps in private)

understanding the effects of certain behaviour on other people's attitudes.

In general, the more sophisticated the behaviour, the harder it is to specify it in every detail. It can also lead to a lot of paperwork. Try to focus on what you regard as the most useful things for the child to learn within the level of her/his understanding of the world and social relationships.

Programmes of work

As it is quite typical to have a large number of objectives for the child, it is not possible to work on all objectives at once.

This selection of objectives becomes the child's programme, ie a list of the current objectives which indicate what we intend to teach the child, why (towards what objective) and how, within a defined period of time, say a six-week period.

"Programmes" and "Plans" are two further terms which can be used with different meanings; eg a programme is often seen as more specific than a plan. However for our purposes we would use the terms as meaning the same thing, and, by and large, "programme" is used more often.

Please note, that, strictly speaking, a programme is a very detailed and precise account of every step required to take the child from a starting point to the desired outcome. The term comes from computing where the steps are specified in order to instruct the computer to perform certain functions. It is not expected that our programmes will be written so precisely but it is essential that certain points are kept in mind.

Appendix C at the end shows how a child's programme can be devised:

for each broad area of curriculum the objectives are outlined;

the learning environments are indicated;

appropriate teaching methods are briefly specified (where helpful, initial steps, materials and language used can also be included);

The progress, (ie the observed response by the child to the programme) is noted at the end of the set period (this will vary but perhaps after 6-8 weeks).

An important issue to consider when we speak of "outcomes" or progress is the criteria we use to judge children's skills. Various ways exist to evaluate children's behaviour or performance on various tasks, eg

how frequently they do what is required;

how much assistance they need (ie how easily is it done);

how long they engage in the activity.

These can be measured or described objectively. However, in some circumstances judgements must be more subjective; eg:

what standard or level of skill is required?

is the child performing to the best of her/his ability even if this is limited?

It is not always possible to say that a child has mastered a skill or concept. You should, however, state what level of performance has been accepted before you move on to a new objective. You should also check periodically that previous skills have been retained by the child.

Appendix C is just one suggested format of recording a child's programme but it does not have to be followed rigidly - each school will usually work out its own preferred approach.

The important thing is that the written programme should allow consistency and continuity of the work with a child which can carry on despite changes of staff, holiday breaks, etc. It should contain enough information to allow a new member of staff to pick up on previous work with a minimum of difficulty. The programme should always be made available to the child's parents and discussed with them.

Working on a day-to-day basis

It is still necessary to have a means of recording daily progress or significant points (eg behaviour) and this can be done by a simple daily record which is completed by all staff when they have been involved with a child. Note that daily entries should be kept brief. Think who is going to reread this and what will be of interest to them so don't feel that daily record keeping requires a massive amount of writing. It should alert others to progress observed or important points to note.

Timetables

Finally, the child's weekly and daily timetable is drawn up. The timetable organises the child's educational programme. It is vital that all the essential elements of the child's programme are taken account of and this means a certain amount of flexibility is required. However other factors do have to be considered:

availability of staff;

needs of other children;

school organisation.

There are therefore various factors involved in drawing up the child's timetable which will be the most visible means of showing the work being done with the child.

Skills and concepts are not taught in a vacuum but within the context of activities. The timetable condenses and organises the curricular areas (ie activities) for each individual child. The same skills can be taught within several contexts or learning environments and, vice versa, the same context can be used to promote several skills. In fact it is most desirable that activities should be multi-purpose, ie helping to achieve several objectives for the child.

Examples of weekly timetables for children at different stages of the curriculum are shown in Module 6 Topic 2.

Summary

In this section we have been looking at the practical implications of assessment for the teacher, aims, objectives, programmes and timetables all relate to the same basic issues, but from different points of view. They all refer to the way that a school makes clear the nature and purpose of the work being done with the child.

Bibliography

There is no require reading for this topic. However, for those who wish to read further and in more depth the following are suggested:

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Wheldall K, Merrett F (1984) Positive teaching, Unwin Educational Books.

Appendix A

Suggested answers for Activity 1

Question 1

Initial profile of Sally from information given

use of sight - Partial, no recognition of people, explores, sees yellow and shiny objects. Bumps into things. Light gazes.

use of hearing - Appears profoundly deaf, may distinguish sound from silence. Has not been tested. No hearing aid.

tactile awareness - Likes water, perhaps wind/rain (likes being outside). Dislikes physical contact yet accepts mother carrying her.

mobility - Can walk a few steps - she explores but bumps into objects. Mother carries her.

eating/drinking - Poor eater - fed baby food. Drinks from bottle. More information needed from home.

dressing - Information needed from home.

toilet - Wears a nappy - not toilet trained.

washing - Information needed from home.

awareness of others - No recognition of even familiar adults although may have some recognition of her mother (bracelet; allowed to carry Sally).

awareness of self - No information.

likes/strengths - Being on her own, exploring, water, outside in playground, yellow things, mother's bracelet (shiny things?), short naps during day.

dislikes/weaknesses - A lot of activity (loud noise?), being touched, solid food (?). Poor sleeper

communication - Makes movements (Makaton signs) but does not appear to understand them as signals or symbols.

Question 2

Possible areas to pick up and develop in the initial programme would be:

her interest in yellow objects (her staff member might have yellow ID)

her mother's bracelet (could be used for her ID)

water play

play outside in the playground

exploring quiet rooms (those associated with activities)

some physical contact - be cautious

Question 3

Behaviour which would be allowed to continue at beginning but would gradually be faded out:

some light gazing

eating baby food

drinking from bottle

short naps during the day

people carrying her (including mother)

wearing a nappy

Makaton signs for BALL, TOILET, WATER (Would allow her to make them if she wished but would not be given them. She needs to be taken back to understanding signals and symbols).

Sitting on her own (very gradual introduction to others)

Question 4

A possible reward could be initially:

Playing with shiny/yellow object (30 seconds)

Question 5

Suggestions for Sally's initial programme:

Arrival in school - greeted by her member of staff;

then directed to her base (approx 5 minutes);

then to the dining room for something to drink (it might be possible to get her to sit on the adult's lap at this point). Her movements are observed closely and a recurring/favourite one might be picked up and echoed by the adult. (May take half hour depending on mood.);

having possibly established some physical contact, she might now tolerate the adult sitting on the floor beside her while she "plays" with her shiny, or yellow, things in her base. (After a period of time - minutes, or days or even weeks - of doing this, she might accept close body contact and allow the adult and herself to move together.) (Approx half hour);

time on her own in her quiet room to encourage exploration (approx quarter hour);

drink from a bottle;

water play (approx half hour altogether);

time on her own in her base (observed by adult);

lunch, baby food or anything she likes - if possible sitting on adult's knee. Follow method used by her mother eg fed, finger feeding, etc;

time on her own in base - nap if needed;

introduction to something new (Not last activity of the day.) eg a rocker, UV room, soft play - observe her closely - record reactions - try to get close if possible to resonate her movements (approx half hour or less depending on mood).

outside in playground;

time on own in base (5/10 minutes)

preparation for home.

(You may notice toilet training has not been mentioned - this could be the "something new" introduced after first week.)

Appendix B

Answers to Activity 2

Answers 1. (b)

2. aims (b and d)

long term objectives (a and f)

short term objectives (c and e)

Appendix C (1)

child - Sam

Curriculum area Personal independence

ACTIVITY/SUBJECT - Mobility

General Teaching Stage: Distancing

DATE 13.4.91 OBJECTIVE - To walk independently for longer distances ENVIRONMENT - In all indoor situations - school and home METHODS - Adult acts as lead to encourage him to follow. PROGRESS - Will walk unaided following adult for about 4 minutes. Distance walked depends on mood. He will explore familiar setting (98.8.91)

DATE 28.8.91 OBJECTIVE - To walk independently for longer distances - in new situations, especially outdoors ENVIRONMENT - In bounds of school and home garden. To nearby shop, etc. METHODS - Plan outings, shopping to accommodate this. Communication: object of reference and gesture for walk. Gesture to be given when appropriate

Appendix C (2)

child - Jimmy

Curriculum area Personal Independence

ACTIVITY/SUBJECT - Toileting

General Teaching Stage: Co-active

DATE 15.4.91 OBJECTIVE - to reduce incidence of wetting ENVIRONMENT - In school. At home METHODS - Draw attention to wet pants, give TOILET gesture take to toilet. Repeat gesture before putting him on the toilet. Keep record of wet/dry PROGRESS - Rarely wets when working. Has become more active at free time and wets pants less often at this time too. (30.8.91)

DATE 30.8.91 OBJECTIVE - To develop a toilet routine ENVIRONMENT - In school initially. Transfer to home when pattern seems to form. METHODS - Take him to toilet at set times (chart). Sit on toilet without distraction for 5 minutes to relax and become aware of situation. Use rewards and GOOD BOY gesture. PROGRESS - Little progress here. Often wets if allowed to lie down for any length of time. (30.10.91)

DATE 30.10.91 Continue as above

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 [Topic 2 Overview of curriculum and methodology](#)

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A resource for staff working with children who are deafblind

Module 6 Topic 2

Topic 2 Overview of curriculum and methodology

Introduction

(You may like to re-read [Module 4 Topic 2](#) before attempting this topic.)

- The curriculum is the term used to describe all the experiences a school plans for children each developmental stage, in order that they will eventually attain the final learning outcomes, which for the child with dual sensory impairment, are:
- to make sense of her/his experiences and environment and use them to continue the life long learning process;
- to have an effective means of communication;
- to experience satisfying relationships with others;
- to have enough personal independence to give her/him a sense of self-esteem.

You will remember from [Module 4 Topic 2](#) that the four broad curriculum areas, which arise from these aims are:

- concept and cognitive development
- language development
- socialisation
- personal independence

The various subjects in the curriculum will aim, in a practical way and according to the developmental stage the child has reached, to develop these 4 areas. However, we have already stated that each child's programme will vary according to her/his particular ability and preferences. Therefore the development of and the suggested points at which subjects/areas are introduced in this and the next topic are ideals - they give a general picture. You must adapt them according to the individual child.

The topic we now present is divided into 2 sections:

- Overviews of the links between curriculum and methods at the various stages of the child's development.
- Noticeable differences in a curriculum for children who are deafblind.

Overviews

In order to simplify our organisation of the curriculum subjects and highlight the methods used with children at the different developmental stages (mentioned in [Module 5 Topic 5](#)) we have divided the curriculum into 3 levels.

Early curriculum level

The child undergoes constant assessment and learns basic skills appropriate to her/his developmental stage through resonance, co-active and distancing methods ([see Module 5 topic 5](#))

Middle curriculum level

Emphasis is put on developing the child's concepts, symbolism and imitation through specific curriculum subjects.

Later curriculum level

Self-direction is nurtured in the child.

All the subjects/areas in each level will, to varying degrees, promote the 4 broad curriculum areas already mentioned above: language, socialisation, independence and concept and cognitive development. You will be reminded of this at the end of each curriculum subject in Module 6 Topic 3 Curriculum outlines.

The following overviews illustrate the links between the curriculum and methods used to teach the child at each developmental stage. Although it is helpful to look at all levels it is mainly intended that you look at the sections which apply to the child you are working with.

Early curriculum level: Overview

Resonance

The links between method and curriculum

Generally speaking the child's developmental stage is one of dependency, receptivity and reaction to stimuli. s/he is caught up in a personal world of pleasure and discomfort. Therefore our basic approach is observation and resonance (details of this approach in [Module 5 Topic 5](#)).

Curriculum methods

Developing communication and language ([Module 5 Topic 4](#))

Our approach at this stage is one of alerting and responding to any signals from the child. Picking up and reflecting back the child's movements.

Developing concepts ([Module 5 Topic 3](#))

Basic concepts are initiated through the following methods:

Self: simple massage

Others: watch out for any recognition of familiar adults - to be later used for IDs

Time: create a simple, constant day rhythm.

Environment: child is encouraged to explore. Emphasise identifying features

Activities: must be meaningful. Direct attention to the objects involved. Observe interest in possible identifying objects

Objects: encourage exploration of objects and their possibilities. Do not allow play with used for self-help activities.

Developing structure ([Module 5 Topic 2](#)) in order to help independence.

People: restrict number of adults

Time: create of simple day rhythm following home routine as closely as possible

Environment: should be simple and constant. Use rooms appropriate to activities. Remove unnecessary distractions. Create a corner for the child

Activities: follow home routine. Create simple, consistent steps. Keep to the same objects

Developing the senses ([Module 5 Topic 1](#))

Observation of use and misuse of senses. Directing the child's attention

Curriculum subjects ([Module 6 Topic 3](#)): This is principally a time of assessment. Initially the curriculum areas: eating, drinking, dressing, toileting, washing, movement, unstructured play and whatever interests the child make up the timetable. They are approached in the ways mentioned above. Through this we come to know the child, who grows to accept and trust us, thus enabling a curriculum suiting her/his needs to be drawn up. Timetable a in Appendix A shows a possible way of constructing the child's day at initial level.

Co-active movement

The links between method and curriculum

Stage of development

The child has now become increasingly aware that movements can be purposeful. S/he is more conscious of the surrounding environment. Our basic approach at this stage is through Co-active movement and Hands-on manipulation ([Module 5 Topic 5](#)).

Curriculum and Methods

Developing communication and language ([Module 5 Topic 4](#)) (see Appendix F)

Adult and child move together in close body contact - vocalisation is used. Child's signals are responded to. Co-active signalling is introduced if necessary. Sequence introduced. Natural gestures are introduced immediately before and during activities. Close observation of and response to any evidence of signalling in all situations.

Developing concepts ([Module 5 Topic 3](#))

Self: body matching and massage ([Module 6 Topic 3](#))

Others: introduce IDs and natural gesture

Time: pockets to indicate nights in school (timetable pockets/boxes NOT introduced yet) ([Module 6 Topic 3](#))

Environment: exploration encouraged. Routes to and from activities are used ([Module 6 Topic 3](#)) Identifying objects in rooms are highlighted.

Activities: child is physically involved in all self-help activities. These should be meaningful - have obvious outcome.

Consistency is important. Introduce ID for activity immediately before it, then child carries it to the activity

Objects: explore familiar objects, identifying features are emphasised.

Developing structure ([Module 5 Topic 2](#))

People: continue with familiar adults - same people do the same things.

Time: the daily rhythm/structure of self-help skills is increased to include new activities.

Environment: keep it simple and consistent. Direct the child's attention.

Activities: use "hands-on" to introduce new self-help skills. Break down activities into simple steps. Direct child's attention to the beginning and end of an activity. Use activities which motivate child.

Developing the senses ([Module 5 Topic 1](#))

Begin with the sense the child finds least threatening. Continue to direct the child's attention.

Movement: co-active introduction to new movements and activities. Co-active walking if applicable ([Module 6 Topic 3](#)).

Vision: connecting movement and vision ([Module 6 Topic 3](#)). Glasses introduced if applicable and not already used.

Hearing: connect movement and hearing. Hearing aids introduced if applicable and not already used. ([Module 6 Topic 3](#))

Touch: co-active introduction to exploring environment ([Module 6 topic 3](#)).

Taste/smell: new foods introduced slowly.

Curriculum subjects ([Module 6 Topic 3](#))

In addition to subjects already mentioned the following are now added: visual, auditory and tactile training, mobility, body awareness (all depending on child's ability and interest). These are approached and organised in the ways mentioned above. Timetable b in Appendix A illustrates possible ways of organising the child's day. However, it is important to remember that the child may be at different stages of development in different areas so some subjects on the timetable may need to be approached according to the methods used at another stage; eg while dressing may be at the co-active stage movement may still be at the resonance one.

Distancing

The links between method and curriculum

Stage of development

As the child becomes familiar with basic concept co-active work is replaced by increasing elements of distancing. S/he is now ready to refer to familiar persons and objects distanced in time and space.

We call our basic approach at this stage Distancing ([Module 5 Topic 5](#))

Curriculum and methods

Developing communication and language ([Module 5 Topic 4](#)) (Appendix F)

Distance is introduced between child and adult. Equipment is now used in the movement programmed an increased number of gestures and movements are used in circuit ([Module 6 Topic 3](#)). Distance between gesture and activity is then gradually increased. Elements of surprise are introduced into structure to elicit reaction/communication. Respond immediately to all child's attempts at communication.

Developing concepts ([Module 5 Topic 3](#))

Self: introduce detail in body matching matching self and dolls ([Module 6 Topic 3](#)).

Time: timetable boxes introduced with IDs for activities. Same routine for each day then activities to distinguish days ([Module 6 Topic 3](#)).

Environment: identification of IDs on routes to activities ([Module 6 Topic 3](#)).

Activities: IDs for activities gradually distanced. Memory boxes introduced.

Objects: recognition of objects outside of structured setting. Outline drawings introduced ([Module 6 Topic 3](#)).

Developing structure ([Module 5 Topic 2](#))

People: new people may be introduced to working with the child.

Time: IDs for activities are put into sequential timetable boxes (see Concepts above)

Environment: element of change occasionally introduced (see Language)

Activities: new experiences such as shopping introduced. Support is gradually withdrawn in familiar skills - beginning with last step and working backwards.

Developing relationships

Up to now the child is relating to a restricted group of adults in the same activities. Keeping these same adults, the child is then introduced to a few new people who use the same approach and routine. IDs are used to identify new people; gestures for the familiar ones. Group activities introduced.

Developing the senses: ([Module 5 Topic 1](#))

Movement: distance is kept between the adult and child while moving - equipment is introduced in simple circuit form (not in gym) ([Module 6 Topic 3](#)). Turntaking introduced ([Module 6 Topic 3](#) Child walking independently. Trailing introduced. ([Module 6 Topic 3](#)).

Vision: UV room introduced.

Hearing: identification of sound through air. Movement to amplified sound ([Module 6 Topic 3](#)).

Touch: child encouraged to identify familiar objects away from appropriate situation.

Continue to encourage coordination of all senses.

Curriculum subjects ([Module 6 Topic 3](#))

In addition to those already mentioned in this Level the following are now added using the methods mentioned above: simple kitchen skills, simple shopping skills, swimming, matching objects, timetable organisation (in boxes), simple gross and fine motor skills, and drawing outlines. In this way the child's independence, socialisation, language, concept and cognitive development continue to grow. Timetable c in Appendix A shows a possible timetable for a child at this point.

The Middle curriculum level: Overview

The links between method and curriculum

As the child progresses, the timetable areas concentrated on initially will develop offshoots which become inter-linked and often overlap. Some basic areas will expand eg the concentration on eating and drinking skills will develop into socially acceptable table behaviour, preparing and cooking the meal, shopping for the food. Other areas such as toileting may be

totally replaced with new ones if the pupil achieves independence.

Stage of development

The child has begun to interact constructively with the environment. Her/his ability to communicate is accelerating. Independence in self-help skills is increasing. The child is ready for a lessening of structure, a broadening of experiences in order to deepen concepts, further exposure to symbols and an introduction to imitation. (Module 5 Topic 5).

Curriculum and methods

Developing communication and language (Module 5 Topic 4) (Appendix F)

Drawings used to communicate (and Module 6 Topic 3)

Graphic conversation/reading introduced (and Module 6 Topic 3)

Fingerspelling introduced.

Speech, if possible. Combined use of all forms of communication.

Braille (introduced if appropriate).

Language is taught through conversation about immediate experiences. Simple sentence structure and tenses of familiar action words introduced.

Developing concepts (Module 5 Topic 3)

Sorting and classifying objects, activities, people.

Self: identifying emotions. Simple sex instruction.

Others: meeting people outside home/school ie clubs

Time: identifying days, weeks, weekends, holidays. Recognising hours - introduction to clock. Diaries introduced. (Module 6 Topic 3)

Environment: increasing exposure to objects and activities outside immediate environment.

Number: simple number concepts. Always build new experiences on familiar ones - move at child's pace - observe closely.

Structure/independence (Module 5 Topic 2)

Increasing independence within structure which is slowly lessened. Elements of choice introduced. Support gradually withdrawn on routes to familiar rooms and activities beginning with last step.

People: introduction to clubs eg Brownies/Cubs

Time: sequence on entire day. Introduction to wider divisions ie weekends, months, holiday times (see Concepts above)

Environment: basic structure maintained but use variety (within it) to stimulate the child

Activities: increasing independence, and a widening variety.

Relationships: gradual exposure to working with an increasing number of people inside school, eg with domestic staff, gardener (following developmental approach), and outside school, eg clubs, Brownies/Cubs, or joining another school for swimming, craftwork, games. Broadening the knowledge of family. Simple sex education - identification of sexes.

Developing the senses: (Module 6 Topic 3)

Movement: in gym.

Imitation of movements, using miniatures and drawings.

Moving independently within familiar surroundings. Coping with simple hazards. Introduction to variety of terrains.

Hearing: distinguishing sounds, number of sounds, duration of sound and pitch. Imitation of sound.

Touch: Discrimination of textures, pre-braille skills.

Curriculum subjects (Module 6 Topic 3)

In the following areas the child's learning should develop greater breadth and depth, eg

Eating and drinking - correct behaviour emphasised

Simple kitchen skills - simple cookery

Washing and toilet training - personal care emphasised

Dressing - independence concentrated on

Shopping - buying personal toiletries/food

Mobility - independent movement to familiar rooms

Gross motor skills - circuit in gym

Body image - drawings used

Vision training - LVA if necessary

Auditory training or sound perception- rhythm, etc, speech (if possible)

Tactile training - pre-braille skills (if needed)

Matching - sorting/classifying

Identification of people - introducing people's roles

Drawing - graphic conversation and reading

Timetable boxes - drawn and written simple diary introduced

Fine motor skills - introduction to writing or pre-braille skills

The child is introduced to imitation and fingerspelling (or formal sign language if this is more suitable)

Towards the end of this level the following are introduced:

Household tasks; eg laundry, cleaning

Social activities; eg games, clubs (mixing with peer group)

Sex education (basic introduction)

Number/money

Introduction to simple religious knowledge (if appropriate)

Stories (outside immediate experience)
Simple problem solving
Art

Timetable d Appendix B would be a possible timetable for a child who is well into this level.

Later curriculum level: Overview

The links between method and curriculum

(The Later curriculum level is not the main focus of the course, so up to now it has not been included in the package. However, it was felt that some indication should be given as to how the later curriculum stages develop, so this level is presented here in greater detail than the others.)

The later Curriculum level is an ongoing stage marked by greater independence, self-organisation and decision making by the young person ([Module 5 Topic 5](#)).

The aim is to help the young person:

- to organise her/his own life (outside and inside home)
- to develop an ability to identify needs: - clothes, food, medication, etc - and know how to go about getting them when needed
- to develop practical housekeeping skills
- to develop interests and hobbies
- to interact in a social setting: to make friends
- to learn to solve simple problems
- to experience failure and success (within a supportive set up)
- to develop a living language
- to be able to communicate with a variety of people
- to continue her/his formal education.

The approach used in the Later curriculum level attempts to do this by gradually transferring the young person from the security of an organised routine into a supervised independent setting ie a bedsit, within the school.

The programme develops as follows:

- i. learning to choose activities and plan a routine
2. planning the semi-independent living style
3. living in the bedsit/flat

Before anything is planned the programme should be discussed together with the young person and her/his parents. Their support and cooperation are essential to the success of the venture, because this programme will have to be followed through at home. Both they, and the young person need to be clear about how that is to happen.

Learning to choose activities and to plan a routine

The young person has already had some experience of simple decision making when s/he had to choose between foods, clothes, etc and also how to use free time. Now s/he is faced with deciding what is wanted and when it is to be done ie simple timetable planning.

Step 1

Allow the young person to choose 3 unrelated activities from a selection of flash cards; eg

art , cleaning the bedroom , number

S/he must then place them in the 3 gaps created in the timetable.

As the young person's ability to choose develops the number of unrelated choices increases.

Step 2

Decisions on more complex activities which are in some way related to or dependent on another, are introduced; eg

When to go shopping, ie in advance of when you eat

When to do the washing ie when the clothes are dirty.

The young person has to decide when in the week these will be done.

Step 3

The young person now plans the entire week, recognising activities which have to be done it a certain time, eg using the gym, and then placing other activities in such a way as to have a balanced day, which should naturally include constructive use of free time.

Throughout all this independence is encouraged at the young person's pace. Support and supervision are gradually distanced

as the person's confidence increases.

Language and communication (including language structure) continue to be taught through daily discussion of and writing about experiences. Graphic conversational form continues.

Remember

Always move from the known to the unknown.

Curriculum subjects at this level would be:

Household tasks - cooking, shopping, cleaning, etc

Self care - personal hygiene, choice of clothes, etc

Sex education

Organising and planning - the days, weeks, etc (gradually depending on youngster's ability)

Diary

Mobility - semi-independent or independent travel, use of aids

Social skills

Recreational activities (sport, etc)

Aesthetic development - art, music, dance

English - development of reading, writing, braille skills, formal grammar

Communication skills - a second or third method of communication introduced

Practical maths - budgeting, problem solving, computer work

Religious education

Geography/history or whatever the child shows an interest in

Work experience

etc

see Timetable e Appendix C

● **Planning the semi-independent living style**

In preparing the young person who is deafblind for semi-independent living within a supervised bedsit, many people might argue that we are asking them to deal with a situation that no hearing and sighted teenager is asked to cope with. This is partly true but it must be kept in mind that the non-handicapped young person can learn by observing; s/he will pick up what happens at home or elsewhere. The child who is dual sensory impaired learns chiefly by doing - s/he must be involved in a situation, coming up against the difficulties and learning to cope with them when there is someone around to help. We are not throwing the child who is deafblind into a setting and leaving her/him to cope alone; we are creating an environment where the youngster learns independently in a practical way and experiences a gradual introduction to more and more freedom. We are structuring the steps to independence.

Indirect preparation for this move has already been going on since the earliest curriculum level. So, at this point the young person will have increasing proficiency in personal care, simple domestic tasks, mobility, planning her/his days/weeks, relating to and communicating with others.

Direct preparation for the actual move into the flat or bedsit should begin up to 12 months before the event. Ideally 2 young people should be in the situation together as this gives the added dimension of learning to cooperate with another. The following areas will need to be looked at, and discussed with the young people. There will also be others appropriate to the particular individuals and the school.

- What will the young people need? (furniture, food etc)
- What will they do? (household tasks, mobility, "school work", developing personal interests, social activities, leisure activities, etc)
- How will their money be organised? (where it will come from, how will they budget, how much will be allowed for pocket money, banking, etc?)
- What emergencies could arise and how should they cope with them? (accidents, fire alarm, getting lost, running out of money, visiting the doctor, dentist, etc)
- Who will supervise them and how? (staff involved and the others outwith the school)
- Who will keep an overview of the programme? (A key person who will check their overall development of the programme and how areas; eg language are being coped with.)

Naturally, only the basic necessities can be looked at and discussed before the young people are moved into the bedsit; the whole purpose is to learn about living through doing it. However, to help the adjustment the young people can be started on some areas of independence before the actual move, eg

- mobility (routes to and from shops)
- personal care
- responsibility for planning the meals for the week

or any other suitable one. Then when they move in they will have less to deal with.

Appendix D Planning the supervised living in the bedsit suggests areas that need to be looked at beforehand.

Living in the bedsit

We have already looked at the possible aims we could have for this form of set up. The whole idea is the same as that which has been running through the entire programme; ie

- to learn how to do, through doing;
- to learn language through communicating
- to learn how to live through being exposed to life in an environment suited to your stage of development but which also stimulates you to move towards the next stage.

An extremely vital element in this programme is the attitude of the staff to the young people. These youngsters are no longer children but young adults and must be treated as such. Privacy must be considered. In asking them to be responsible and self-directive the staff must respect their rights; eg knocking on the door of the bedsit and waiting to be admitted. However, these young people are still in a learning situation, so they must understand that intervention by the staff (gradually lessening as the youngster's ability to cope increases) is necessary. The adult's role is one of shadowing, not doing, of being a constant support and a person to refer to when help is needed. Intervention in practical situations should be kept to a minimum, the youngster should be allowed to discover by her/his mistakes (as long as it is not detrimental to them). There will be many an emergency and a laugh, as when the youngsters forget to wash their clothes and have nothing to wear, or overspend in the supermarket, or use too much money on clothes or leisure activities and then have to eat cornflakes for the 3 meals one day! However this, provided it is pointed out to them, is the way they learn. This setting provides the ideal safe place to discover what life is all about.

Running through all this will be the threads of language (including grammar, reading and writing, see Appendix F), number, money, reasoning, experiences, personal care nutrition, sex education and social behaviour.

Intervention will be needed as well as discussion if the young people are to learn from their experiences. In addition to this, less practical issues such as religion, current affairs, etc will need to be timetabled. Again, as in all the stages up to this there will be special emphasis on the interests of the young people. For example they might be fascinated by cars, fashion, animals or whatever. These can then be developed and encouraged by visiting (if appropriate), reading, making collections, etc. Another good way of cultivating interests and increasing communication and knowledge is through a pen pal, perhaps one living in another country who can eventually be visited. All of these interests are a natural means of cultivating language and communication and should be utilised to teach formal language structures.

Appendix E Living in a supervised bedsit suggests areas that need to be included in the daily routine of a deafblind teenager at this stage.

The next step on the ladder to living is through living in a flat/bedsit outside of school but with some overall supervision. Our course does not attempt to cover this period, it is a natural progression of the Later curriculum level.

Summary

The Later curriculum level provides the means by which youngsters who are deafblind can come increasingly closer to independence and self-direction. Within the setting of a semi-independent flat/bedsit they learn:

- to do, by doing
- to plan, by planning
- to reason, by experiencing and discussing
- to cope with difficulties and failures by facing them in an environment which is supportive
- to relate, by living with another and relating to a wide variety of people
- to develop language through communicating and structured input
- to develop self worth by experiencing respect, trust, freedom, etc
- to develop interests and gifts through the freedom and encouragement given
- to use their free time creatively.

In other words they learn to live.

What is different about a curriculum for children who are deafblind?

Most of the topics mentioned above will seem familiar to those who have worked with children with learning difficulties and visual or auditory impairment. Some areas, eg circuit or graphic conversation may seem new.

However it is not the topics of the curriculum which make the essential difference. Three of the most significant features are:

Learning is put in context

eg children learn about clothes by putting them on and taking off, by collecting them, putting them away, identifying their own clothes, sorting clothes, etc, not through a lesson on names of clothes, or dressing a doll but at the appropriate times in real situations.

Learning tasks are presented as a whole

Allowing for the age of the child, the child is expected to follow through on increasingly large parts of the activity, so s/he does not just eat lunch and leave, but may be involved in setting the table, clearing dishes, washing, drying and putting away

dishes, and sorting out which plates/cutlery go where. In this way, splinter skills are avoided (ie skills where the child can only perform certain specific parts of a task).

The role of the educator

The role of the educator in the life of a child who is deafblind is a complex one. At different times you will be teacher, playmate, care giver, "security blanket" , substitute parent, but most of all the adult is a "go-between" for the child and the outside world. You will be required to interpret the world to the young child, to know what they can and cannot grasp so as to present it to them appropriately. You will have to become an interpreter for the child by "getting into their skin" and understanding what they are feeling, needing or trying to communicate.

To be effective, you must create a bond between you and the child.

You are part of a team (which includes the parents) helping the child to grow in independence, confidence and self-esteem.

Reading

Chapter 3 of deafblind Children and Infants McInnes & Treffry, the role of the Intervenor.

Appendix A

Timetable a

Example of initial Timetable - **Early curriculum (Resonance) level**

(Developmentally young, partially sighted, deaf child, not resident in school at present). Approximate times

Arrive in school. Short time relating to own staff

10.15 Snack

10.30 Toilet, washing hands

10.45 Unstructured play in personal corner (particular observation)

11.00 Movement with adult (resonance, co-active)

11.30 Toilet, washing hands

11.45 Child's interests - (1st activity should always be the same - then vary) ...

12.30 Lunch, toilet, washing hands

Unstructured time with other children (particular observation)

1.30 Undressing, sand/water play, dressing

2.30 Toilet

Unstructured play in personal corner

Preparation for home

Please note

- The timetable follows the same sequence - length of times for activities may vary according to child's interest and mood.
- Constant observation and recording of child's awareness of objects, people and sequence is essential.
- The timetable should suit the individual likes/dislikes, strengths and weaknesses of each child - so no 2 timetables are the same.

Appendix A

Timetable b (new additions to timetable in italics)

Example of possible timetable - **Early curriculum (Co-active) level** - gradual introduction after some weeks. (Developmentally young, partially sighted, deaf child, not resident in school initially.)

Arrive in school. Short time relating to own staff

10.00 Snack

10.15 Toilet, washing hands.

10.30 *Visual training*

10.50 Unstructured play in personal corner

11.00 Movement with adult

11.30 Toilet, washing hands.

11.45 *Auditory training*

12.00 Child's interests - (1st activity should always be the same - then vary activities).

12.30 Lunch, toilet, washing hands

Unstructured time with other children

1.30 Undressing, *body awareness*, sand/water play, dressing

2.30 Toilet

Unstructured time in personal corner

Preparation for home

Please note

As far as possible the rhythm introduced in Timetable a is maintained.

Observation continues

Consult with parents about the possibility of a simple timetable for home (something they can keep to).

Appendix A

Timetable c (new addition to to timetable in italics)

Example of possible timetable - **Early curriculum (Distancing) level**
(Child is now resident in school 4 nights each week)

Appendix B

Timetable d (new additions to timetable in italics)

Example of possible timetable - **Middle curriculum level**
(This timetable does not follow on immediately from timetable c)

Please note:

- The child determines the timetable so the emphasis will be on her/his needs.
- During "choice of activity" time the child is encouraged to choose from about 3 simple and known activities presented to her/him.
- Language continues to be developed through conversation in all situations but some formal work is now introduced (9.45 am).
- Number has been already introduced through setting the table, shopping, etc - some formal work is now presented.
- Those areas identified in the timetable are specific times of reinforcement and backup (11.35 am).
- Note the specific areas to identify the day of the week are introduced immediately after lunch each day. Additional variation may be added in the late afternoon but these are not the activities which identify each day.
- One activity may be used to identify a period of time which may include other tasks associated with it, eg the Visual Training period.

Appendix C

Timetable 3 (new additions to timetable in italics)

Example of possible timetable for child moving into the **Later curriculum level**
(This timetable does not follow on immediately from the last one)

At this stage of development, the young person is encouraged to think, plan, choose and therefore to have more say in organising her/his own day. The timetable is more flexible; certain activities must be done at a particular time but otherwise the child can plan, (using the subject list) her/his own week. There is less need for activities to identify each day but some general structure is helpful.

The subject list (those activities the young person has to place independently)* would include the following:

Craft, cleaning bedroom, washing and ironing clothes, shopping, fine motor skills, imitation, spelling and reading practice, writing letters, etc, etc.

Some of these require more thought than others, eg the child will not have anything to eat unless s/he goes shopping first, or, if there is no washing done, s/he will not have clean clothes to wear. Help will be needed with this.

The child's afternoons and evenings would follow a similar plan.

Appendix D

Planning the supervised living in the bedsit

Factors which need to be considered when planning the semi-independent living bedsit/flat with young people who are deafblind.

Possible topics would be:

- a. The place (the bedsitter)
2. The activities - what makes up the day
3. Leisure
4. The people involved
5. People who can help; eg inside the school, outside the school
6. Emergencies
7. Home and school
8. Mobility
9. Language and communication
10. Special interest areas.

Before moving into the bedsit the following points will need to be discussed and planned with the young people:

11. Organising the bedsit with the young people

Identify the furniture needed (from the school? elsewhere? buying it?)

12. What activities need to be planned beforehand with them?

- Identify activities (washing, ironing, cooking, formal language work, banking, etc etc)
- Plan how the day/weeks are divided between leisure, school work, and housework.
- a. Leisure
 - Discuss the balance needed between work and leisure
 - Creative use of free time.
- a. The people involved
 - Discuss with the young people their individual likes, dislikes and needs; eg privacy
 - Explain the new role of the staff (change of attitudes - these are no longer children but young adults)
 - Discuss the place of family and friends; eg visits.
- a. People who can help with the organising
 - Identify them - talk with them
 - The staff immediately involved
 - The caretaker/janitor
 - The domestic staff
 - The heads of departments
 - a plumber
 - a joiner
- a. Emergencies
 - How to avoid accidents
 - Identify possible accidents and how to deal with them
 - Getting lost
 - Running out of money
- a. Home and school
 - Identify areas of responsibility for youngster when at home
 - Identify communication system between school and home
- a. Mobility
 - Identify placement of furniture
 - Identify routes to various shops, home, etc
 - Identify various forms of transport
- a. Language and communication
 - Discuss and write about above subjects
- a. Special interest areas
 - The planning of the bedsit is the main interest area for the present.

Appendix E

Living in the supervised bedsit

Areas which will need to be developed with deafblind teenagers living in a semi-independent bedsit within the school.

a. The place

- positioning the furniture
- daily and weekly cleaning
- repairs
- allocation of work (who's responsible for what)

2. The activities

Identifying what needs to be done:

1. washing
- eating
- cooking
- shopping (preparation and activity)
- budget planning (calculating money, banking, etc)
- cleaning
- washing clothes
- "school" work (special projects and the associated work, eg improving written English)
- etc

(Each of these areas will need to be broken down and planned.)

3. The process

- Identifying when activities are done
 - what must be done daily
 - what must be done weekly
 - how often must they be done in the day/week?
- Planning the day (including time to get up)
 - the week
 - the month
- Coping with unexpected changes and learning how to adapt.
- a. The people involved
 - Identifying them, relating to them
 - young people's awareness of each other's opinions, likes and needs, privacy, etc
 - shared responsibility
 - staff working with them - discussion of role and attitudes
 - family - relationships with
 - friends - joining clubs, etc; visitors
 - abuses - drink, drugs, solvents, sexual activities
 - communication - letters, visits, birthdays, etc.
- a. People who can help Identifying and relating to them
 - Outside the school: police, doctor, dentist, social worker, taxi driver, plumber, joiner, priest or minister, centre (clubs for deaf and blind people)
 - Inside the school: staff involved with bedsitter, headteacher/officer in charge, janitor, domestic staff, other teaching & care staff visitors
- How to approach someone for help
- a. Emergencies
 - Accidents (cuts, burns, scalds, falls)
 - How to avoid them
 - How to cope with them
 - Illness (colds, flu, headaches, etc)
 - How to avoid them
 - How to deal with them
 - How to identify the need for a doctor/dentist
 - Information about drugs, poison, medication
 - What to do when lost
 - What to do when the money runs out/how to avoid it.
- a. Home and school

- involvement of home in the planning of the bedsit
 - changing attitudes at home (allowing the young person more independence)
 - identification of areas of responsibility for young person while at home
 - constant discussion and written communication between
- a. Mobility
- Identify and discuss the limits of the young person's freedom
 - Work on routes between shops, home, schools, etc
 - Using different forms of transport
- a. Language and communication
- continues to be taught in normal everyday activities through: communication at the time - discussion afterwards - using graphic conversation to backup; diaries and stories; newspapers and magazines; writing - stories, letters, etc; photograph albums; reading books for teenagers;
 - formal language structure using the above material
 - other communication systems introduced; eg 2-handed fingerspelling or whatever is appropriate
- a. Special interest areas
- Projects - according to the young person's interests

Appendix F

Overview of the development of language for the child who is deaf and has some usable vision.

(*indicates modes suitable for child who is deafblind)

Curriculum Level	Communication Mode	Content	Method
Early curriculum level	signalling natural gesture on body	Vocabulary is linked with self-help skills, structured routine and child's needs.	Seizing what the child needs to communicate. Natural gesture is taken from the child or is part of the movement associated with self-help activities. Gestures given co-actively immediately before activity
Middle curriculum level	natural gesture on body introduction to signing (if suitable) drawing graphic conversation fingerspelling simple diaries	As above, but greater involvement in the environment widens the child's needs and interests. Simple stories within experience.	Seizing child's inadequately expressed questions, statements, interests and misunderstandings, and developing new vocabulary which is constantly reinforced. Summaries of conversations about activities/events used as a reading book. Keep record of child's difficulties, also words/sentences which need reinforcement.
Later curriculum level	fingerspelling (or signing) graphic conversation personal diaries writing speech (if possible)	Language linked with daily living. Grammar Language associated with new areas of development; eg religion, sex education, geography, etc. Stories outwith young person's experience	Conversation about personal experience and interests recorded in diary. These compositions are the material through which grammar is taught. They are also the springboard for new knowledge. Conversations which present new information are always based on the familiar. Reading schemes and print/brailled books introduced.

For the child with little or no usable vision

Signing and natural gesture will need to be traced on her/his body

Drawing is not suitable

Graphic conversation at Middle level will consist of raised symbolic shapes. Later on braille may be introduced

Writing - braille is used

Diaries will initially consist of memory boxes, then raised symbolic shapes, Braille is eventually used.

Speech according to the child's ability.

NB always speak to the child whatever other mode is used.

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Module 6 Topic 3

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Topic 3 Early Curriculum Guidelines

This topic consists of practical guidelines for the early stages of the curriculum for a child who is deafblind. They are only intended as guidelines because variations will occur depending on the child and the overall organisation of the school. They should be used as the need arises. It is not intended that they be read through in a training session.

Presenting a fully comprehensive and detailed curriculum would be an impossible task, so we have concentrated on those areas which form the initial curriculum and those which, because of a particular difficulty need additional explanation. Each subject is broken down into the stages already mentioned in [Module 5 Topic 5 The Stages](#). It will be noticed that the development of language and communication in the child is listed as one of the principal aims in each area even though it may not be mentioned in detail in the developmental stages of the subject. This is to emphasise, once again, the importance of teaching language and communication through and in the daily structured routine.

Note: These guidelines can only be used effectively in the light of Module 5 Topics 1 to 5 and in particular, [Module 6 topic 2](#) which gives you an overview of the curriculum. You will need to constantly refer back to them while working on the subjects which are outlined in greater detail as follows:

[Eating and drinking skills](#)

[Dressing skills](#)

[Toilet training](#)

[Movement](#)

[Body awareness](#)

[Timetables](#)

[Visual training](#)

[Sound perception](#)

[Orientation and mobility](#)

[Drawing programme](#)

[Imitation](#)

[Graphic conversation](#)

At the end of each subject you will find a chart summarising the development of that subject and the other areas associated with and dependent on it.

EATING AND DRINKING SKILLS

Before attempting to use this section, please refer to the note above.

Principal aims:

To help the child achieve personal independence in eating and drinking.

To develop the child's language and communication.

Secondary aims:

To develop fine motor skills

To help develop social skills connected with eating/drinking;

To let the child experience eating as a pleasurable experience;

To encourage awareness of body possibilities eg hand to mouth, hungry/full;

To develop awareness of and response to other people;

To help the child remember and anticipate events.

Presentation

Before any formal programme is begun, the methods used by the mother should be observed and any participation by the child noted. This approach should be continued for a short time by the school staff before any changes are introduced.

The level of the child's awareness must be taken into consideration when deciding where in the programme s/he should be started.

Meals are always given in the same place, preferably the kitchen, which clues the child into what is to happen. A coloured mat may be used to define her/his own area. The same layout should be used eg apron, dishes (with non-slip material underneath and initially, a beaker with no handle), cutlery (a baby spoon or spoon with foam grip).

Surroundings must be washable as the emphasis is on participation by the child and not to keep the place clean.

Chair should be at the appropriate height and always in the same place at the table.

Child should be beside adult as s/he prepares the food. The child is then taken to the table and food put in front of her/him immediately. The child should not have to wait while food is prepared.

The adult stands behind the child to feed co-actively.

Early Curriculum Level

Objectives

(Note that some objectives will depend on the child's vision)

The child will recognise food/drink and the objects associated with them;

The child will eat/drink within a structured situation and with limited assistance from an adult;

The child will associate reference object (ID) for mealtimes, with eating;

The child will recognise natural gestures for food and drink.

Stages

i) Resonance

The important things at this time are:

to continue the approach used previous to admission to school;

to observe the child closely for food preference and awareness of what is happening;

to follow these preferences (for the moment) in so far as it is possible;

The following progression may help the child to transfer from liquids to solid food.

Liquidised food

Hold child in semi-upright position on your lap. Place small amount in mouth with a spoon and give the child time to swallow before giving more food. (Your thumb on chin and middle finger under it, may be used to open the child's mouth.)

Place food towards centre of tongue.

Press or rub upper lip, then draw out spoon. This will encourage mouth to close.

Semi-strained food

Feed when child is hungry. Hold child in an upright position on your lap.

Start with favourite foods.

To help the child to anticipate spoon, touch her/his lower lip with it before putting into mouth.

Observe any movement at feeding which could later be used as a natural gesture for food.

Solids

Always use a favourite food as a base to start from. If a soup, gradually thicken it over a few days by adding well mashed potatoes or vegetables.

ii) Co-active finger feeding

Adult should stand behind the child and with hands on the child's hands pick up the solid food (no spoon).

Observe left/right hand preference in the child

Food should be in a secure bowl (flat bottom on Dycem suction pad).

If child does not pick up food, put a little in her/his mouth and then co-actively guide the hand to the food in the dish.

Co-active drinking

The cup should always be in the same place and lifted co-actively with both hands.

Gradually remove adult support beginning with the last movement in the activity - allow child to continue the movement alone.

Gradually move from using feeding cup with lid to a beaker, then to a cup with handle. Introduce ordinary cup gradually.

Remember to observe any movement which could later be used as a natural gesture for drink.

Co-active feeding with a spoon

Gradually introduce the spoon to the child towards the end of finger feeding sessions.

Do not present the child with new foods at this transition stage.

Use favourite foods that will stick to the spoon eg mashed potatoes, puddings.

Adult should stand behind the child seated at the table and put her/his hand over the child's hand on the spoon.

Before scooping co-actively get the child to feel bowl of spoon with free hand for wrist positioning. (The child may also check food in the dish by touching with fingertips - co-actively).

Don't hesitate to reward the child after each mouthful (if necessary).

Be sensitive to the slightest movement indicating that the child knows what to do and take away support very gradually

- holding wrist instead of hand;

- holding elbow instead of wrist;

removing contact towards the end of the movement eg as the food nears the mouth allowing the child to continue movement her/himself.

At the end of the meal the dish and cup are co-actively put to one side and the child's overall taken off. S/he may then be moved from the table, thus giving the clue for the end of the activity.

Remember to put emphasis on the spoon as the ID for meal times (the cup may be used for snack time). Help the child to carry the spoon to the table before the meal. The ID is introduced as soon as finger feeding ceases.

Gesture

By now you will have noticed whether the child is using a particular movement for or during meal times - if not, use the hand to mouth movement as a natural gesture for food. Co-actively make this spontaneous/given movement immediately before the child eats and at frequent times during the meal. Repeat the word "food"] "Robert's food" as you make the gesture with the child.

The child's spoon (ID for meal times) may now be introduced to the timetable boxes.

The child with some vision should be directed to look at the food.

iii) Distancing

The gesture for food and drink are gradually (over time) distanced from the activity; eg

co-actively make gesture with child before s/he reaches the table;

then at the door of the kitchen or dining room;

then when the child takes the spoon out of the timetable boxes.

By this time the child may be giving the gesture on her/his own. Always respond to these attempts by giving the child something to eat.

Widening range of foods

Present the child with one new food at a time. Combine new food with accepted one - a little at a time. Introduce at beginning of a meal with other familiar food. Gradually increase the new one.

Alternate spoonfuls of new and familiar food.

Encourage child to smell the food.

If a child refuses the new food a number of times, try again some weeks later.

Many children who are deafblind will need some physical contact for a long time after they have mastered the skill of scooping. Fingertips touching the back of the child's hand, but not guiding it, may be sufficient.

Give the child plenty of scooping practice during playtime in the sand. But do not use spoons or dishes for this purpose or the child will get confused and may try to eat the sand.

The child should also be given occasional* snacks to eat on her/his own eg toast or biscuits to emphasise the hand to mouth movement and to encourage chewing, as food is usually mashed and moistened at this early level.

*If there are problems with eating, it is better to stick to three meals a day and give the biscuit or whatever, after one meal.

Middle Curriculum Level

Objectives

The child will eat/drink with limited assistance and less reliance on structured situations;

The child will eat independently when food has been cut;

The child will drink independently;

The child will independently use appropriate gestures to ask for food or drink;

The child will recognise drawings of the objects involved in meal times;

The child will sort/classify objects connected with these activities;

The child will be able to identify times of meals;

The child will recognise written words linked to mealtimes outwith eating situation (for child with some vision).

Development

Use of fork

Once the child has demonstrated effective use of a spoon s/he can be introduced co-actively to a fork and the necessary prodding movement. The food should be cut up first.

Then introduce co-active cutting of the food and eventually independent use of the fork.

Drinking/pouring

A small jug of milk (or juice) should be left beside the child's place.

When s/he indicates the need to drink, the adult should co-actively pour the liquid with the child, resting the spout lightly on the edge of the cup and occasionally checking the level of the liquid.

The adult gradually lessens the support given.

Drawings (for child with some vision)

(See Drawings Programme - this topic)

The child matches the drawings with the cup/spoon, etc (in the practical situation)

The spoon/cup is replaced by a drawing as object of reference (ID)

Sorting/classifying (see [Module 5 Topic 3](#))

The child collects all utensils necessary for her/his meal and sets the table (using a small basket).

The child sorts cups, plates, spoons, forks, etc. Use a few items at first which are identical or very similar. Later use various types eg mugs, plastic cups, etc.

The child sets the table for the group.

The child can identify utensils needed for various meals.

Reading

(see Graphic Conversation - this topic)

The child is presented with the new symbol ie the written word in the practical situation - then learns to match it with the gesture, the drawing and the object.

Gradually replace the drawing with the written word.

The brailled word may be introduced in the same way.

Language and communication

Language associated with meal times is developed in the practical situation through communication with the adult and the other children at the table.

Remember this is the ideal learning situation.

Broadening the experience

Once the child has attained a degree of independence in table skills s/he can be helped to develop other associated ones; eg

food appropriate to different times of the day

eating out (various situations, restaurants, on a train, picnics)

cooking a meal

planning, shopping, cooking

planning, etc for a week

budgeting

foods from other countries

All of these areas are expanded and developed when the child moves into the LATER CURRICULUM LEVEL when concentration in on ever-increasing independence (see [Module 6 Topic 2](#))

Helpful hints

Mealtimes can be very difficult. Many children who are deafblind will refuse to touch anything other than a limited range of foods, others have problems swallowing. The following hints may help:

Swallowing

To encourage swallowing touch the tongue 3/4 times with the loaded spoon before emptying into the child's mouth.

Stroke neck each side of Adam's apple.

If child starts to gag, lightly tap her/his lips with your fingertips. This helps the situation.

Chewing

If required, the child can be helped with chewing problems as follows:

After spooning the food into the child's mouth, place your left middle finger flat (flesh side up) under the child's jaw. At the same time put your index finger flat along her/his jawline and your thumb on her/his chin. (The index finger will keep the child's jaw from moving back and forth sideways). Make a rotating movement. Place your other hand on top of the head to keep it from bobbing up and down.

Putting food to the back and side of child's mouth often initiates chewing.

Solids

The adult must be firm and persistent if the child refuses solids.

Give the "new" food at the beginning of the meal and if there are problems only insist on 1/2 mouthful, giving the child her/his favourite food afterwards as an incentive. Slowly increase the amount of new food given.

If the child continues to reject the food, offer a reward of a favourite food or drink between mouthfuls, letting the child (if possible) hold the reward.

In occasional cases the child will continue to reject the solids. Ask your doctor to check that there is nothing physically wrong. Ask the help of an occupational or speech therapist. Physical manipulation may be needed.

Tongue and mouth exercises (may be helpful but should not be done at mealtimes).

Put honey/peanut butter on lower lip - encourage licking off

Put some on upper gum ridge. behind teeth. Press tongue tip down.

Put some on spoon and encourage child to lick it off with spoon outside mouth.

Many useful hints may be found in the books listed at the end of the topic.

Overview - eating and drinking

The developmental areas most positively affected by this programme

Independence in eating and drinking

communication and language

body awareness/development (swallowing, chewing, biting, drinking, hungry/full)

awareness of self and others - social interaction

sense of time (structure)

memory and anticipation

fine motor skills (scooping, prodding, spreading, stirring, etc)

use of the senses, particularly smell and taste

feeling - likes/dislikes

aesthetic enjoyment of food.

Other curriculum areas associated with and dependent on the development of this programme

Setting the table

washing up

cooking

shopping

storing food

planning meals

hygiene

diet

budgeting

safety - First Aid

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 [Topic 3 Dressing skills](#)

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Module 6 Topic 3b

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Topic 3 Early Curriculum Guidelines

DRESSING SKILLS

Before attempting to use this section, please refer to the [note](#).

Principal aims:

- To help the child achieve personal independence in dressing;
- To develop the child's language and communication.

Secondary aims:

- To help the child develop body awareness;
- To help the child remember and anticipate events;
- To develop the child's awareness of and response to other people

Presentation

Before any formal programme is introduced the methods used by the child's parents and the child's involvement should be observed; eg does the child lift his second arm after the first is put into the sleeve?

This approach should be continued for a short time by the school staff

Again the level of the child's awareness should be considered when deciding where in the programme s/he should be started.

Dressing should always be done in the bedroom. The child's clothes laid out in order on the bed. The adult sits or stands behind the child, both facing the clothes (the child may be on adult's knee, or standing or sitting on a low chair).

The order of clothes is always the same:

on the bed; top garments - vest (on top of pile), shirt, jumper; lower garments - trousers/skirt (on top of pile), pants
under the bed; left shoe - sock in it, right shoe - sock in it

Early Curriculum Level

Objectives

- The child will recognise everyday clothes by relating them to the appropriate part of the body;
- The child will put clothes on, within a structured situation with assistance from adult;
- The child will understand the natural gestures for these clothes.

Stages

i) Resonance

Having followed the home method and observed the extent of the child's response, introduce structure by putting on the clothes in the following order: (they should be laid out as suggested in the Presentation)

vest (garment on top of left hand pile)
pants (garment on top of right hand pile)
shirt
trousers/ skirt
jumper
right sock
left sock
right shoe
left shoe

glasses
hearing aid

Reverse the order for undressing.

Observe the child for recognition of where the garment goes on her/his body and for participation in the activity.

ii) Co-active dressing

Start with undressing co-actively, adult behind guiding the child's hand into appropriate movements. Keep to the sequence mentioned. Encourage child to finish movements; eg the last pull of an arm

Co-active dressing

Adult is behind the child and guides her/his left hand to garments on left, and right hand to garments on right. Then co-actively puts them on.

As soon as the child shows signs of doing anything by her/himself withdraw a little help.

Always follow the same routine.

Reward the child.

Depending on the awareness of the child, gestures may then be introduced.

Remember: Every person involved in the programme must do exactly the same thing.

Gestures

Begin with the last items; ie shoes and socks.

Lift the sock co-actively with the child.

Place it over the correct foot.

Co-actively trace the sock with the child's 2 hands; eg moving them over the sock resting on his foot and saying at the same time "Sock, Robert's sock". (This is now the natural gesture for sock)

Use the child's hands to put the sock on.

Gradually introduce other garments using the same approach.

Make sure all staff and the child's parents follow the same strict order of movements.

Later on, make the gesture co-actively and let the child reach for correct garment

(clothes being in correct order).

iii) Distancing

Decreasing help will mean that eventually the child will remember the sequence and make the appropriate gesture before lifting a garment.

At this time the child's attention is drawn to the identifying features of each garment; eg the texture of the jumper, the elastic in the pants. This is especially important for the child with no usable vision - it may be necessary for all concerned to keep to a limited number of features for each garment e.g. the child's attention is drawn to the straps of the vest, emphasising the elastic helps distinguish the pants.

So, now the approach is as follows:

- Child independently lifts the garment and identifies it co-actively.
- Child makes natural gesture for garment on her/his body (co-actively if necessary).
- Child puts on garment (with minimum help).

Once the child appears to follow the sequence you should check that s/he really knows the clothes by varying the order slightly eg. take a garment out of sequence and observe the child's reaction. You could also hand the child a garment, making sure the identifying features are felt, to see if the child knows where it goes on her/his body.

Throughout all this, child and adult co-actively close zips, buttons and ties as required, in the normal setting of dressing and undressing.

Middle Curriculum Level

Objectives

- The child will dress independently only needing help with difficult buttons, zips, etc.

- The child will name the different clothes using the appropriate natural gesture in various situations outside the dressing programme;
- The child will match and sort clothes and shoes;
- The child will classify clothes;
- The child will read names of clothes outwith programme (for the child with some vision).

Development

Gradually decrease the support given to the child and look for recognition and naming of garments in settings outside the bedroom; eg in the gym, while swimming, etc. Games can be played to reinforce this; eg "Guess what's in the bag?"

Back-up exercises in fine motor skills may help to increase independence in the use of zips, etc.

Gestures may now be given visually (not co-actively) by the adult as the child has some understanding of imitation. Continue co-active gestures with the child who has no usable vision. Speak as you gesture.

Drawings (for child with some vision) (See Drawings Programme this topic)

Keeping the sequence the adult draws garment (each time) on paper or marker board with appropriate colour. Child colours the drawings with help. Then gestures and picks up the correct garment.

Later drop all colour and use black lines only, remembering to emphasise the characteristics. These drawings can be used in later sorting activities.

At this point, a doll could be used to dress, and the drawing exercises linked with it.

Eventually the drawing will be replaced by the word.

Contrasting words; eg vest and trousers should be used first. (Some children may need to link the word and drawing as explained in Drawing Programme - this topic.)

Reading

(See Graphic Conversation - this topic.)

As with drawing, the child will be expected to read the word, then gesture and put on the garment.

Sorting/classifying (see [Module 5 Topic 3](#))

Sorting clothes for washing, putting into cupboards, different clothes for boys/girls, individual's clothes.

Clothes for going swimming, horse riding, clothes for bed, etc.

Back-up exercises may be done to reinforce the concepts.

Drawings can later be used for sorting and tracing lotto, games and jigsaws may be made.

Remember to expose the child to clothes in a variety of situations.

As independence increases the structure can be lessened and the child can choose her/his own clothes from the cupboard and develop a personal order in dressing. Again, make sure help is withdrawn gradually.

Broadening the experience

Once the child has attained a degree of independence in dressing s/he can be helped to develop associated skills; eg

- appropriate clothes, for an occasion, for different kinds of weather, etc.
- clothes that go together (colour, style)
- shopping for clothes, the different types of shops
- budgeting
- mending, sewing on buttons, making simple garments, knitting
- fashion.

Helpful hints

Identifying back/front of garments

For the child with some vision - draw her/his attention to the label on the garment or sew one on.

For the child with no usable vision it may be a help to initially attach a peg or dogclip to the back of each garment - then

remove it when it is on the child. The label can eventually be used.

Closing garments

Velcro is a great help to the very young or clumsy child.

A key ring put through the hole in the zip fastener will make closing zips easier.

Overview - The dressing programme

The developmental areas most positively affected by this programme:

- Independence in dressing
- body awareness
- language and communication
- fine motor dexterity
- gross motor development
- use of the senses
- awareness of self and others
- sense of time
- memory and anticipation
- structuring
- sorting/matching

Other curriculum areas associated with and dependent on the development of this programme

- Storing clothes
- washing/ironing
- sewing/knitting
- personal grooming
- health
- fashion
- budgeting
- shopping

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 [Topic 3 Toilet training](#)

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Module 6 Topic 3c

Topic 3 Early Curriculum Guidelines

TOILET TRAINING

Before attempting to use this section, please refer to the [note](#).

Principal aims:

- To help the child become independent in using the toilet;
- To encourage body awareness (need for toilet);
- To develop the child's language and communication.

Secondary aims:

- To help the child remember and anticipate events;
- To develop socially acceptable behaviour;
- To encourage personal hygiene.

Presentation

Toilet training should always be done in the bathroom or toilet, The purpose of the exercise is to train the child, not just to keep her/himself clean and dry.

Initially a comfortable potty is used but gradually wean the child onto the toilet - use a secure child's seat and rest the child's feet on a step, making sure her/his legs are not swinging.

Toilet times should be happy and relaxed. Sing or talk to the child while s/he is seated.

Early Curriculum Level

Objectives

- The child will relate the bathroom/toilet to its function;
- The child will anticipate toilet times within the daily structure;
- The child will use the toilet when taken to it;
- The child will gradually develop control over toileting needs;
- The child will understand gesture for toilet by linking it with bathroom/toilet, and the activity.

Stages

i) Resonance

Observe the child's needs closely and record on a chart the times s/he is found be wet or soiled. This should be continued for as long as is needed to assess any pattern. (see Appendix A at end of Topic 3.)

After some time (one/two weeks) begin to structure. Toilet times should be easy for the child to remember, so schedule them alter regular activities; eg mealtimes. If a pattern emerges, the times should be altered accordingly but always make sure there is some means by which the child can remember when s/he is to be taken to the toilet.

Night training depends on the child's sleeping pattern; if s/he is a poor sleeper they should not be disturbed. If satisfactory, the child's pattern should be observed and s/he should be taken up when there is likely to be some success.

It is important to remember that the aim is not to keep the child dry but to make her/him aware of their need and what they are expected to do about it.

Always reward successful use of the toilet.

Observe child for any movement which could later be used as a natural gesture for toilet.

ii) Co-active

Pants should be pulled down and up co-actively.

Child should be helped to use toilet paper.

Co-actively wash and dry hands. Child and adult put in plug, then turn on tap, (be careful of the temperature - feel the water). Identify the taps then lift the soap and wash co-actively. When finished pull out plug and feel the water go down the drain.

Co-actively reach for the towel and dry hands.

Additionally the child should be co-actively helped to recognise the objects which identify the room; ie the toilet and handbasin.

An ID for the activity should be carried by the child to the bathroom/toilet; eg square of towelling (bathroom), empty toilet roll (toilet). A second version of this ID should be tied to the door of the toilet.

The child with some vision should be directed to look

Attention should also be directed to the sounds; eg flushing, echoes, etc.

Have a clearly identified route to the toilet.

Child should be given an appropriate reward for success.

Gesture

Depending on the child's level of awareness, the gesture should be introduced immediately before the child has identified the toilet. Co-actively use any gesture that you have noticed the child giving, or use a movement such as pulling down the pants.

Remember to speak as you gesture.

ii) Distancing

As with the other areas gradually distance the gesture from the immediate activity; eg give the toilet gesture at the door of the toilet. At a later date give the gesture before the child reaches the door, etc. Also, if and when you recognise that the child needs to use the toilet; eg s/he starts to pull clothes or twist about, give the child the gesture for toilet co-actively) and take her/him there (even if outside the set times). However, it is important to retain the regularity of set times so that the child begins to develop bladder control and also some sense of time.

Remember to gently withdraw help when there is a sign of awareness, eg; the next step/movement in the activity (finishing pulling up pants, walking to handbasin, etc).

Middle curriculum level

Objectives

- The child will recognise the physical need for toilet and will give appropriate gesture.
- The child will go to the toilet independently and wash hands afterwards.

Development

Continue to decrease the support given to the child, rewarding as appropriate.

Clearly identified routes to the toilet are extremely important. Start the child off on the route, trailing as you go. Over a period of time gradually decrease the support given beginning with the last few steps.

Structured times for using the toilet are gradually lessened but it is advisable to keep a basic routine; eg after meals.

The detailed toilet chart may now be discontinued but some record is necessary to avoid the possibility of constipation.

Broadening the experience

Toilet training can lead to development of associated skills:

- use of toilet outside home and school; eg public toilets, "going behind an bush" , etc (depends on age and level of development of boy)
- Hygiene (clean/dirty, etc)

Helpful hints

Urinating in toilet

Introduce this at time when success is a likelihood.

Child stands squarely in front of toilet, touching bowl with legs.

Member of staff coactively holds child's penis - encouraging him to urinate.
Direct the child's attention to what is happening.
Praise him.

Night time

Limit liquid intake before bed time.

Closely observe times the child is wet and lift her/him immediately beforehand to ensure success. Reward the child.

If bed is wet in morning the child's attention is drawn to it and s/he helps change the sheets.

Do not punish.

Many helpful hints regarding toilet training are available in the texts below. You may wish to read them.

Freeman P The Deafblind Baby Learning Steps California State Education Department

John Tracy Clinic Correspondence Course for Parents of Deaf-Blind Children

Overview - Toilet training programme

The developmental areas most positively affected by this programme:

- Independent use of the toilet
- body awareness
- awareness of time
- language and communication
- fine motor skills
- awareness of self and others
- socially acceptable behaviour
- sense of privacy

Other curriculum areas associated with and dependent on the development of this programme:

- Hygiene
- aspects of sex education

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 [Topic 3 Movement](#)

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Module 6 Topic 3d

Topic 3 Early Curriculum Guidelines

MOVEMENT

Before attempting to use this section, please refer to the [note](#).

Principal aims:

- To make the child aware of her/his own body, its possibilities and its relationship to the world around;
- To develop the child's communication (signal, gesture, sign, fingerspelling, speech);
- To develop independence of movement in the environment and in self-help skills.

Secondary aims:

- To make the child aware of other people as distinct from her/himself: to help build relationships;
- To make the child aware of space and surrounding objects; their movement possibilities and their permanence;
- To train the child's memory through sequencing;
- To develop turntaking and eventual imitation;
- To help the child realise that s/he can have control over what happens;
- To aid problem solving.

Presentation

Much of the development of movement has already been presented in Module 5, especially Topics 5 and 5, as the Early Curriculum Stage is principally one of approach through movement. Other curriculum topics also cover the subject, especially self-help skills which involves co-active manipulation.

Again, as in all areas, it is important to have consistency in the approach, the time, the surroundings and especially the number of people involved.

Early Curriculum Level

Objectives

- The child will signal for a favourite movement (withint structured setting);
- The child will experience a range of body movements in contact with adult and equipment, then apart from adult;
- The child will remember a sequence of movements;
- The child will, through structured, co-active movement, learn to eat, drink, dress and find her/his way around the principal rooms at home and in school with help;
- The child will have some understanding of turntaking;
- The child will learn that a symbolic movement (natural gesture) represents a particular activity.

Stages

i) Resonance

(Details of this may be found in Module 5 Topic 5)

The key issues are:

- reflecting the child's movements back to her/himself
- responding to any signal given by the child to initiate a movement while on the adult's knee. (Use song when moving with the child.)
- observiing the child's favourite movements.

ii) Co-active (Again, details may be found in Module 5 Topic 5)

The approach consists of

- moving co-actively, in sequence (about 4 movements) on the knee, or on the floor (bodies touching). Remember to use song;
- observing the child for an awareness of the next movement in the sequence then responding to it;
- using an object to represent the movement session.

ii) Distancing (Refer to Module 5 Topic 5 and the section in this topic on Imitation)

The essence of the approach is that physical distance is introduced between the child and the adult and equipment is gradually introduced into the sequence.

- rolling a big ball
- crawling on the mat
- climbing the ladder
- sliding down the bench together

or whatever else the child likes and is able to do.

All equipment should be placed in a circle so that there is no break in the sequence. We call this movement circuit.

When the child has reached the point of recognising the sequence and is secure in the movement, the adult should gradually withdraw support and increase the distance between her/himself and the child. Slow s/he "drops out" of the movement allowing the child to continue independently. If the child is inclined to interpret this as a clue to discontinue the movement, the adult should maintain some slight pressure on the child's hands; eg touching the back, as an indication to keep going. The child will eventually get the message.

Introducing gesture

Once the child has some awareness of the sequence of the movements in a circuit the adult should introduce a natural gesture for each one. So, for example:

- before s/he pushes the ball the adult could make a pushing movement co-actively with the child to indicate what is about to take place;
- before crawling there could be co-active slapping of the child's knees;
- before climbing, a climbing movement with the child's hands;
- before sliding, touching the seat of her/his pants.

or whatever the child indicates and/or likes.

After some time doing this the child will begin to remember the sequence of these natural gestures. As soon as there is any evidence of this the adult should remove support although s/he should maintain physical contact with the child (for security reasons). In addition the symbol/signal should be reinforced by using these natural gestures for climbing, crawling, jumping, etc in other situations outside this lesson.

Introducing change into the circuit

After some time drop the first movement and add a new one (on equipment) to the sequence.

All new movements should be introduced co-actively to the child.

A general gesture for movement is introduced to go with the symbol. This, as with other areas is done immediately before the activity, then at the door, then when the child takes the symbol from the timetable boxes.

Remember

All of this is carried out in the place movement was introduced to the child; at the same time each day and by the same person. Close observation of the child is essential. Look out for favourite movements and any that increase fear or tension in the child.

Middle curriculum level

At this stage movement branches out into many areas:

gross motor development (circuit in gym)
 mobility
 imitation
 signing and fingerspelling (Module 5 Topic 4)

Objectives (gross motor development - circuit)

- The child will move on gym equipment presented in a circuit;
- The child will remember a sequence of 8 to 10 movements on this equipment;
- The child will remember and give appropriate gestures for movements;
- The child will imitate movements from adult; from drawings, from written word (see Imitation Programme);
- The child will experiment with movement.

Presentation

The equipment should be in the form of a circuit.

Initially, use different pieces of equipment for different movements; later the equipment may be duplicated.

Equipment should be close together and going in the same direction so that there is a flow of movement.

You are aiming at independence of movement for the child so do not include movements that would be impossible for the child to do eventually on her/his own.

As the number of movements increases introduce new equipment to the end of the circuit (not at the beginning or in the middle).

Each movement should have a gesture.

The child should not be allowed to become bored.

Before any new movement or equipment is introduced to the the child; blindfold yourself and go through it. Find out how to approach it and what the dangers are.

Development

The child is introduced to the familiar circuit in the larger area of hall or gymnasium.

Gestures for movements are more clearly defined (they may only have been signals up to now).

Circuit is completed 3 times. Child is rewarded after each.

New movements on new pieces of equipment are added to the end of the circuit. Slowly increase the number according to the child's ability - may be up to 9 movements. Initially these are introduced co-actively but as the child progresses a certain amount of imitation will be possible (see Imitation Programme). You will also need a Gross motor checklist (see bibliography) to guide you in your choice of movement.

Allow the child to be as independent as possible. Depending on her/his ability you may add new movements every week, every second day or even every day (always follow the rule - drop the first movement and add the new one to the end of the circuit).

Don't stick at a movement until the child is perfect in it - give her/him extra help at that point but keep the flow of movement going.

Variety and an awareness of number may be developed by allowing the child to wear 3 of something; eg sweat bands, and taking one off each time s/he goes around.

Eventually the day will come when the child, using familiar movements and pieces of equipment (new ones are always introduced within the security of a familiar circuit) can be given different circuit movements each day. Before this is introduced s/he must be able to imitate (see Imitation Programme).

The process develops as follows:

Adult demonstrates first movement on first piece of equipment in circuit. Child watches/feels what adult does then follows suit.

Adult demonstrates second movement. Child imitates, and so on to the end of the circuit. Child repeats sequence of movements a number of times - depending on her/his ability to retain information.

Again, depending on child's ability - gestures for the movements may or may not be used.

Drawings of each movement required of the child are next presented before the movement (see Drawings Programme).

After the sequence is completed the child is asked to put the cards into the correct sequence.

Written/brailled words are introduced later.

A number of movements are then presented, depending on the child's ability:

The adult moves 3/4 pieces of equipment

The child is asked to imitate or put together the sequence using the drawings given and then going through the movements.

The child may also be presented with a series of movement drawings and asked to copy them.

Through all this time the child is encouraged to repeat taught movements in areas other than the gym; eg in the soft play area, and the playground.

Overview - The movement programme

The developmental areas most positively affected by this programme:

- Awareness of self and others
- social interaction
- communication

- body awareness
- gross motor movement
- concept of space
- concept of time
- awareness of objects (in relation to self)
- sequencing
- memory
- turn-taking
- imitation
- self-help skills
- coordination of vision, sound and movement
- sense of control
- problem solving
- sense of freedom/independence
- language

Other curriculum areas associated with and dependent on the development of this programme:

- visual training
- sound perception and auditory training
- tactile training
- mobility and orientation
- dance
- games

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 [Topic 3 Body awareness/image](#)

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Module 6 Topic 3e

Topic 3 Early Curriculum Guidelines

BODY AWARENESS/IMAGE

Before attempting to use this please refer to the [note](#).

● Principal aims

- To give the child a conscious awareness of her/his body as an entity;
- To give the child an awareness of the possibilities of her/his body;
- To give the child an awareness of self in relation to other persons;
- To aid imitation and subsequently signing and fingerspelling.

Secondary aim

- To improve self-help skills

Presentation

Initially body image work is carried out during the most appropriate activities; ie before dressing and during washing. Dressing itself will also reinforce a pattern of limbs to be moved. Later specific body image work is introduced to the child's timetable, when matching parts of the body follow the same sequence and keep to a certain rhythm. A song can help this out.

Early curriculum level

Objectives

- The child will be aware of the different body parts through stimulation;
- The child will anticipate and follow a sequence in washing;
- The child will match her/his own body to that of another and to a doll.

Stages

i) Resonance

Body awareness is begun with "play" on the child's bed: tickling, stroking and using talc or body lotion on the different parts of her/his body. Observe child's awareness and desire to participate.

Use different textures on the child; eg something slightly rough to stroke her/him. Some children like the warm air from a hair dryer. Make a point of small areas such as behind the ears, between the toes. Encourage child to do this independently but be careful not to allow over-stimulation.

ii) Co-active

Structured washing

Wash co-actively in the same order every time; eg face, neck, back, lower back, front, lower front, left arm, right arm, left leg, left foot, right leg, right foot. Look out for anticipation of the next limb or part of the body. Name the parts as you wash and dry them co-actively.

Body matching

Sitting, facing each other, the adult guides the child's hands to feel a part of adult's body (eg head) and then to feel the same part on child's body.

Concentrate on principal parts only and always in the same order; eg (as with washing)

- adult's hair - child's hair
- adult's face - child's face

- adult's body - child's body
- adult's right arm - child's right arm
- adult's left arm - child's left arm
- adult's right leg - child's right leg
- adult's left leg - child's left leg

When child shows awareness of what is happening allow child to touch, or stroke her/his own body part.

Remove the order. Co-actively stroke different parts of adult, then allow the child to match her/his own body parts

Return to the beginning - reintroducing same sequence but this time the child's body is touched first and then the adult's.

Follow the same progression; gradually allowing the child to do it independently. (This step is particularly difficult for child with no usable vision).

Child should now be able to match all major parts of her/his body to another.

Remember to use an object to identify the activity in the timetable boxes.

iii) Distancing

Only now should a child with some sight point to the body instead of stroking it.

More details is introduced; eg features of the face, back and front of body, elbows, fingers, toes, knees. Remember to present them gradually and in sequence.

A large doll may also be used, the child matching her/his body to it. (Co-actively at first). Gradually introduce more detail in the exercise.

Middle curriculum level

Modelling clay is introduced. Each body part; eg the child's hand, is pointed out, made with clay and then joined to the rest of the clay model. The child should then be asked to match the doll's parts with her/his own. (The model should be 3-dimensional and solid - outlines in plasticine or clay are not suitable.)

Miniature dolls may eventually be used.

Drawings

(The child should have been introduced to drawings before the next step is attempted, see section in this topic on drawings.)

Draw an outline of the child as s/he lies on the floor and colour it co-actively. Now match the child's parts to the drawing. Other children may also be drawn and matched. These can then be cut into sections and put together again. Jigsaws can be made of these.

The next step is to draw the child's parts as they are pointed out. This is begun co-actively and gradually left to the child to do her/his own.

Drawings may now be used to point out differences between people; eg identification of important characteristics.

Another variation on this is to fill in the missing parts on a drawn face or body.

Written words are then gradually introduced to replace drawings.

Photographs can also be used with the child to match with self and others.

Matching/sorting/classifying

Sorting drawings of different people; eg boys/girls, men/women.

Classifying according to role, grouping, work; eg parts of a body, members of a family, a school, a club, etc.

Gestures

Initially there is little need for symbols, except for one to identify the whole activity. Later finger spelling the names of the parts of the body can be introduced.

Broadening the experience

The body awareness programme now develops into:

- imitation
- body massage
- awareness of feelings
- sex education

Overview - the Body awareness programme

The developmental areas most positively affected by this programme:

- security - acceptance of physical contact
- awareness of own body as distinct from others
- awareness of others - similarities and differences
- communication and language
- use of senses - especially touch
- fine motor dexterity
- gross motor movement
- memory and anticipation
- sorting/matching
- awareness of parts of a whole
- imitation

Other curriculum areas associated with and dependent on the development of this programme:

- washing/drying/dressing
- sex education

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 [Topic 3 Timetables/organising time](#)

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Module 6 Topic 3f

TIMETABLES/ORGANISING TIME

Before attempting to use this section, please refer to the note.

The importance of structuring the child's day has already been looked at in Module 5 Topic 2, especially in the section on Structuring time and in Module 5 Topic 3, the section on how we help the young child to identify time. This particular presentation is to give you an overall picture of how to present it to the child at different stages.

Principal aims:

- To help the child internalise the concept of time;
- To help the child remember and anticipate events thus enabling the child to organise and direct her/his life;
- To develop communication and language skills.

Secondary aims:

- To develop sequencing;
- To help develop security in the child.

Presentation

In the initial stages, boxes attached to each other (one box for each representational object) or pockets, hung on the wall are used to help give the child the concept of how the day is divided. (See video, section on Developing Concepts, Part 3: learning and teaching)

Early Curriculum Level

Objectives

- The child will distinguish between day and night;
- The child (if resident) will distinguish between the nights s/he must sleep in school and the nights at home;
- The child will remember the sequence of the morning's activities using objects and gestures;
- The child will be introduced to identifying activities for each day.

Stages

i) Resonance

In as far as it is possible the child's home routine is followed.

Observe for any anticipation of events for instance, eating time.

ii) Co-active

A simple routine based if possible, on the original home routine, is established. Each day in school follows the same pattern. After changes are introduced the parents are encouraged to establish a similar (but less detailed) routine at home.

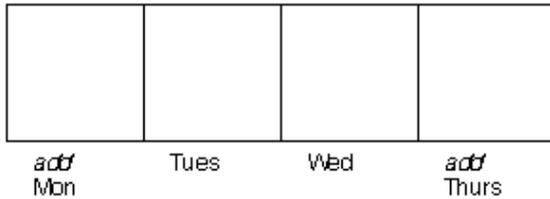
Distinguishing between night and day

The golden rule here is - night time is bed-time. As far as is possible the young child who is deafblind should sleep in her/his own bed. A favourite toy/blanket is the ideal identification for it but any object that the child associates with bed may be used. Once the child is taken to bed s/he must not be allowed to get up and come back downstairs unless in an emergency (this is because the child who is dual sensory impaired only understands clearly defined situations, therefore night-time is bed-time). If the child has difficulty in getting to sleep the adult should sit with her/him. The child should not be allowed to fall asleep in the living room and then be taken to bed, s/he must be trained to go to sleep in the correct place. At a later date the child is encouraged to get up if s/he needs the toilet. Times of illness are always the exception to the rule.

Distinguishing nights in school

One way of doing this is to put attached pockets on the wall beside the child's bed. On the first day resident the adult and child co-actively put a pair of the child's pyjamas or night dress into each pocket, one for each night. So, if the child's introductory pattern to being resident is just 2 nights in the middle of the week then there would only be 2 pockets. Gradually, as the

number of nights increase they are added onto the 2 already established and so you would have 3/4 pockets;



Each morning the adult and child co-actively feel how many full pockets are left. If the child is boarding weekly then you can eventually increase the number of pockets to 7 leaving those symbolising time at home empty. Parents should be encouraged to use this method at home. Their pockets symbolising nights in school being left empty. This method may also be used to help the child understand that s/he is sleeping away from home, as when on holiday.

The morning's activities

At this point the child will be somewhat familiar with the identifying object for each activity within its setting. Natural gestures will also have been identified and used immediately before and during an activity. Timetable boxes/pockets are not introduced for the present.

ii) Distancing

As explained in Module 5 Topic 5 the child's objects of reference and the natural gestures used are gradually distanced from the relevant activity. When the child has reached the stage of showing some recognition of the ID for an activity that is to take place:

in a few minutes and in a room other than the one the child is in s/he is introduced to the timetable boxes/pockets.

Timetable boxes/pockets

Each main activity of the morning has a separate box/pocket; eg as illustrated in Module 5 Topic 3

- a. a spoon representing a meal
2. a toothbrush representing time for brushing teeth
3. a ball representing movement time
4. the child's favourite object representing time on her/his own
5. a spoon representing the next meal

This sequence is followed every day in school.

Initially the adult and child should, each morning, co-actively put all the objects into the sequential boxes from a general box (moving from left to right). Then, at the appropriate time co-actively lift the first one out, make the natural gesture and proceed to the appropriate activity leaving the ID behind in the place of activity.

The next step is to go back to the timetable boxes, feel the empty box co-actively, making some appropriate gesture for "finished"/"food is finished". Then move onto the next item and so on.

Identifying days from each other

As soon as the child shows some awareness of the sequence of activities, an item to identify a different activity for each day is added onto the box containing the symbol for lunch.

and so on.

Make sure the child associates this ID with the activity by putting extra emphasis on it and by taking it with them when they go swimming, or whatever. Ideally each day's activity should have a different colour. The child therefore has an additional clue; eg Monday is blue, Tuesday is red, etc.

For the residential child the Friday box holds an ID for home which goes with them when they leave (make sure they don't carry it back to school themselves, the parents should be asked to hide it in the child's bag so they are not aware of it). Equally they should travel from home to school with an ID for school with them.

If an emergency occurs, for example you cannot go swimming, follow that particular day's routine, putting the ID for swimming into the box, then taking it out co-actively shaking your head (let the child feel it) and saying "No swimming". Replace it with an object to represent what you are doing instead. However you must avoid doing this too often as the child needs to have consistency if they are to recognise the day.

School holidays can also be explained to the child in the same way. The parents give the child the symbol for school each weekday morning and saying "No school" then give the child the home symbol, indicating s/he is staying at home.

Gradually the "hands on" support in putting the timetable together can be lessened. The child is encouraged to put the lunch

ID into the box by her/himself(not the ID for the day, that is done co-actively for the present). Then the item for activity before the lunch and so on. Great care should be taken not to move too quickly through this process because the child's task is quite complex. S/he is being asked to
remember the next activity,
remember the ID for the activity,
distinguish the ID from others,
find the next empty box,
place the object in that box,
give the appropriate gesture.

It is suggested that a natural gesture be now given to indicate the question "What's next?" to the child. One such gesture would be co-actively moving the child's hands (palms facing upwards) in an up and down movement.

With the exception of the identifying activity which must always come at the same point in the daily sequence (ideally after lunch), the child is not yet asked to put together the sequence of the afternoon's activities although it also must follow a definite routine.

Middle Curriculum level

Objectives

- The child will remember the principal activities of a complete day in sequence;
- The child will identify the days of the week through their particular activities;
- The child will distinguish the school week from the weekend and holidays from school time;
- The child will name the days of the week (signing or fingerspelling);
- The child will read the days of the week;
- The child will understand the concept of week, and eventually month;
- The child will be introduced to reading the clock.

Development

Identifying the days of the week

Up to now the adult will have placed the ID for a particular day into the general box of that day's activities before beginning work with the child.

When the child shows signs of remembering each day's particular activity these IDs are placed together in sequence in another box or set of pockets (different from the timetable boxes).

So now the child is faced with

a general box with the IDs for activities which are the same each day;

a box with the special IDs for each particular day in sequence (The weekly box/
pockets);

and the set of boxes for the day's timetable. (The timetable boxes).

Having put the IDs for the morning's activities into the appropriate timetable boxes the child comes to the last box and having felt it with the adult is given the gesture for "What's next?" The two then move to the weekly box/pockets and pick the appropriate ID for the day, gesture it and put it into the timetable boxes.

Introducing a whole day

Gradually new boxes may be added to those of the morning, but these should not be detailed. A good way of allowing for some flexibility is to put the ID for the child's

member of staff into the timetable box for the afternoon or, if a day pupil, the ID for the child's mum or dad; eg

Then when the child comes to that time in the day, the particular adult indicated can explain what they are doing together.

For the child with some vision, drawings should slowly replace the objects in the boxes. Initially these are done by the adult with the child each day but eventually the child should draw them independently. (Care should be taken to vary the drawings so that the child's concept is not restricted.)

The day's colour should be included as should bedtime.

When the child is ready, the whole week is represented on one sheet of paper, but continues to be drawn day by day.

When there is a change in this timetable the usual activity should be drawn, then crossed out and the replacement stuck over it.

Photographs of the activities can now be introduced. Let the child spend time matching these with the drawings and the activities.

Previously drawn cards may eventually be used with the child to speed up the exercise. Slowly the word is introduced to replace the drawing of the ID (see Graphic Conversation).

Finally introduce the name (signed or fingerspelt) of each day at the beginning of the sequence.

For the child with no usable vision the IDs for activities are gradually reduced until quite abstract symbols represent the activities. This has already been explained in Module 5 Topic 4. So the child's timetable boxes could eventually look like this

- a. small part of wooden handle of drumstick (sound perception)
2. handle from cup (drink)
3. square material from sweatband (circuit)
4. oblong woven raffia (baskets used for sorting)
5. miniature doll (body image)
6. metal end of spoon/fork (dinner time)
7. plastic material from arm band (swimming)

These symbols are gradually replaced by raised symbols on card.

Eventually the first 1/2 braille letters in a word are put with the symbols until finally they replace them

Broadening the experience

During this stage the child is introduced to a form of diary and to the clock.

The diary

The diary evolves from the memory boxes mentioned in Module 5 Topic 3 but is also closely connected with the timetable and graphic conversation.

Initially the child puts either a drawing or the written name for the identifying activity into the space in the diary, after the colour for the day (the child with no usable vision will have to wait until they are introduced to braille).

Graphic conversation will be occurring every day and many times a day at this stage. The identifying colour of the day is put on the top of each page reminding the child that that particular event happened on the yellow day or the blue day or whatever. A summary of this may be put into the diary after the event.

Initially a brief summary of anything out of the usual routine may be added to the diary after the event.

So the diary for a week could look like this:

The next step is to enter in future events; eg

After the event the tense can be changed to the past; eg

Diaries, if kept for reference are a wonderful way of helping the child to develop concepts of weeks, months and years. Through using them the child can anticipate something that happens once a month eg a visit to someone, or yearly events such as Christmas, birthdays, etc. By looking back at last Christmas the child can slowly realise that it comes around once a year, that there are similarities (the activities that characterise it) but that it can also be different; eg Gran was with the family last year but not this year.

Clock time is introduced by synchronising the hours with the activities in the timetable, firstly giving the child an experience of 1 hour (put the correct hour number in the timetable) then half an hour and so on.

A large egg timer with coloured sand sitting beside the child as s/he dresses or eats or works, gives a concrete clue to the child as to how time is passing. (This can be made for the child with no usable vision so that they can feel the sand).

Having grasped some concept of time the actual reading of time will depend on how far the child has progressed in number. The usual methods can then be used.

Language and communication

The entire development of the timetables is closely dependent on and linked with the development of language and

communication and vice versa. Of course back-up exercises in reading, in particular, will have to be done, but going through the daily routine of associating language with what is actually happening and entering into conversation about it is the natural way to learn.

Later Curriculum Level

The young person who has reached the point of understanding all the activities which constitute a week should be given the experience of organising her/his own week. Certain restraints are necessary but coping with those is an important aspect of real life. So, for example, the young person makes a number of cards naming the activities s/he must do at some point in the week. And also a set of activities which must be done at a certain time or/and on a certain day such as swimming, cooking, etc. The young person then has to plan the week in such a way that

- s/he allows the appropriate amount of time for each activity
- fits in all the activities
- gets the correct sequence; eg ironing comes after washing,
- shopping before cooking, etc (see Module 6 Topic 2 Timetable E)

Overview - The Timetable Programme

Developmental most positively affected by this programme

- Structuring/organising
- memory/anticipation
- sense of security
- sequencing
- concept of time (hours, days, weeks, months)
- sense of control
- independence
- communication and language

Other curriculum areas associated with and dependent on the development of this programme.

- Reading
- reading the time
- diary work
- planning (days, events, etc.)
- number

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A resource for staff working with children who are deafblind

Module 6 Topic 3g

VISUAL TRAINING

Before attempting to use this section, please refer to the note.

There is a lot of information available on training the child with a visual disability. This presentation only attempts to highlight those aspects that are particularly applicable to the child who has the dual sensory impairment of deafblindness.

Principal aims:

- To train the child's residual sight;
- To develop a concept of the world around;
- To aid mobility;
- To develop hand-eye coordination;
- To help her/his concept of self, persons and things;
- To aid communication/reading/writing;
- To aid self help skills;
- To increase independence.

Secondary aims:

- To help the child organise her/his own environment;
- To aid the child's memory;
- To develop imitation.

Presentation

Ongoing assessment is essential and training any residual vision the child has can be a positive help.

Children with the dual sensory impairment are inclined to use a tactile rather than visual channel for receiving information. It is therefore important to always direct the child's attention to what is at hand - to look at what s/he is doing.

(See Module 2 Topic 5, Module 4 Topic 5, Module 5 Topic 1 and Module 8 Topic 2 for suggestions about lighting, positioning, etc.)

Visual training is done at all times by everyone dealing with the child. However more intense sessions will need to be done in a formal setting such as the Ultra Violet room.

Light gazing

Self stimulation by the child who is deafblind may take a number of forms - light gazing, flicking objects close to the eye and eye poking are among them.

Needless to say these practices are not encouraged but care must be taken to replace them with something else of interest to the child. So, when Tommy is sitting poking his eye or flicking, his hand is gently taken away from his eyes and he is given a favourite manipulative toy, or the adult, holding his hands, plays with him, jumping and swinging, etc. If he is light gazing, the blinds are drawn or the light source hidden and his attention is directed to something interesting.

A child will tend to stimulate self when bored or left for long periods on her/his own so avoid these occasions. Occasionally, when there is no other powerful motivator, light can be used to reward a child for cooperating. The exposure should only be a few seconds duration and care should be taken that it is not distracting the child from the task in hand.

Early Curriculum Level

Objectives

The programme depends very much on the extent of the child's disability. The objectives for this level would therefore be:

- To assess the child's vision and use of it;
- To help the child accept glasses (if prescribed);
- To encourage the child to LOOK;
- To establish eye contact;

- To help the child co-ordinate movement and vision;
- To establish eye-hand co-ordination.

Stages

i) Resonance

This is the initial period of observation. The child will need to be examined by an ophthalmologist, but your own observations are vitally important. Check lists are a help in order to help you focus on particular areas. (Some references may be found at the end of this subject).

Remember it is important to observe and record how the child coordinates the use of her/his sight; ie how it is used in conjunction with hearing, touch and movement.

ii) Co-active and Distancing

One of the dangers of co-active movement is that the child will allow her/himself to be manipulated through an activity and will not use her/his sight. It is necessary to be constantly aware of this and to regularly check that the child is looking. (This is difficult as the adult is behind the child, but pausing before a movement may encourage her/him to look).

Teaching the child to look

Efforts must be made to encourage the child to wear her/his glasses (if prescribed). This should be done gently by introducing them at times when the child is happy and absorbed in something. Gradually increase the length of these times until the child has accepted them.

The child's attention will be attracted to objects if they are interesting and seen easily - so keep that in mind.

Early mother-infant games of putting your face close to the child's and then moving away while blowing may be of help. Painting the adult's face may also attract her/his attention.

Using fluorescent objects in the UV room to direct the child's attention - co-actively moving towards them.

Training the child to follow an object; eg touching her/his lips with a spoon and taking it slowly away.

Using a torch in a dark room; eg moving it from side to side, up and down, in a circle.

Putting favourite objects at a distance but where the child is bound to see them. Moving them as s/he stretches towards them. Increasing the distance.

Using different coloured objects and size of objects - gradually decreasing the size.

Developing eye contact

Bringing a sweet/biscuit or torchlight close to the adult's eyes will encourage the child to look. Facial games will also help. When the child is on the adult's knee follow her/his gaze until there is contact, then holding the gaze, sing, laugh or bounce the child creating a happy experience. Looking in a mirror side by side also helps.

When the adult introduces her/himself to a child it should be at the child's level. As well as using their ID, eye contact should be established.

Coordinating vision and movement

The child should, at all times be directed to look at what s/he is doing or where they are going.

Moving fluorescent objects in the UV room, and encourage the child to follow are a help.

Mapping out routes to rooms and pointing out the identifying features along the way will help the child's mobility. (See Mobility Programme)

Eye hand coordination is also developed in everyday situations by directing the child to look at what s/he is doing and, depending on child's vision, discouraging searching with the hand alone.

Middle Curriculum Level

Objectives

(Again, all these depend on the child's vision.)

- The child will make greater use of vision for mobility, orientation and fine motor manipulation, drawing, reading and writing;
- The child will imitate movements and gestures;
- The child will interpret facial expressions, gestures and fingerspelling.

The development of vision now becomes an intrinsic part of the development of all areas in the child's curriculum. There is still however a certain need for back-up training.

Development

Coordinating vision and movement

The circuit (see Movement Programme) is the ideal means of developing this. In addition, simple obstacle courses may now be introduced in the UV room, eg: walking/ crawling, or later, riding a bicycle between cones

and games passing a ball between 2 people (a fluorescent or white ball may be used in the UV room).

Other helpful games are: bowling, bouncing a ball, knocking objects off a stool with a bean bag, hopscotch. All, of course, depending on the child's development in other areas. (See Imitation Programme)

Eye-hand coordination

The introduction to and use of drawings will greatly enhance the development of this.

Pen and paper games can be devised; eg finding a small reward or picture at the end of a wavy line (use thick felt pen on a large sheet of paper). The child can trace this with her/his finger until coming to the reward.

(Always use a basic left to right pattern even if the movement is up/down, looping, etc.)

More complicated versions can then be devised.

Other suggestions are:

- inset type jigsaws
- large threading cards
- simple dominoes and lotto

Once the child has been introduced to the use of a felt pen (or whatever is suitable) the visual training can develop to include:

- mazes
- tracking
- dot to dot
- tracing and colouring
- filling in the missing bits from a drawing
- matching objects/shapes according to the drawings
- matching same colour/shape of drawings and joining with a line
- matching pairs of drawings, increasingly more complicated threading
- according to drawn instructions
- more difficult jigsaws - matching bits to picture on box first.
- and so on...

Remember at all times to keep the child's particular difficulty in mind; eg tunnel vision, retinitis pigmentosa, nystagmus, myopia, etc.

For further information refer to:

Dale FJ (1972) Progress Guide

Efron and Duboff (1976) :A: Vision Guide: for Teachers of Deaf-Blind Children Raleigh NCU Department of Public Instruction

Fraiberg S (1977) Insights from the Blind British edition: Souvenir Press Ltd, 43 Great Russell Road, London WC1

Jurgens MR (1977) Confrontation between the Young Deaf-Blind Child:and the Outer World pp 2125

Lowenfield B (Ed) (1974) The Visually Handicapped Child in School Constable & Company Ltd, 10 Orange Street, London WC2H 7EG.

McInnes J M, Treffry J A (1982) Deaf-blind Infants and Children: A Developmental Guide pp 157-185

Sheldon J (Ed) Perceptual Development Workshop Visual Functioning and Deaf-blind Children. Hosted by New York Institute of Education for the Blind - Bronx NY.

Stillman R (Ed) (1978) The Callier Azusa Scale The South Central Regional Center for Services to deaf-blind children, 2950 Turtle Creek Piazza, Suite 207, Dallas, Texas 75219.

Overview - Visual Training Programme

The Developmental areas most positively affected by this programme

- Concepts of self and others
- concepts of objects and the world around (world image)
- gross motor movement
- fine motor movement
- mobility and orientation
- structuring
- reasoning
- memory

- matching/sorting/sequencing
- imitation
- coordinated use of all senses
- social interaction
- communication and language

Other curriculum areas associated with and dependent on the development of this programme

- Self help skills
- drawing and writing
- reading

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A resource for staff working with children who are deafblind

Module 6 Topic 3h

SOUND PERCEPTION

Before attempting to use this section, please refer to the note.

This programme is for children with a hearing loss within the level indicated below in the audiogram.

Children with a less severe loss may require training in some of the areas mentioned here but on the whole theirs would be a training in discrimination of more subtle environmental and speech sounds.

0 (Frequency in Hz)

Principal aims:

- To train the residual hearing so that:
- The child is aware of the different sources of sounds in the environment, and her/himself;
- The child can isolate certain sounds; eg danger warnings, her/his name, etc from background noises;
- The child's communication and language can develop (through speech, if this is at all possible);
- The child is aware of sound through channels other than hearing; eg vibrotactile.

Secondary aims:

- To teach rhythm which will help movement, train memory and give enjoyment (through dance);
- To enable the child to enjoy sound, especially music.

Presentation

(See Module 2 Topic 3, Module 4 Topic 5, Module 5 Topic 1 and Module 8 Topic 1)

It is pointless to try to train a child's hearing if s/he is not wearing a hearing aid. This is the first area to work on. If the child is to get the best results from the hearing aid, the environment should be relatively quiet. No one should work or play with a child while listening to a radio or music (unless this is connected with the training).

The child's attention is directed to sound in everyday situations; eg the Hoover, the bath water running, etc. However, specific training is needed and ideally this should be done in a soundproof room with a non-vibrating floor (eg a concrete underlay).

Adults should talk to the children as they work with them (but not carry on a steady stream of chatter.) Sentences should be simple, to the point, repeated and with normal intonation and rhythm.

The child should always be encouraged to vocalise when playing an instrument.

An amplified electric organ is an excellent instrument for training the children's hearing. Chords, etc should not be used, pure tones are the easiest sound for the child to hear, so the organ should be adjusted accordingly.

Programmes for individual children will vary greatly depending on their hearing loss, age, interest in sound and physical ability. However, the usual stages are followed through with each child, some being much quicker than others.

Remember to give the child an ID for sound perception.

Early Curriculum Level

Objectives

- The child will accept wearing a hearing aid;
- The child will become aware that s/he is the source of sound through the adult reflecting her/his sounds back. The child will vocalise in response to this;
- The child will beat drum and play organ co-actively with adult;
- The child will be able to continue a sound begun by adult on drum and organ;
- The child will take turns in making sounds vocally and using an instrument;
- The child will indicate awareness of sound/silence through exposure to amplified sound.

Stages

i) Resonance

Continue what the child's parents have done up to now with regard to wearing hearing aids.

Pick up and echo the child's noises putting one of the child's hands on her/his chest/throat/mouth, the other hand on the adult's equivalent body part.

Reflect back the child's beat with a beat, the child's stamping with stamping. etc all the time drawing her/his attention to what the adult is doing.

Attempt turn-taking by waiting till child finishes making a noise, the adult repeating it, then indicating to the child to do it again, then the adult repeating it, etc.

ii) Co-active

If the child does not already wear a hearing aid, now, after testing, is the time to introduce it.

Introducing the child to a hearing aid is a slow and often difficult process. Go gently. The child should wear the harness (if being introduced to a body aid) for some time without the hearing aid, then with the aid in it. During a relaxed period together the ear mould is introduced to the child, s/he should be allowed to feel it and explore it, but should not be let bite it.

Next it is inserted into one ear for a few seconds. (It may be necessary to have spent some time "playing" with the child's ears, washing them, etc. this will get the child used to his ears being touched). Whether or not the aid is switched on immediately will depend on the individual child. However, when it is introduced the experience should be pleasant - the adult singing softly and moving to the song. It should also be for a very short time - for some children this could be a second. Gradually the time is increased but only at the child's pace.

The child should not be forced to accept a hearing aid. Keep the introductory exercise to the same time each day, then gradually increase the length of time and, when there is evidence that the child has accepted it, increase the number of times it's presented.

The next step is for the child to wear the aid during "teaching times".

After this step the child should wear the aid after school times (if resident).

When it is fully accepted, the aid should be put on each morning with the child's clothes and only taken off at bedtime. Then s/he should wear it at home as well. It is important to show the parents how the aid works and how they can help the child to make the best possible use of it.

Vocalising and sources of sound

When the child is in a happy mood and relaxed s/he will probably vocalise. A young child will have regular sessions in close contact with "her/his" adult. During these sessions it is good to move with and sing to the child. Soon the child may also begin to vocalise and the adult should pick up and reflect the sound the child is making again, moving with rhythm; eg a short sound is reinforced by a bounce, a long sound by swaying.

It is helpful to give the child a simple gesture to indicate that you want her/him to vocalise; eg touching her/his throat. One is not expecting the child to imitate at this stage - the adult is imitating the child to make him aware of his own sound. (See the section on Movement in this topic.)

If the child does not vocalise naturally grasp any situation such as crying to make her/him aware of it.

Attention should always be drawn to the sources of sound around the child; eg the door banging. Show the child how it happens. Let the child feel the Hoover or washing machine. Turn them on and off. Above all make her/him aware of voice, let the child feel vibrations in the throat and chest, the air expelled through the mouth and the sound both in her/himself and others.

Instruments such as the drum and organ can be introduced and played co-actively with the child. Allow the child to have freedom in hitting these but control the use of organ. (Show the child how to hit it with one finger rather than the whole hand).

Now the child knows how to make sound with her/his voice, the drum and the organ. Begin to reflect the sounds the child is making; eg child is hitting the drum, wait until s/he stops then hit the drum/organ in roughly the same way. Then indicate you want the child to do the same.

Introduction to discriminating between sound and silence

The child sits on the floor in direct physical contact with a large drum or the amplifier of an electric organ (the child may sit or lie on either). The adult beats the drum or plays middle C on the organ (pure tone single notes, not chords). Observe the child for an awareness of sound or of silence when the music stops. If the child makes some movement pick that up and co-actively make the movement with the child, then repeat the sound immediately. (You may introduce a signal yourself such as slapping the floor with the child's hand). Repeat this co-actively and when the child appears to connect the sound with the movement withdraw support. Vary the number of times you beat the drum or play the note. Always give the child time to become aware that the sound has stopped and that s/he is expected to signal. There is a danger in leaving the child too long a time as s/he will forget the purpose of the exercise. So, move her/his hand co-actively and respond immediately with the sound.

Another help is to co-actively move with the child to music (sitting on floor, the child between your legs, her/his back against your chest). Stop when the music does (drum or organ) and co-actively give the signal to continue. The movement can be swaying, clapping, moving arms.

Remember: Make sound interesting for the child. Encourage vocalisation and always give a reward.

iii) Distancing

Distance is now gradually created between the child and the source of sound (amplifier or drum). Firstly sit the child with their back to the instrument, then a little further away. Increase the distance until the child is perceiving sound through the air. (Make sure your floor is solid, ideally with a concrete base, otherwise the child will be dependent on vibration through her/his feet and not be aware of them in her/his ears, throat and chest.)

Turn-taking is now gradually introduced. To begin with the child has to learn to continue the sound begun co-actively with the adult.

Firstly the adult and child co-actively beat the drum, then point co-actively to the child's, then the adult's chest, saying; eg "John and Ann together". This continues for some time. Then, as they are beating, the adult gently removes her/his hand, allowing the child to continue the action independently, at the same time pointing to the child's chest and saying "John now". This is continued until the child spontaneously keeps going on her/his own.

The next step is for the adult to beat the drum while the child waits. When the child stops beating the drum, the adult holds the child's hands gently while beating the drum with the other hand. Then when the adult stops, the child is encouraged to beat independently and so on.

There is no emphasis on imitating at this point, all the child is doing is taking her/his turn. It is not imitation but can eventually lead to it (see Imitation Programme).

Remember don't confine this learning to the formal teaching session, help the child transfer the new knowledge to everyday situations. Continue to draw her/his attention to sound and its source.

Middle Curriculum Level

Objectives

- The child will move to sound;
- The child will distinguish other instruments (depending on hearing loss);
- The child will distinguish between one note/sound and many notes/sounds;
- The child will distinguish duration of sound (short/long);
- The child will distinguish the pitch of notes (high/low);
- The child will distinguish direction of sound;
- The child will be able to imitate one note and many notes on organ or drum;
- The child will recognise and move to different rhythms.

Development

Moving to sound may be quite difficult for the child - this may be moving arms but, if at all possible should be walking. The child must keep walking while the drum or organ note (middle C) is being played by an adult. This should be a continuous sound, or a note played repeatedly very fast, otherwise it will be difficult for the child to recognise when it is finished. When the sound stops the child should stop. (You may need to do this co-actively with the child so it is useful to have an assistant). Games with other children can be incorporated into this e.g. musical chairs, and stop-and-put-the-hat-on games.

Discriminating between one note and a lot of notes is a development of recognising the difference between sound and silence. It is another aspect of sound.

Co-actively beat the drum once. Then, instead of matching it with another beat put one sweet or brick or whatever interests the child, onto the drum. Then introduce beating the drum lots of times and put a handful of sweets or whatever onto the drum (the number doesn't have to be exact). When the child can do this reintroduce the single beat, then alternate beating many times with one beat and asking the child to match it with one or many sweets, etc. (You may need to do this co-actively sometimes). Let the child watch (if there is usable vision). Then, get her/him to turn around and listen and match.

Reward the child well.

Another way of doing this would be to ask the child to beat the drum once or many times and the adult matching the beats with the objects. The same can be done with the organ putting out one or many sweets/bricks as is expected.

The next step is for the adult to put out the bricks and the child to play the required number of notes (Remember it is still one/many and using middle C on the organ).

Encourage the child to vocalise with the sound.

Discriminating other instruments depends on the child's hearing loss. Make sure s/he can hear them before any discrimination is introduced. Having done this the child will then be shown how to discriminate between; drum and flute, drum

and recorder, drum and organ, drum and xylophone, drum and violin/guitar. Only when the child can do this should finer distinctions such as between recorder and organ be introduced. Remember the child must be allowed to play the instrument her/himself and only after having had plenty of experience in listening to the instrument should s/he then be asked to identify it from sound alone. The human voice should also be used. Amplify all instruments if necessary.

Duration of sound Using Middle C on the organ make the length of the sounds as different as possible. Co-actively get the child to stretch out her/his arms for the long note, moving slowly with the sound or, draw a line on paper, or roll a long sausage of playdoh for the duration of the sound. For a short note the hands can be held close together, a short time drawn on paper or a small playdoh sausage made. Giant Steps and Baby Steps can be attempted when the child is ready and may be a group activity.

This is an introduction to fast and slow.

The child should also be given an opportunity to play the notes and also to reflect the adult's notes on another instrument such as a recorder.

Again encourage vocalisation.

Pitch is now introduced. Two notes are used, one being the lowest and one the highest the child can hear. With the highest note the child is shown how to stand on tiptoes and stretch her/his arms as high as possible. On hearing the low note the child should crouch down to the floor. Bright yellow, light bricks for high, and heavy blacks for low may also be used to represent these notes. Movement may now be done involving continuous high notes when the child should walk on tiptoes, and continuous low notes when s/he should shuffle along in a crouching position. Middle C indicates when the child should walk upright.

If possible encourage vocal imitation.

Direction of sound can be difficult for the child. It cannot be attempted unless the child is wearing two hearing aids. Begin with placing a large drum directly behind the child and a smaller one in front. Show the child what you are doing and how s/he should indicate where the sound is coming from (moving towards the instrument or pointing). Gradually get the child to identify from listening alone.

Now choose two different instruments; eg the organ, a flute, a sonar bar (see reference at end) or anything that makes a sound and can be heard by the child. Place one each side of the child (nothing to front or back). Show the child what you are doing and how s/he should indicate the direction. Gradually get the child to identify where the sound is coming from.

When the child can distinguish direction using many instruments s/he should be given the same sound from each direction; eg place four drums around the child or move to the different positions with one drum.

It is important to carry this training into every situation; eg when a door bangs ask the child what direction the sound is coming from and encourage her/him to find it. Call the child to you instead of going up to her/him before an activity begins. (The distance will depend on the child's hearing but even if there is useful hearing the distance should only be about 2-3 feet away at this stage.)

Imitation of sound can only be introduced when the child has become fairly proficient in imitation, unless the child has good residual hearing. (See section on imitation in this topic.) S/he must also be able to match one sound and many sounds with objects.

Imitation is a development of turn-taking. The adult plays one note (middle C) on the amplified organ. The child, with the help of another person, matches the sound with one beat on the drum. Then middle C on the organ is played many times and the child matches it with many beats on the drum. Support is gradually reduced until the child can imitate independently (still keeping to the contrast of one and many sounds).

Encourage the child to vocalise as s/he imitates the sound on an instrument.

Gradually as number is introduced to the child it may be incorporated into the discrimination of sound.

The child can be helped to recognise the number of notes being played through matching them with bricks or marks on paper, walking them and vocalising them. The child can then advance to "How many notes were played?" Then "How many high notes?", "How many low notes?" etc

Rhythm ($3/4$, $4/4$, $6/8$) is introduced by clapping, beating the drum, playing the organ and finally walking to the particular rhythm being taught. The rhythm should be very clear-cut. If the children are given inaccurate rhythm they will not learn to discriminate between the different speech and notation patterns. All rhythms should be taught separately and a tape recorder should be used if the adult does not have a good sense of rhythm. Automatic beats on the organ must not be used unless they are very clear and are one of the above mentioned rhythms.

$3/4$ time may be learned as a waltz time; $4/4$ as marching time; $6/8$ as skipping time. The children should also be given quick high notes to indicate running and slower single Middle C notes for walking.

The appropriate language will also have been introduced through graphic conversation, signs and fingerspelling; eg one note, lots of notes, high low, long short, where? how many?

Broadening and developing the experience

The sounds of familiar activities and objects should be taped with the child. Graphic conversation being used to introduce the

new words.

The child will eventually be expected to identify the sound, away from the situation and give the appropriate language.

Musical notation may also be introduced to the child with some usable vision. The child will already be aware of long notes, short notes and very quick notes, all that is needed now is to give them the written symbol and the new name. They will need plenty of practice reading these notes (keep to Middle C for the present) and also writing what is being played for them by the adult. As an introduction the long notes are drawn as minims, the short notes as crochets , and the quick notes as quavers).

Discrimination of pitch will already be associated with colour. Experiments show that dark, heavy colours indicate low notes and the brighter ones the high notes. Gradually the scale, beginning with the greatest contrasts, high doh (high C), low doh (low C), and middle C, is built up using the colours as follows:

Beginning with low doh: black, blue, green, red, brown, pink, yellow, white. (These colours have been researched.)

Discrimination of notes should always be in terms of contrast; ie we cannot produce a note at random and ask a deaf child "Which note did I play?" but we can play two different notes and ask which is the higher and which the lower of the two.

The child can then advance from coloured blocks to coloured staff notation. Later it will be possible to dispense with the colour notes.

Sonar Bars are an excellent means of helping the child's pitch.

Teaching speech to the profoundly deaf child with impaired vision is an extremely difficult task. The sound perception programme up to this point will have provided a solid foundation for development in this area. The reader is advised to turn to Van Uden's A World of Language for Deaf Children for details of how this may be approached.

For further information:

Jurgens M R (1977) Confrontation between the Young Deaf-blind Child and the Outer World pp25-26

Van Uden A (1977) A World of Language for Deaf Children Part 1 Basic Principles. Swets & Zeitlinger, Amsterdam and Lisse, A maternal reflective method.

Sonar Bars may be had from Hope Education, Old Hill, Huddersfield Road, Waterhead, Oldham OL4 2ST
or from

The London Music Shop Ltd, 39/45 Coldharbour Lane, London SE5 9N.

Overview - Sound Perception Programme

The developmental areas most positively affected by this programme

- Awareness of sound and silence
- discrimination of sound from background
- noises
- recognition of particular sounds; eg names
- awareness of sources of sound
- rhythm
- pitch
- coordinated use of all senses
- language and communication
- deportment
- social interaction
- sense of time
- memory and anticipation
- concentration
- aesthetic enjoyment of sound

Other curriculum areas associated with and dependent on the development of this programme.

- Speech
- music
- dance

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Module 6 Topic 3h

ORIENTATION AND MOBILITY

Before attempting to use this section, please refer to the note.

This topic has already been looked at in Module 1 Topic 5 and Module 4 Topic 6. Now we will give you an overall picture of how orientation and mobility is introduced to the child at the different stages. It is important to remember that each child will be different, having her/his particular strengths and difficulties and so the programme must be adapted accordingly.

Principal aims:

- To help the child achieve independence in the environment;
- To enable the child to utilise the assistance of others in order to function independent of their direction;
- To develop communication and language.

Secondary aims:

- To give a concept of space;
- To help develop gross motor skills;
- To help develop self help skills;
- To aid problem solving;
- To assist the child's social interaction.

Presentation

For the young child the environment should be simple, safe and uncluttered. Furniture and objects should, as far as possible be kept in the same place (see Module 2 Topic 3 The Visual, Auditory and Tactile Environment) They should clearly indicate to the child the activity they are associated with. So be careful, don't hang mobiles, etc over the child's bed, that's for sleeping in. The playpen, or for the more mobile child her/his own area, is for play!

Early Curriculum Level

Objectives

- The child will explore her/his immediate environment;
- The child will tolerate physical contact;
- The child will begin to anticipate simple activities;
- The child will move around her/his environment, walking, if at all possible:
- The child will recognise identifying features on routes to familiar rooms in school and at home;
- The child will trail.

Stages

i) Resonance

The young child should not be left lying for long periods without stimulation. Whether sitting up or not s/he should be surrounded by a variety of objects, including mobiles, to encourage exploration. Observe the child's preference, it may be a mirror or a shiny yellow toy or a noise maker. Use these to get the child to stretch out, move towards and search for. But guard against the child becoming obsessed by them. Neither should the child be given objects used in feeding, washing, etc to play with, otherwise s/he will not recognise the activity when it occurs.

Encourage the child to explore her/his own body by massaging with cream etc (see Body Awareness Programme) and to explore the surroundings by using hands, feet, tongue, etc.

Always alert the child to your presence. Come close to her/him, pause, touch the child gently on the chest, pause, identify yourself making a small lifting movement to alert the child to the fact that you are going to lift (if that's the case), pause, then lift the child slowly and gently.

If the child is inclined to resist physical contact spend time sitting on the floor beside her/him. Then gradually decrease the distance until you are touching. Do this over a period of time, identifying yourself on several occasions. Wear a distinctive

perfume so that the child can recognise you easily. Always move slowly and gently and the child will gradually develop a sense of security with you.

Take the child around the house or school with you, either carrying or walking if there is any ability to do so. (Once a child can walk it is important that s/he is not carried unless in an emergency or a difficult situation). This helps a child become aware of the smells, the activity and the time involved in the lead up to an activity. Keep to the same routine so that the child will begin to anticipate what is to come.

ii) Co-active

The aim, if this is physically possible, is to get the child walking. This is done co-actively, the adult standing behind and supporting the child, holding her/his shoulders (or hands at a low level) and gently pushing, with rhythm, one foot in front of the other. Once the child has grasped what to do support can be lessened, but try to keep a rhythm in the movement. The next step would be to introduce a small weighted truck for the child to push. This should be introduced co-actively and help gradually withdrawn as the child progresses. The child needs to have a reason to walk otherwise s/he won't be motivated, therefore much of this walking practice is done when the child is going from one activity to the next; from one room to the next. Of course practice is needed, so rewards will provide the motivation here. Don't give into the child easily, keep going. Be firm but gentle.

Routes to and from room and activities should be planned and adhered to at all times; eg:

- which side of the room/hall/stairs, etc to walk along,
- where to cross over,
- what features on the route should be used for identification (it is a help to put little reminders along the route to help the staff; eg "John crosses over here"),

When taking the child to an activity follow the planned route and let her/him explore the identifying features (a radiator, a different textured wall or floor, etc). However, do not spend too much time on this as the child must not forget her/his destination - these features are merely clues along the way.

The child must always carry the ID for the activity. If there is difficulty with this attach it by elastic to the child's wrist.

In addition to all this the child is encouraged to freely explore the environment both during and between activities. Do this co-actively to begin with.

Continue to have a special base for the child which contains her/his favourite objects. Go back to this between activities.

iii) Distancing

Hopefully by this time the child will have some independence in walking. Depending on this trailing is introduced (see Module 4 Topic 6). This is done co-actively until the child understands what is required. Opening/closing doors should continue co-actively for the present. Going up stairs the adult should walk behind the child guiding her/his hand co-actively and slightly ahead along the rail, pausing when the top landing has been reached. Going down stairs is much more difficult. Pause at the top of the stair. The adult should step backwards in front of the child holding one hand on the rail and encouraging her/him gently forward with the other. At this stage the child should not take a step at a time but put two feet on each step. However, keep the rhythm going. Remember there should be a clear, unmistakable landmark at the top of the stairs.

When the child has achieved balance and can walk independently s/he should be held gently by the wrist (thumb and first finger circling it). It is not advisable to hold the child's hand.

For the present it is sufficient to encourage the child to explore a chair before seating (remember identifying features) and then to lift her/him onto it.

Middle Curriculum Level (depending on child's vision)

Objectives

- The child will move independently, through doors, up and down stairs, etc within a familiar environment; eg home, school, local supermarket, enclosed playground, etc;
- The child will cope with reasonable hazards; eg crowds, obstacles left lying around, etc;
- The child will understand boundaries within familiar environment; eg where not to go;
- The child will identify dangerous objects;
- The child will attempt to move in a variety of terrains with an adult;
- The child will use the correct grip when walking with an adult;
- The child will move with a sighted guide in unfamiliar territory.

The child should now be encouraged to move independently in familiar environments and to follow her/his routes to rooms and activities.

Gradually introduce the child, according to her/his ability, to the various skills and coping strategies already described in Module 4 Topic 6 b) Coping Strategies. For the present s/he should not be introduced to the correct use of a sighted guide; when taking a child through unfamiliar territory use "hands on" techniques to guide her/him.

Obstacles

Up to the present the child's routes has been kept totally clear of unnecessary obstacles. Now is the time to very gently introduce a few simple difficulties such as a chair, table, an upright Hoover (make sure it's at least waist level). Make sure the child does not hurt her/himself, encourage exploration of the obstacle and if the child makes no attempt to bypass it co-actively take her/him around it.

Gradually introduce different objects encouraging the child to overcome the obstacle independently.

Introduce the child to walking in crowded areas progressing from small numbers to larger crowds.

Pushing a trolley in a supermarket will eventually be achieved (depending on the child's vision) if it is prepared for in the safe environment of the school. The child can take clothes, etc from one place to another in a truck/trolley or whatever. Dangerous objects are another hazard. The child needs to be taught about fire, heat, hot water, electricity, sharp objects, poison, etc. if independence is to be achieved. Initially a gesture such as a sharp withdrawal of the hand and an "ouch!" is sufficient but eventually the child can be given the appropriate language (remember to use the conversational method) and the reasons why something is dangerous.

In the **Imitation Programme** we mention the importance of introducing a signal for "stop" and "keep going". These are necessary to the child with no usable vision as, once they are out of contact with another they become very insecure. In fact, even when encouraging such a child to move independently it is often necessary to keep some slight contact; eg a light hand on the shoulder or upper arm. (Never put a hand in the middle of a child's back as s/he will have the sensation of being pushed; this increases insecurity).

Boundaries are important if the child is to learn independence. S/he should know where not to go and the reason for the restriction.

Encourage the child to be adventurous by introducing her/him to a variety of terrains and climatic conditions. Too often the child who is deafblind is over-protected and loses out on a lot of fun. Let her/him walk, run, roll on grass, leaves, sand, let them play in mud and in water. Take the child across country, uphill, downhill, across stones, through streams. Take the child on holiday in a caravan, a tent, a hotel, let her/him experience travelling on a bus, a train, a bike, a boat and a plane if you can manage it.

Always have a purpose for a walk, even if it's only to visit the pet rabbit. Never walk for the sake of walking, the child is too young at this stage to be motivated by this.

Remember keep in contact with the child when on the streets, do not allow her/him to play about. Pause at kerbs. Follow the Green Cross Code. Towards the end of this level the child can be introduced to moving with a sighted guide. This will naturally be taught co-actively. Details of how to teach these skills may be found in Module 4 Topic 6 a) Sighted Guide Skills.

Language and communication

Remember to always use the conversational approach when teaching these skills. Drawings of the IDs along a particular route can be put into sequence. Obstacles and how to overcome them can be talked about. Above all there is tremendous scope for learning language through the various outings experienced together. The Mobility Programme is one of the most exciting ways of developing language.

Broadening and developing the experience

From now on the young person's mobility training will more or less follow that of any child with a vision loss. Naturally there will be restrictions because of the communication difficulties so it is important that the mobility instructor be conversant with the young person's mode of communication.

Areas which may be developed from the Mobility programme are:

- long cane techniques
- travel between school and home, to shops, etc (on bus/train, crossing roads)
- map reading
- getting lost, how to seek help, etc

For further information refer to:

McInnes J M & Treffry JA (1981) Deaf-Blind Infants and Children pp224:241

Overview - Orientation and Mobility

The developmental areas most positively affected by this programme

- Body awareness
- gross motor movement

- independent movement in the environment
- coordinated use of all the senses
- concepts of space and time
- problem solving
- structuring
- interaction with others
- communication and language
- sense of freedom and control

Other curriculum areas associated with and dependent on the development of this programme.

- Independence in all self-help skills (from dressing to shopping)
- independent travel

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Module 6 Topic 3j

DRAWING PROGRAMME (for the child with some usable vision)

Before attempting to use this section, please refer to the note.

Principal aims:

- To increase the child's concept of symbols;
- To help the child understand two dimensional representation;
- To assist and develop communication

Secondary aims:

- To prepare the child for graphic conversation;
- To help the child understand pictures and photographs;
- To develop fine motor dexterity;
- To help the child organise and control her/his environment.

Presentation

The type of drawings which the child requires will depend on the degree of residual vision and also the nature of the visual impairment. For most purposes a thick black felt tip pen is best for outlines.

Keep the drawings very simple. This is not an opportunity for adults to demonstrate their artistic talents!

Always draw the object with the child, allowing her/him to participate as fully as they are able; ie finishing off the drawing and/or colouring it in.

Initially all drawings are done on the spot. Drawn flash cards and eventually pictures and/or photographs are only given to the child at a later stage.

Always include the identifying feature of the object or person in the drawing.

For the child with no usable vision, drawings will not be feasible. However, Brailon, thermoform paper which produces a raised image, can be obtained, and this may allow some children who are blind to understand that drawn outlines represent the real object. However the scope for use thereafter is limited.

Early Curriculum Level

Objectives

- The child will recognise outline drawings of familiar objects;
- The child will be able to match a number of small drawings with familiar objects and (if possible) the gesture

Stages

i) Resonance

Drawings are not introduced at this stage. The child should be identifying a number of everyday objects as well as recognising some gestures before drawings are introduced.

ii) Co-active

Although drawings are presented co-actively they are only introduced towards the end of the distancing stage.

iii) Distancing

When the child has some understanding of a symbol representing an activity and can distinguish familiar objects by their identification s/he is shown another means of symbolising them; ie by two dimensional representation - drawings. (Drawings have already been introduced in Module 5 Topic 4 but to help you see the overall development we have repeated the

introduction.)

The first steps in introducing drawings co-actively are:

Co-actively feel and explore the familiar object to be drawn; eg a hearing aid, a plate.

Place the object on a large sheet of paper and trace around it firstly with child's finger, then co-actively using a medium sized black felt pen. (Remember the identifying feature.)

Fill in any simple detail necessary; eg the catch on the hearing aid, the teeth in the comb. (Let the child feel them before you put them in.)

So, for example the drawing of the comb would be something like this.

Colour the drawing co-actively.

Match the object and the drawing. The child is told they are "the same" (a gesture such as putting the two index fingers together).

Draw the objects, already introduced, without outlining them; ie. freehand.

Ask the child to match them with the object.

Decrease the size of the drawings slightly making sure the identifying feature is included and the child recognises the object.

Where possible the gesture is included in the matching so that the child understands all three things mean "comb" or whatever.

Middle Curriculum Level

Objectives

- The child will draw familiar objects independently;
- The child will understand drawings of activities;
- The child will use drawings to communicate.

Development

Over a period of time the drawings can be reduced considerably in size and, very importantly, the child is presented with different views of the object. In this way her/his concept is not limited to one view of a thing. So, the comb, for example could be drawn like this

like this

or like this

or like this

The child is then encouraged to draw the objectives by her/himself. (You will probably need to gradually reduce the support given.)

Remember to make sure the child puts the ID into the drawing.

After scores of opportunities to draw these things the child will attempt to work independently. Games of "where's the ...

with the child and adult taking turns leading, can be both educational and enjoyable. The child will think it great fun when the adult, intentionally or otherwise makes a mistake - it will give her/him a tremendous sense of achievement and control.

Drawing people

The child and familiar people can also be drawn in the same way; ie putting a large sheet of paper on the floor and tracing round them (see Body Awareness Programme).

Can the child now match her/his own parts to the parts in the outline?

Cut it up - can the child put it together again?

Reduce the size of the drawing, pointing to the separate parts as they are drawn. Point out the identifying feature so that different people can be recognised. (The individual's ID is extremely important and should be included at all stages of reduction)

Jigsaws can now be used but care should be taken to show the child the complete picture and point out the parts of the body.

Drawings introduced to programmes

Drawings of objects can now be introduced to many other learning situations; eg

- The dressing programme
- The washing programme

- Eating and drinking programme
- Visual/Auditory programmes
- Body Awareness programme
- Timetables

Initially objects used are drawn during the programme and matched with the object and gesture (if there is one). Then little games are played, an item is hidden; eg the child's shoe. When the child starts to look for it s/he is handed the felt pen and clipboard and told to draw what is wanted. (Even if the child gestures for it first it is good to get the drawing also).

Equally the child learns to use drawings to organise an activity; eg here are all the things needed for going swimming:

The timetable can now be slowly weaned from objects in boxes or pockets to drawings of the identifying objects. (See Timetable Programme)

Drawing objects in relation to each other; eg

Chair and ball

Chair and hoop

Bench and ball

Firstly the drawings are done after the objects are positioned.

Then, after looking at a drawing the child positions the objects independently.

Drawing body positions

Body positions are introduced next. The child sits on a chair (or whatever) and a drawing is made.

Then the drawing of a body position is presented to the child and s/he must physically copy it. We are now into imitation (see Imitation Programme)

(Pinfigure)

By now the child has some idea of the relationship between object and object and person and object so simple instructions can be communicated to the child; eg

It's bed-time

It's bath-time

It's time for swimming

Drawings of facial expressions will also help the child to identify and name feelings; eg ;

Pin figures may be introduced if the child can understand them.

Photographs, using a Polaroid camera (so that the object and picture can be matched immediately) may now be used. Photographs must be clear and fairly close up or they will be hard for the visually impaired child to interpret.

Lastly use printed pictures from books.

Sorting/classifying/sequencing

Once the child has become fluent in the recognition of drawings, small, previously drawn cards may be used to back up exercises in sorting and classifying. They may also be used to illustrate the sequence of events in an activity; eg making toast

The Drawing Programme has now been completely submerged in the following areas:

- Visual Training
- Graphic Conversation
- Reading

Art work as such is developed separately, with emphasis on creativity.

For the child with no usable vision identifying objects from experiences will need to be continued for a much longer period of time. Then, especially in the Timetable boxes, these objects are reduced in size. Next they are slowly replaced by abstract

shapes, shapes that are in some way similar to the original shape of the object. Different textures may also be used. Eventually these shapes are thermoformed. The next step is to incorporate some brailled letters into the thermoformed representation. Eventually the brailled word can be substituted for the raised shape.

This process will proceed very slowly. Many children with a profound hearing loss and no usable vision will be unable to reach this stage.

Remember, one of the principal aims of this programme is to facilitate communication so, encourage the child to use drawings if s/he is upset, or looking for something, or confused.

Use drawings yourself with the child to give information and just for the fun of it!

Be flexible and spontaneous.

Always speak when presenting the child with gestures or drawings.

Overview - Drawing Programme

The developmental areas most positively affected by this programme

- Understanding 2D representation
- understanding symbols
- awareness of surroundings and relationships
- between objects
- awareness of self and others
- use of vision
- communication and language
- sorting and matching
- structuring
- sequencing
- imitation

Other curriculum areas associated with and dependent on the development of this programme.

- Graphic conversation
- writing
- reading
- art work

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Module 6 Topic 3k

GRAPHIC CONVERSATION

Before attempting to use this section, please refer to the note.

Graphic Conversation has already been introduced in some detail in the topic on Communication and Language Module 5 Topic 4. This particular presentation is intended to give you a clearer picture of the overall development of the process.

Conversation is the natural means a mother uses to teach her child to communicate. It is the way of teaching language to a child. Written/brailled conversation is an added reinforcer to the child who has inadequate input through hearing. It is easier for her/him to process what is being said and to learn from her/his own attempts at words. The child is highly motivated to participate because, on the whole the process originates in response to her/his own query, need or interest. It gives the child a sense of importance and confidence.

Principal aims:

- To develop the child's communication and language through natural conversation;
- To introduce reading to the child.

Secondary aims:

- To develop turntaking in the child;
- To help the child understand and structure her/his world;
- To develop relationships and friendships;
- To teach the child how to gather information; acquire knowledge.

Presentation

The conversation must originate from the child or be connected with her/his interests or needs. It is based on the method used by a mother teaching her child. (This is one reason for the restricted use of adults dealing with the child. The person must really know the child, be able to interpret her/his body language and develop a trusting relationship with them.)

Keep the flow of signed conversation going - be quick to write or draw it and, if there is danger of losing the impetus keep the signed conversation going and write it out in the usual form afterwards.

Write in a conversational form; eg using contractions, not in a formal, bookish way.

Translate the child's efforts into correct language; eg:

Child signs "I bus home"

Teacher signs "You are going home on the bus"

Teacher writes: Cathy: "I'm going home on the bus"

Involve the child in the activity, get her/him to draw/colour/write.

Use felt .pens and paper best suited to the child's sight.

The adult must, at all stages be lively and dramatic. A bored child does not learn.

Remember graphics should only be used if they are a help to communication, but don't give up too easily.

Early Curriculum Level

Graphic conversation develops from the following areas: The early interaction between adult and child (Module 5 Topic 4); Movement (Module 6 Topic 3 Movement Programme); Drawing (Module 6 Topic 3 Drawing Programme)

The objectives for these are therefore the same for the Graphic Conversation Programme until it is actually phased into existence through drawings in the Middle Curriculum level.

Middle Curriculum Level

Objectives

- The adult will seize what the child is trying to communicate through drawing and develop it to give further information;
- The child will recognise simple familiar words when incorporated into the dialogue.

Development

Following on from The Drawing Programme we now look at how the interaction between the adult and child develops into conversation. (This has been already presented in Module 5 Topic 4.)

The conversation is presented in balloon form. Each person must have their ID included in the drawing.

First Step

Previous to this when the child has, for example, asked for/or drawn a biscuit, the adult has responded by taking the child to the tin. Now the adult draws the child (with ID) and puts a balloon around her/his drawing showing that the child has asked for it. Then the adult draws her/his response using a balloon and the drawing with ID; eg:

Second Step

The next step would be when the adult not only responds to the child's query but develops the conversation; eg:

The child draws the symbol for going home

The adult responds by telling the child s/he will go home after lunch.

It may happen that the child will then gesture or say some key word associated with the event such as "Mummy". This is added to the conversation; eg:

and the adult picks it up and develops it further by telling the child "You are going home with Mummy in the car".

To reinforce the information and the sequence it would then be important to summarise the conversation; eg

After dinner you are going home with Mummy in the car.

It is a good idea to put the colour of the day on the top of this conversation and to store it in the child's folder so that it can be looked at and referred to by the child and the adults (school staff, parents, others). It can be also used to initiate further conversation and to develop the use of a diary (see Timetables Programme).

Ideally the conversation is always initiated by the child; this is why it is necessary to have a stimulating and responsive environment. Realistically you may have to engineer a situation such as:

- Hiding something you know the child wants or replacing it with something silly.
- Raising their curiosity by wrapping up something belonging to the activity, and asking "What's in the box?"
- Leafing through a photograph album or another child's graphic conversation folder.

There are many ways of engaging a child's attention and getting a conversation going.

Third Step

As the child progresses in her/his understanding of two dimensional representation and the interchange of conversation, simple written words of about 3/4 letters may be added to the drawings.

So the conversation could look something like this;

Child asks if she is going out in the bus.

The adult responds and develops the conversation.

In this example the child is being taught to recognise the key words in the sentence: ie bus, swim. These words should then be given to the child by everyone as frequently as is possible. Notice they are introduced in a sentence. (Flash cards of the words may be used as a back up to reinforce the reading but remember, the real learning situation is within graphic conversation.)

always use familiar short and contrasting words such as

bed

Jill

shoe

and those words which already have a drawing and are motivating to the child.

Depending on the child's ability increase the written vocabulary and fade out the drawings.

Always gesture/fingerspell and speak.

Some children will need additional help in reading. incorporate the word into the drawing; eg:

For these it may be of help to incorporate the word into the drawing; eg:

Fourth Step

The child is now helped to remember the sequence of a conversation and who said what.

After a conversation session, cut up the conversation (include the drawing of the person).

Can the child put the conversation together again?

Again cut the "speaker" from the written conversation. Can the child remember who said what and the sequence of the conversation?

Discontinue the colouring and replace the face with the person's name.

The child can now participate in quite a detailed conversation.

Fifth Step - Broadening the subject

These "conversations from heart to heart" as Van Uden calls them, are spontaneous dialogues where flow and freedom are the most important elements. However, graphic conversation is also a natural means of teaching new structures and words. An example of such a session may be found in Appendix B at the end of the entire topic.

After the conversation has been recorded, a short precis of the ideas and expressions included in it is put together by the adult. Conversational language, not formal prose is used as far as is possible. (Appendix C)

From this precis the child can be introduced to simple forms of language structure; eg:

Key (pointer) words; ie I, you, he, she, it, they, we, our, your, mine, his, hers, theirs, us, them, etc; eg:

Gerry likes oranges. He eats them every day.

Questions such as What? Who? Where? (Why?, should be left until last).

Singular and plural nouns

Adjectives

Simple verbs and tenses. The child's diary (see Timetables) can be of great value here. The child (or adult) writes about an event in the present tense then, after the event, changes the verb; eg:

We are going went swimming

The same can be done with future events; eg:

We will go are going swimming on Friday today

This aspect of graphic conversation is called Linguistic Conversation when the child is encouraged to look at and reflect on conversations just completed or from previous events.

Later Curriculum Level

Objectives

- To develop and deepen the young person's art of conversation;
- To improve and broaden their reading skills;
- To teach the formal structure of their language;
- To introduce them to the world outside their immediate environment;
- To develop independent learning.

When the young person reaches this stage, conversations, primarily for the purpose of teaching grammar, may be initiated. It continues to be important to get the child's attention and interest and to avoid questions (especially those with yes/no answers) as much as possible, so use familiar attractive material.

Conversation, including graphic conversation, is also the approach used to present new information to the young person. Topics that interest them may already have been introduced in the Middle Curriculum Level but now, as the young person

becomes more aware of the larger world, interest in for example, other countries, may be kindled. But, beware of changing the approach, the young person's chief way of learning is not by being presented with facts, in other words, lectured to, but by having a conversation about them.

Reading books (other than the child's diary or stories within her/his experience) offer another means of getting the young person in touch with the wider world.

The conversational approach also applies to children with no usable vision. A way of adapting this conversation before the child understands braille has already been presented in Module 5 Topic 4.

Reflection points to help the adult assess the effectiveness of the conversational lesson may be found in Appendix D.

For further information on this read Van Uden's book *A World of Language for Deaf Children*.

Overview - Graphic Conversation Programme

The developmental areas most positively affected by this programme

- Communication
- language (new vocabulary and structure)
- understanding of the printed word
- use of vision
- use of hearing
- sorting, matching,
- sequencing
- structuring (control of child's own world)
- writing

Other curriculum areas associated with and dependent on the development of this programme.

A means of introducing and developing all areas of the curriculum.

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A resource for staff working with children who are deafblind

Module 6 Topic 3I

IMITATION

Before attempting to use this section, please refer to the note.

The Imitation Programme is a development of, in particular, the Body Awareness Programme and the Movement Programme. It is not introduced until the child has reached the Middle Curriculum Level.

The child with no usable vision will have greater difficulty imitating than the child who has residual sight. However, with a good basis of body awareness and movement they also, using touch, can learn to imitate all but the most complex of movements. However, all new skills or movements should be introduced co-actively.

Principal aims:

To enable the child to imitate the bodily movements of another;

To develop communication skills.

Secondary aim:

To develop self help skills.

Presentation

The child will find imitation easier when there is an object involved.

Early Curriculum Level

See Body Awareness and Movement Programmes

Middle Curriculum Level

By now the child:

is familiar with her/his own body;

has a number of fine and gross motor movements;

has been introduced to equipment in a large room.

Objectives

The child will move parallel to a moving adult;

The child will continue a movement independently;

The child will take turns;

The child will imitate body positions; eg sitting on chair;

The child will imitate familiar gross motor movements in sequence;

The child will imitate familiar fine motor movements.

Development (It would be helpful to have the assistance of a second adult)

Parallel Movement

When the child reaches the stage of intentional involvement in a movement; ie when s/he is no longer passive, the adult should slowly withdraw support (over a number of sessions) until the child is making the movement independently but parallel to the moving adult, (the adult is still moving at this point).

Continuing a movement independently

The adult gradually fades out of the movement until the child is moving independently. The child's attention is drawn to this fact by co-actively pointing to her/his chest and saying

"John, by himself"

Then, as the two revert to moving together, the child's attention is drawn to it by co-actively touching the child's chest

and the adult's and saying

"John and Ann together"

It is a good idea to develop some signal to let the child (especially the child with no usable vision) know that you want them to continue doing something independently. (The adult's hand placed gently but with a slight forward pressure on the child's shoulder would be a possible gesture.) This is invaluable for many situations as, having been used to co-active direction they may think they should cease to move once the contact ends. It is also important to develop a "stop" gesture (this could be something simple such as the adult's open hand placed flat against the child's chest).

Teaching the child to take turns develops from this. Having established the idea that the child should continue a movement started parallel to the adult, s/he is now directed to stop. Then, co-actively pointing to the adult's chest the child is held still while the adult makes the movement on her/his own. Then the child is co-actively indicated to do it independently, then the adult and so on, indicating whose turn it is and sometimes doing it together.

It is a good idea to have a short and clearly defined distance if you are walking/crawling, etc, this could be a mat, a bench or just between two walls or large objects. This gives security to the child.

The next step is to introduce a time element. Again, using familiar movements:

the adult makes the movement and directs the child to feel it

s/he then stops

the child is told "You crawl the same way" or "you, do the same" and is lightly manipulated into the movement until - "the penny drops"!

The child has now begun to imitate.

Repeating body positions such as sitting on a chair (use two chairs) and putting on hats or whatever, is another step in the development of imitation. (A good example of this may be found in the video section The Stages) The adult and child after indicating that they are to move together, go through the movements co-actively. Then the adult co-actively indicates s/he will move first and, for example, sits on one of the chairs facing. Then, the child is directed to move on her/his own and, hopefully sits down on the chair beside the adult. (The child with no residual sight should feel the adult's position). The child is then told (through an appropriate gesture which is used in other situations such as matching objects) that the two are "the same". This exercise must be practised over and over again with variety and in all sorts of different situations before we can be sure that the child is in fact imitating.

The child can now be expected to repeat a movement or position demonstrated by an adult beforehand. At this point the Movement Programme (the circuit) can be fully utilised to back up and develop Imitation.

Dolls may now be used for imitation. Initially the child is asked to copy the doll's position on life-size furniture, then using dolls' house furniture. The child may also use the doll to imitate the adult's movements or position.

Drawings of body positions are introduced next. The position is done first, then drawn on a card. At the later stage the child is presented with the card and asked to imitate the position. (see Drawing Programme)

Imitating a sequence of positions using objects is slowly built up by using, at the

beginning, different objects; eg

putting the ball in the bin and

the cup on the chair

then increasing the activity:

putting the hat on the head

sitting on a chair and

putting the doll on a knee.

Later, the difference is reduced by using the same object to do various things; eg

taking the hat from the box

then putting it on the chair

then on the head.

Drawings are a great reinforcer of sequence. The positions are drawn beforehand on cards, the adult goes through the sequence, the child puts the cards together in the correct sequence and then imitates them.

Imitating body movements is now introduced to the child. Objects are used to reinforce the movements. Eventually wear her/him away from the "mirror imagining" s/he will naturally make, by standing together in front of a large mirror, and holding both your positions move away to face each other. In this way the child will understand that the imitation of position is not a mirror image. (This will have to be repeated several times before the child understands what has to be done, the child with no residual vision will have even greater difficulty).

Using different coloured sleeves, gloves, or socks to make your limbs more obvious will help the child to imitate your

movements more easily. The US room can be of great assistance here when fluorescent paper and paint are used to identify parts of the body.

When drawing a movement use a dotted line; eg

See Appendix E at end of this subject for examples of gross motor imitation.

Fine motor movements begin with whole hand positions and movements and then finger training. Again, this is introduced through hands-on manipulation. Then direction and support are reduced until finally the child is copying. Finger games, using rhythm and song can turn this into a very enjoyable exercise.

Over time the finger positions for the letters of the alphabet are introduced, again as a game, if possible. Then combinations of two letters, then three and so on. (See Module 5 Topic 4, the section Introduction to Fingerspelling)

Matching movements, drawings, (symbols for the child who is blind) and eventually the written/brailled word will reinforce the similarities and develop the child's symbolism.

Graphic Conversation will accelerate when the child understands and can follow drawn instructions. The development of self help skills will be greatly enhanced when the child is capable of imitating what the adult does and can follow a series of simple drawn instructions. This will lead to a greatly increased independence thus enabling the child to move into the LATER CURRICULUM LEVEL in these areas.

Remember

Imitation is an important foundation for all areas of learning.

Overview - Imitation Programme

The developmental areas most positively affected by this programme

Body awareness

concepts of self and others

gross motor movement

fine motor movement

sequencing

distancing

memory

use of vision

use of hearing

communication and language

social interaction

number

Other curriculum areas associated with and dependent on the development of this programme.

The ongoing development of fine and gross motor skills and communication

games

All new learning is in some way dependent on imitation

Appendix A

Appendix B

Graphic conversation between a teacher and a twelve year-old girl with a profound hearing loss and partial sight. (A child at this level does not need balloons around the conversations. Bold print indicates the words the adult emphasises.)

Jill (child): A man and a woman are coming today

[The child gestured "coming" - the teacher wrote it correctly - "are coming"]

Margaret (teacher): Whose **father** and **mother?** (**parents**)

Jill: A girl named Ruth

[Again the child Jill, fingerspelt and gestured the keywords. the teacher put them into a correct sentence]

Margaret (the child understands the abbreviation): Yes Ruth and her parents will visit us in school at 11 o'clock

Jill: Jana is in school

Margaret: Yes, Jana is also a visitor. We have **4 visitors** - Ruth, Ruth's mother and father and Jana

Jill: Jana came on Monday

Margaret: Yes, Jana came **yesterday**. We will have another visitor tomorrow

Jill: Who ?

Margaret: A deafblind man named Frank

Jill: 5 visitors!

Mar: Yes, We have 5 visitors in school **this week**.

Jill: Lots of visitors!

[The child gestured "lots" and the teacher gave her the new word]

Appendix C

Precis of conversation

This week we have 5 visitors in our school.

Jana came yesterday.

Ruth and her parents are coming today and

Frank will come tomorrow.

What a lot of visitors!

Appendix D

Reflection points for the adult after a lesson with a child in the Late Curriculum Level using graphic conversation.

1) What were the good points in the lesson?

2) What did the child learn from it?

i) new vocabulary?

ii) new concepts?

iii) rules of grammar?

3) What was the purpose of this conversation?

4) Was it achieved?

5) Was it conversation?

Who lead/directed it?

Look at the child's contribution to the conversation

i) Was s/he interested?

ii) Comment on the quality of the response.

iii) What does the conversation tell you about her/his weak spots and what was not understood?

iv) How would you remedy this?

6) Look at the adult's contribution

i) Did s/he play "the double role" by seizing and then elaborating the child's contribution?

ii) Did s/he enter into the conversation by reacting to the child's efforts and contributing something of her/his own?

7) What sentence types are used in the work - statements, questions, demands, expression of feelings, answers (from adult)? (from child)?

8) How could this lesson be improved on?

What areas/thoughts could have been developed with the child?

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