



EARLY CHILDHOOD DEVELOPMENT AND
VISION IMPAIRMENT TRAINING PACK

Improving play and communication in home
and early years settings

[Document subtitle]

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PART 1: ABOUT THE ECD/VI TRAINING PACK



1. Who is the ECD-VI Training Pack aimed at?

As reported on the Early Childhood Development (ECD) pages of the UNICEF website (UNICEF, 2019) the *Care for Child Development* (CCD) package is a holistic ECD intervention that was originally developed in the late 90s as part of the regular child health visits as specified in the WHO/UNICEF strategy of Integrated Management of Childhood Illnesses (IMCI). The CCD programme:

- *provides information and recommendations for cognitive stimulation and social support to young children, through sensitive and responsive caregiver-child interactions;*
- *guidance for health workers and other counsellors as they help families build stronger relationships with their children and solve problems in caring for their children at home;*
- *outlines play and communication activities for families to stimulate the learning of their children so that caregivers learn how to be sensitive to the needs of children and respond appropriately to meet these needs.*

The Care for Child Development Pack does not however provide specific guidance on how to support young children with disabilities, including those with vision impairment, hence the development of this pack.

The *ECD/VI Training Pack* is intended to be used primarily by frontline health workers, specialist teachers and community development workers who support families with young children who have primarily a diagnosis of vision impairment. This includes the programme facilitators (e.g. people already trained on the UNICEF/WHO framework Care for Child Development), the participants (e.g. community

health workers, ECD coordinators, Child Protection Officers, CBR workers). The *ECD/VI Training Pack* can be used for promoting the development of children who are considered to be blind (i.e. have little or no functional or useful vision) and those who have low vision (i.e. have some functional or useful vision). It can be used as a separate resource or drawn upon to complement the WHO/UNICEF framework *Care for Child Development* (CCD) three-day training programme. We encourage facilitators to consult the conceptual framework which draws on a bioecological systems theory to guide our thinking about early intervention approaches for young children with vision impairment and places the child (active learner) at the centre of their development in the Appendices.

2. Background information on the development of the ECD/VI pack

Inclusive experiences prior to starting school offer young children with disabilities important space to ensure optimal development by providing them with opportunities for learning, play, communication and interaction with their peers. Inclusive early childhood development and education should therefore ensure that young children with disabilities receive specialised health-care and that families of children with disabilities are able to access basic and essential social services in their communities (e.g. UN Children's Fund, 2012). The United Nations Sustainable Development Goals (SDGs) 2030 make 'a universal call to action to end poverty, protect the planet and ensure that all people can enjoy peace and prosperity' (UN, 2015). Nowhere is this more openly expressed than with SDG goal 3 (good health and well-being) which sets out to 'ensure healthy lives and promote well-being for all at all ages'.

ECD is viewed as being a priority focus of the SDGs. Whilst there is explicit reference to ECD in Target 4.2 which states that by 2030 countries should: '*ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education*', the SDG commitments to ECD are much broader than just one early education target. As an example, a 2016 Policy Brief from an international study of childhood poverty (*Young Lives – Oxford Department of International Development, 2016*) offers four key messages that can underpin delivery of the SDGs through the transformative potential of accessible, inclusive, quality ECD – for *all* young girls and boys, and for their families:

1. early deprivation affects the growth and changing structure and function of the brain,
2. inequalities emerge – and are best prevented – early in life,
3. early child development programmes are cost effective,
4. the importance of ensuring programmes are targeted, equitable and inclusive.

We know that vision plays a significant role in early development, acting as a driver for progressively independent exploration of the world. Through the use of vision, young children can develop increasingly sophisticated ways of establishing control within different learning environments. Reduced visual input through a vision impairment can therefore act as a significant barrier to a young child's development. Reduced 'access' to sensory information could potentially result in the child becoming increasingly reliant on other people for support. Work in this area emphasises the importance of promoting distinctive early intervention approaches to maximise the ability of a child with vision impairment to develop with as much independence as possible. We give more information about how vision plays a significant role in early development in an additional section i– '*What ways can reduced vision affect early learning and development?*' which is found in

the Appendices. To date, there are no dedicated resources that can be drawn upon to guide generic early intervention approaches for young children with vision impairment in low-income settings. The *ECD-VI Training Pack* has been developed to address this gap and to be used independently, or to complement the *Care for Child Development* (CCD) training programme (published jointly by World Health Organization and UNICEF).

As a multidisciplinary team committed to best practice in ECD, our intention has been to develop a resource that focuses on what children **are** able to do, and not what they **cannot** do at home and their community. We want to always emphasise ways in which parents and carers can be encouraged to respond positively to their children's needs through appropriate communication and play activities. We hope you share this belief in your own role when training practitioners, carers and parents to support the very distinctive support needs of these young children. We are keen to monitor use of the *ECD/VI Training Pack* and ensure that it has maximum impact to optimise the early development opportunities of young children with vision impairment. We may therefore be in touch with those of you who use the *ECD/VI Training Pack* over the coming years. We hope you find the *ECD/VI Training Pack* to be of value in your role in promoting quality ECD and we look forward to receiving feedback that we can use to both to improve the resource and to evaluate its overall impact.

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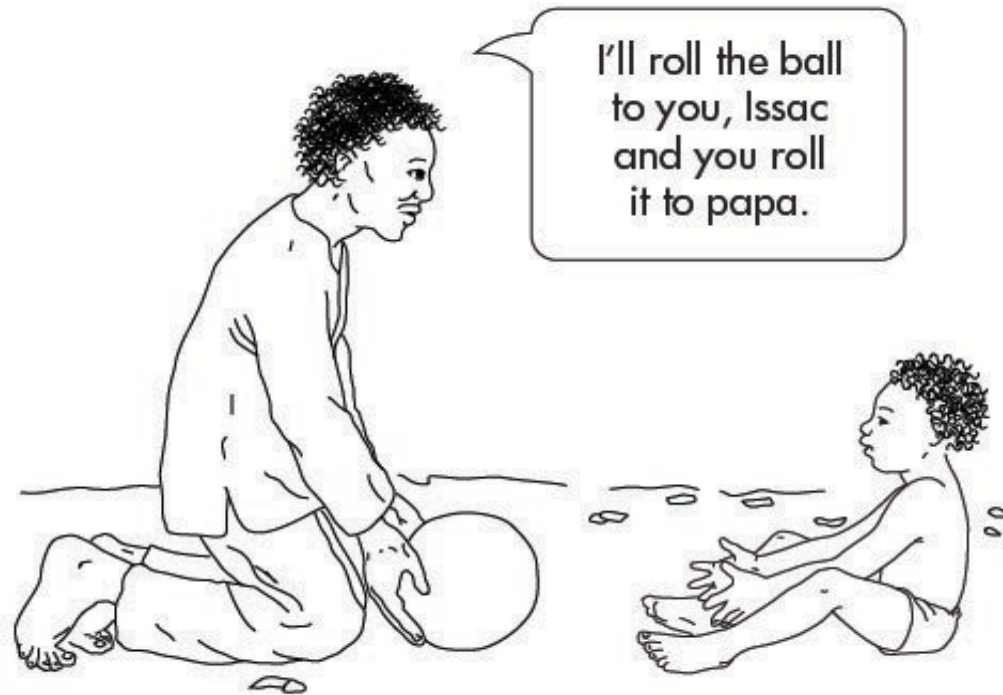
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PART 2: TRAINING RESOURCES



Introduction

The Training Resources provide a set of activities that can be drawn upon for professional development and training purposes in order to explore how vision impairment can affect early learning and development. The resources can either be used independently or to support the resources contained in the CCD programme.

Please note that the line-drawings used in the Activity Cards and Training Resources depict young children in a range of home and care settings. They are not meant to be representative of actual young children with vision impairment or their families but rather to be illustrative of young children being supported in different contexts and with different people.

The quotes that are used in the Activity Cards reflect the illustrative nature of the drawings and are not intended to be prescriptive for how a carer is expected to talk to a young child. Further guidance is presented in each Activity Card.

Training Resource	Guidance for Use
TRAINING RESOURCE 1: WHAT CAN VISION LOSS MEAN FOR LEARNING AND DEVELOPMENT?	This resource can be used to encourage participants to think about vision and vision loss in relation to themselves and then to make comparisons with young children.
TRAINING RESOURCE 2: HOW CAN YOU HELP A CHILD WITH VISION IMPAIRMENT?	This activity is based on a case study child called Tiyanjane and can be repeated with other children that participants want to introduce to a group. It requires participants to listen carefully to a summary that has been written by the mother of Tiyanjane and then to note down key points about how they might help Tiyanjane play.
TRAINING RESOURCE 3: EARLY IDENTIFICATION OF VISION IMPAIRMENT	This activity can be drawn upon to consider some of the descriptors to look for when identifying vision impairment in young children.
TRAINING RESOURCE 4: SOME COMMON MYTHS ABOUT VISION IMPAIRMENT	This is a helpful activity to encourage participants to think about common myths relating to vision impairment. You can draw on the statements presented in the activity and generate your own.
TRAINING RESOURCE 5: LOCAL NAMES USED FOR PEOPLE WHO HAVE VISION IMPAIRMENT	This is another useful activity to encourage participants to think about how names and terms can be used to stigmatise people with vision impairment. Once again you can draw on terms that you are familiar with from your own practice.
TRAINING RESOURCE 6: ADAPTING PLAY MATERIALS AND GAMES FOR YOUNG CHILDREN WITH VISION IMPAIRMENT	This is a very good practical activity to encourage participants to think about how to adapt basic materials to ensure they are useful for young children with vision impairment. It is a good one to use as an ongoing activity throughout the day in between other activities as the possibilities are infinite!

Table 1: List of training resources and how to use them.

TRAINING RESOURCE 1: WHAT CAN VISION LOSS MEAN FOR LEARNING AND DEVELOPMENT?

Guidance for Training Facilitators

1. Ask participants to discuss their own experiences of having reduced vision – this might include walking on a road at night time, trying to find a torch in the middle of the night, losing glasses, result of a vision impairment or similar.
2. Ask participants to think about how different this experience might be for young children who have a vision impairment (either born with a vision impairment, or acquired this at an early age).
3. Ask them to note down up to five points to describe what vision loss can mean for learning for a young child – compare their notes with the summary listed below.
 - A child’s level of vision may vary from day to day, or even moment to moment. Her vision may depend on her surroundings, as lighting can vary from place to place (e.g. inside a home compared with outside the home).
 - If a child is feeling tired, unwell or is under pressure, she may not be able to use her vision as well as usual.
 - A child with reduced vision may not have the same **range and variety of real-life experiences**, such as active participation in daily routines of eating, bathing and dressing which lead to independence.
 - Children who have reduced vision or no vision will be significantly disadvantaged in their opportunities and ability to **imitate** visually.
 - Many skills that children may be expected to ‘pick up’ **must be introduced directly** to children who reduced vision as they have reduced opportunities to learn in the same way as their fully-sighted siblings or peers.
 - It may take a child **more time** to complete activities that involve vision. This can be frustrating for caregivers and teachers; the extra time and effort that it takes to do everyday things can also make them more tired.
 - Our **distance senses** – hearing and vision – allow us to **anticipate** what may happen next: if we touch a child who cannot see without giving them warning through speaking to them first, they may react badly or get upset.

This activity and list of points drawn upon to describe vision loss has been adapted from Jennings, J.(2009) ‘Including children with visual difficulties in the foundation stage’ RNIB: London

TRAINING RESOURCE 2: HOW CAN YOU HELP A CHILD WITH VISION IMPAIRMENT?

Guidance for Training Facilitators

This activity is based on a case study child called Tiyanjane (a fictitious child but one based on real children who were involved in the research study). You can repeat the activity with other children that you know or that participants want to introduce to a group.

Inform participants that you will read out a summary that has been written by the mother of Tiyanjane. Ask participants to listen carefully, and note down key points about how they might help Tiyanjane play. Ask them to write their notes as if they are Tiyanjane (i.e. in the first person). You can write the following headings on a board and ask them to think about some key messages in relation to each one:

- Please remember.....
- Please help me by using....
- Please will you give me....
- Please let me.....

Now read out the summary about Tiyanjane reminding participants to make notes.

About my child Tiyanjane

Hello, I want to tell you about my child Tiyanjane. Tiyanjane is three years old and has very little vision. We don't know exactly what she can and cannot see but we think it is probably only light and dark. She is a very friendly girl but because children and adults who play with her do not always know she cannot see they don't always include her in activities and she can sit silently waiting for people to talk to her. She can be very lonely and sometimes it seems as if she has no friends. I really do want her to go to the nursery so she can play with other children. I want to talk to her caregivers very soon but I am not really sure what I should say. They are all very nice people and want to help Tiyanjane I am sure, but they don't really seem to know how to help her.

Participants can then compare their notes with the summary provided on the following page.

Table 2: Lists of ways to support a child with a vision impairment at home and community: How we can help Tiyanjane play?

Please remember...	Please help me by using...	Please will you give me...	Please let me...
<ul style="list-style-type: none"> • I have to work harder on visual activities so I may get tired • I may see less well in bright or dim light • I may see less if I am worried or ill • I may not see body language • I may not see facial expressions 	<ul style="list-style-type: none"> • my name before giving instructions • the names of the other children so that I know who you are talking to • curtains or blinds to control light from outside coming through the windows • use bright clear colours to attract my attention • activities that use all the senses – touch and sound, as well as vision. 	<ul style="list-style-type: none"> • clear verbal instructions • explanations for unexpected noises • real objects to play with • a place to find toys on my own • warning if my routine is going to change in any way • help to make friends 	<ul style="list-style-type: none"> • tilt my head if it helps me to see better • go as close to things as I need to (this won't damage my eyes) • have extra time for activities • hold objects and books myself • touch and explore new things

You can now try the same activity using short extracts based on reports of different children. These can include descriptions that have been generated by the participants or some that you have prepared earlier as facilitator.

This activity has been adapted from Jennings, J.(2009) 'Including children with visual difficulties in the foundation stage' RNIB: London

TRAINING RESOURCE 3: EARLY IDENTIFICATION OF VISION IMPAIRMENT

Guidance for Training Facilitators

Explain to participants that their observations of a growing child will provide information on how the child is using their vision. Provide them with a copy of the sheet on the following page.

Ask participants to look through each descriptor and to indicate each one may be a sign of a vision impairment. While many of these symptoms will be present in children with no eye problems, it is important to realise that they may be an indication of impaired or fluctuating vision, so it is always advisable to suggest to families that they take their child to an eye clinic for an eye test.

Table 3: A list of descriptors which help to determine whether a child has an eye problem

	Descriptor	True	False	Don't know
1	Inflamed, cloudy, bloodshot or weepy eyes			
2	Drooping or swollen eyelids			
3	Squints of any kind in one or both eyes			
4	Unusual eye movements, such as flicking or wobbling			
5	Blinking, rubbing or screwing up of eyes			
6	Discomfort in bright light or in the dark			
7	Moving head rather than eyes while reading			
8	Unusual (very long or short) viewing distance			
9	Unusual head posture when concentrating on a task			
10	Complaints of dizziness, headaches or general eye discomfort			
11	Poor eye contact			
12	Clumsy movements and poor balance			
13	Bumping into objects at the side on the ground			
14	Difficulty with stairs and steps			
15	Reluctance to join in activities outside			
16	Not answering unless called by name			

17	Closing or covering one eye			
19	Difficulties with hand-eye co-ordination activities			

TRAINING RESOURCE 4: SOME COMMON MYTHS ABOUT VISION IMPAIRMENT

Guidance for Training Facilitators

Write the statements below on a chalkboard or a flipchart. Invite participants to come up and indicate next to each if they think the statement is True or False (or Not Sure). You can also encourage participants to share common myths about vision impairment that they are aware of from within their community, or of course add your own statements to the list.

For information all the statements are **False** (but do not share this with the participants until they have completed them all!)

Table 4: A list of statements which are ‘true’ or ‘false’ or ‘not sure’

Statement	True	False	Not Sure
1. All people who are blind cannot see anything.			
2. All blind people have a special gift such as being able to play musical instruments very well			
3. Eating carrots will improve the vision of young children			
4. Reading in poor light will damage a child’s vision			
5. It is not harmful to look at the sun if you are wearing dark glasses			
6. All people with vision impairment need to wear glasses			
7. Wearing glasses makes your eyes lazy so should be discouraged			

TRAINING RESOURCE 5: LOCAL NAMES USED TO DESCRIBE PEOPLE WHO HAVE VISION IMPAIRMENT

Guidance for Training Facilitators

First, ask participants to give names or terms (both positive and negative) used to describe people (children or adults) with vision impairment in their communities.

Next, ask the participants to discuss in groups if they consider each name or term to be 'appropriate' or 'inappropriate'.

This can lead to a discussion about stigma, feeling different and reduced expectations of children with disabilities in general and vision impairment in particular.

You might want to start the discussion off with some commonly used terms from your own experience.

Table 5: Lists of appropriate and inappropriate names or terms to refer to persons with disabilities

Name/ Term	Appropriate	Inappropriate

TRAINING RESOURCE 6: ADAPTING PLAY MATERIALS AND GAMES FOR YOUNG CHILDREN WITH VISION IMPAIRMENT

Guidance for Training Facilitators

The facilitator should prepare several small cards with names of different play materials written on them. If possible, the facilitator can actually use the actual items. Show the cards or items one at a time. Ask participants how they can adapt or use the play material in relation to a child with vision impairment. Ensure there is an emphasis on locally available teaching, learning and play materials that are appropriate for young children with vision impairment. You should plan to try out each of the suggestions and then evaluate it. A summary sheet can then provide a good resource for the caregivers to use in their work.

Table 6: A list of games and materials that can help stimulate a child with a vision impairment

GAMES AND MATERIALS	HOW WE CAN ADAPT	HOW WE CAN USE
Ball	<ul style="list-style-type: none">Put a bell insideUse bright coloured balls	<ul style="list-style-type: none">Tell the child to listen very carefully to a ball rolling very slowly towards themIf the child has some vision ask them to watch a ball as it rolls across the room
Dolls		
Parachute		
Pretend cooking utensils		

PART 3: ACTIVITY CARDS



Introduction

The *Care for Child Development* (CCD) training programme (published jointly by World Health Organization and UNICEF) places an emphasis on developing ‘play’ and ‘communication’ and is written on the assumption that the young child has vision.

We have taken similar concepts but incorporated into the guidance examples of how it is possible to play and communicate through encouraging the development of all the senses – including vision where appropriate. The main points are included in the form of Activity Cards that have a focus on **play** and **communicate**. The Activity Cards are presented so you can use them separately alongside this Training Pack.

When using the Activity Cards for training purposes key messages to emphasise include:

- Your baby/young child learns from birth but because she does not see well, she will need additional help from you to help her understand her world.
- Your baby/young child needs to be an *active* participant in all the activities – things should not just be done *to* her/him for her/him, but ideally with her/him.
- Reduced vision may not be apparent in the early weeks and months – you therefore need to be attentive to signs of any vision impairment (refer to training resource 3).
- Whenever interacting with your child, always give him or her affection and show your love.
- Help your child learn about his or her world using touch, smell and taste – don’t only rely on vision even if the child does have some vision that they can use.
- Let your child go as close to something as they need to in order to view it – always be guided by the child.
- Give your child plenty of time to do activities.

Activity Card 1: new-born, birth up to 1 week

This Activity Card shows caregivers with a new-born baby (between birth and 1 week). It is suspected (but not yet known precisely) that the baby has a vision impairment and therefore may have reduced vision.

1. Show **Activity Card 1** to participants. Remind participants that very young babies at this age have very limited visual function for seeing objects and people in detail and so are more reliant on sensory information that is close to them – including smells, taste, hearing and close vision such as a smiling face. That means it may not be possible to accurately assess a young child's vision and observation of the baby's movement and behaviour will be important.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a very young baby of this age who has a vision impairment;
 - **communicate** with a very young baby of this age who has a vision impairment.

In particular, encourage them to think about what extra help the very young baby might need to understand and feel secure in his or her surroundings if there is vision loss.

3. Using a doll or a rolled-up blanket, show participants different approaches to promote play and communication and then ask them to demonstrate these to each other.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card. A reminder is provided in the boxes below.

Play –new-born to 1 week

Babies who may not see well need extra help to understand and feel secure in their surroundings. You can provide ways for your baby to see, hear, and touch you. One way to do this is to gently soothe, stroke and hold your child.



Communicate – new-born to 1 week

Take your baby's hand to your face and move your head gently from side to side as you talk to her.



Activity Card 2: 1 week up to 3 months

This Activity Card shows caregivers with a young baby (between 1 week and 3 months). It is suspected that the baby has a vision impairment and therefore may have reduced vision.

1. Show **Activity Card 2** to participants. Remind participants that young babies at this age with no vision impairment have very limited visual function for seeing objects and people in detail at a distance and so are more reliant on sensory information that is close to them – including smells, tastes, hearing and close vision such as a smiling face.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a young baby of this age who has a vision impairment;
 - **communicate** with a young baby of this age who has a vision impairment.

In particular, encourage them to think about what extra help the young baby will need to understand and feel secure in his or her surroundings if there is visual loss.

3. Using a doll or a rolled up a blanket show participants different approaches to promote play and communication and then ask them to demonstrate these to each other. Speaking to the child will be particularly important as a way of reassuring her/him that there is somebody nearby. Practice informing the baby of what it is you are about to do so she can learn to anticipate through her other senses. This can include laying the baby down, picking the baby up, changing the baby etc.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card. A reminder is provided in the boxes below.

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Play - 1 week to 3 months

You can help your baby by giving her many chances to see as well as listen, feel and smell things in the world. Encourage her to explore the world near to her.



Communicate - 1 week to 3 months

Keep your baby near you when she is awake. Speak to her often to let her know you are near. She will learn to recognise your voice and respond to it.



Activity Card 3: 3 months up to 6 months

This Activity Card shows caregivers with a young baby (between 3 months and 6 months).

1. Show **Activity Card 3** to participants. Remind participants that young children at this age are still developing their distance vision. As such, they will still be more reliant on sensory information that is close to them – including, smells, tastes, hearing and close vision such as a smiling face.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a baby of this age who has a vision impairment;
 - **communicate** with a baby of this age who has a vision impairment.

In particular, encourage them to think about what extra help the young baby will need to understand and feel secure in his or her surroundings if there is visual loss.

3. Using a doll or a rolled up a blanket show participants different approaches to promote play and communication and then ask them to demonstrate these to each other.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card.

Play - 3 months up to 6 months

Provide ways for your baby to see, feel, hear, move freely and touch. Slowly move objects that can be easily seen and make a noise e.g. a shaker rattle, a doll, a ring on a rope of string. Let your child grasp the object when she reaches out.



Communicate - 3 months up to 6 months

A baby who cannot see well may seem too quiet. She may be quiet because she is trying to understand the sounds around her. Smile and laugh and talk to your baby. You could tickle her to encourage her to smile and make sounds. You can copy your baby's sounds and gestures and encourage turn turning.



Activity Card 4: 6 months up to 9 months

This Activity Card shows caregivers with a baby (between 6 months and 9 months).

1. Show **Activity Card 4** to participants. Provide a summary of what a young child of this age with no vision impairment can and cannot see.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a baby of this age who has a vision impairment;
 - **communicate** with a baby of this age who has a vision impairment.

In particular, encourage them to think about what extra help the baby will need to understand and feel secure in his or her surroundings if there is visual loss.

3. Using a doll or a rolled up a blanket show participants different approaches to promote play and communication and then ask them to demonstrate these to each other. When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card.

Play - 6 months up to 9 months

Fasten objects to your baby's clothes or hands with a short string. If she drops a toy, guide her hand along the string until she reaches the top. This will encourage her to reach on her own and learn that things she drops have not disappeared. Try to encourage the child to reach for the object rather than placing the object directly into the child's hand.



Communicate - 6 months up to 9 months

Talk about things you are doing and about everyday objects that you are using. If you use the words for body parts and common objects over and over in your everyday activities, your child will learn what the words mean before she can say them.



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Activity Card 5: 9 months up to 12 months

This Activity Card shows caregivers with a baby (between 9 months and 12 months).

1. Show **Activity Card 5** to participants. Provide a summary of what a young child of this age with no vision impairment can and cannot see.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a baby of this age who has a vision impairment;
 - **communicate** with a baby of this age who has a vision impairment.

In particular, encourage them to think about what extra help the baby will need to understand and feel secure in his or her surroundings if there is visual loss.

3. Using a doll or a rolled up a blanket show participants different approaches to promote play and communication and then ask them to demonstrate these to each other.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card.

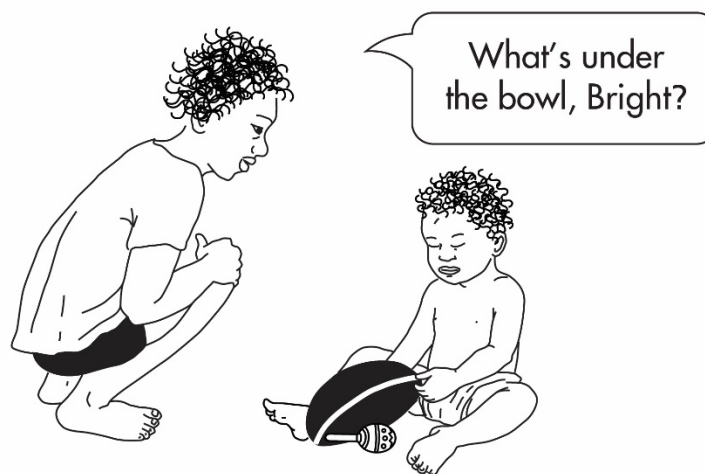
Play – 9 months to 12 months

Give your child clean, safe household things and toys that make sounds and encourage her to imitate and repeat what you do. An example could be a small tin with some leaves inside that make a noise when you shake them.



Communicate – 9 months to 12 months

To help your baby solve problems you could play *peek-a-boo* using a cloth or hide behind a chair. It is important to say 'peek-a-boo' when you appear in case they do not have enough vision to see you. You can call your baby's name and watch her respond as well as play hide-and-seek with your child's toys using a bowl or cloth.



Activity Card 6: 12 months to 2 years

This Activity Card shows caregivers with a young child (between 12 months and 2 years). The child has a vision impairment and therefore has reduced vision in order to access the world.

1. Show **Activity Card 6** to participants. Provide a summary of what a young child of this age with no vision impairment can and cannot see.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a child of this age who has vision impairment;
 - **communicate** with a child of this age who has vision impairment.

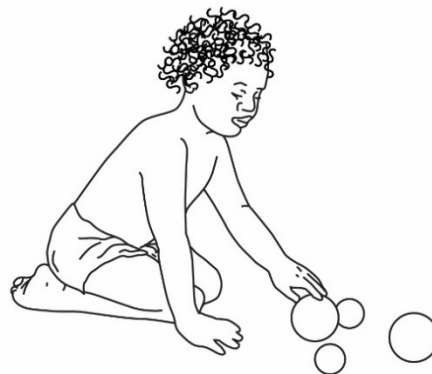
In particular, encourage them to think about what extra help the young child will need to understand and feel secure in his or her surroundings if there is visual loss.

3. Using a doll or a rolled up a blanket show participants different approaches to promote play and communication and then ask them to demonstrate these to each other.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card.

Play – 12 months to 2 years

Give your child different things to stack up (for example, cups) and put into containers. Other activities you could do is matching and sorting objects that are 'big' and 'small'. One example is a 'big' spoon and a 'small' spoon.



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Communicate - 12 months to 2 years

A child who cannot see very well has a harder time than other children learning what words mean. It is important for her to be able to use her other senses as well to touch, smell or if it safe to do so, taste what you are talking about. This helps her to understand what the word means. Respond to your child's attempts to talk and praise her.



Activity Card 7: 2 years up to 3 years

This Activity Card shows caregivers with a young child (between 2 years and up to 3 years). The child has a vision impairment and therefore has reduced vision in order to access the world.

1. Show **Activity Card 7** to participants. Provide a summary of what a young child of this age with no vision impairment can and cannot see.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a child of this age who has a vision impairment;
 - **communicate** with a child of this age who has a vision impairment.

In particular, encourage them to think about what extra help the young child will need to understand and feel secure in his or her surroundings if there is visual loss.

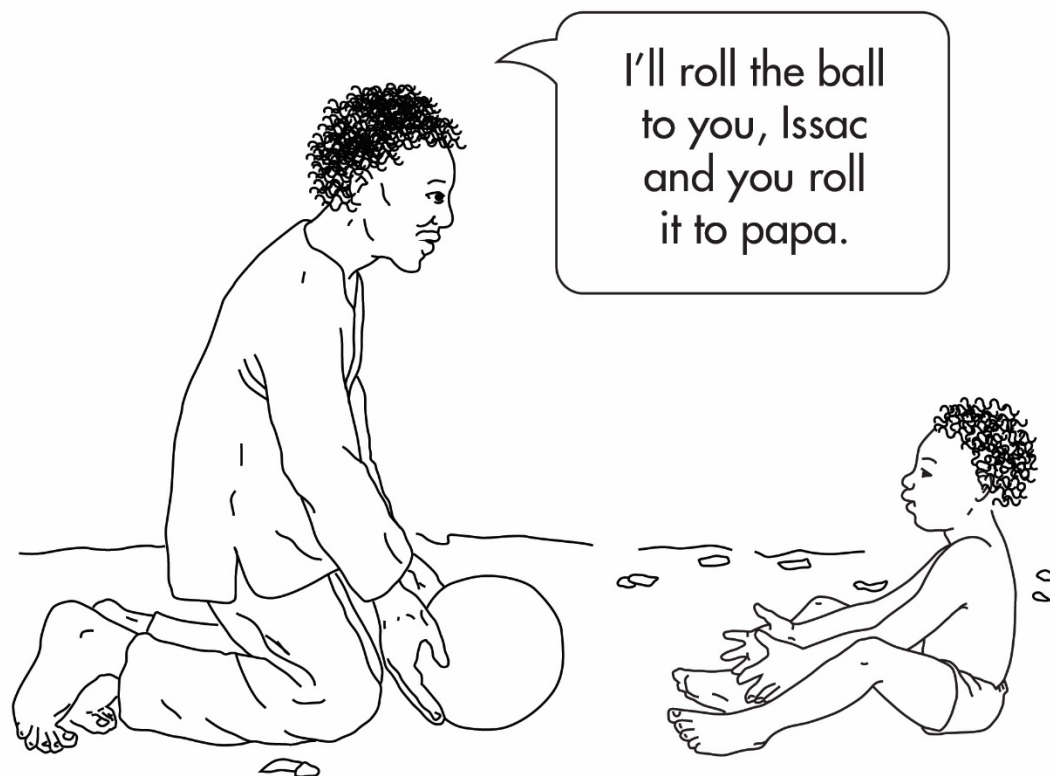
3. Using a doll or a rolled up a blanket show participants different approaches to promote play and communication and then ask them to demonstrate these to each other.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card.

Play – 2 years up to 3 years

Help your child to explore the physical world around her safely and encourage her to learn actively through play. She needs 'play friends', 'play space', 'play time' and 'play things'.

Try to increase your child's movement and handling of objects. You can also try throwing, catching and kicking a ball with her.



Communicate - 2 years up to 3 years

Encourage your child to talk and answer her questions. Teach her songs and games she can play with other children of her own age.



Activity Card 8: 3 years and older

This Activity Card shows caregivers with a child (3 years and older).

1. Show **Activity Card 8** to participants. Provide a summary of what a child of this age with no vision impairment can and cannot see.
2. Ask participants to think about how they could provide opportunities to:
 - **play** with a child of this age who has vision impairment;
 - **communicate** with a child of this age who has vision impairment.

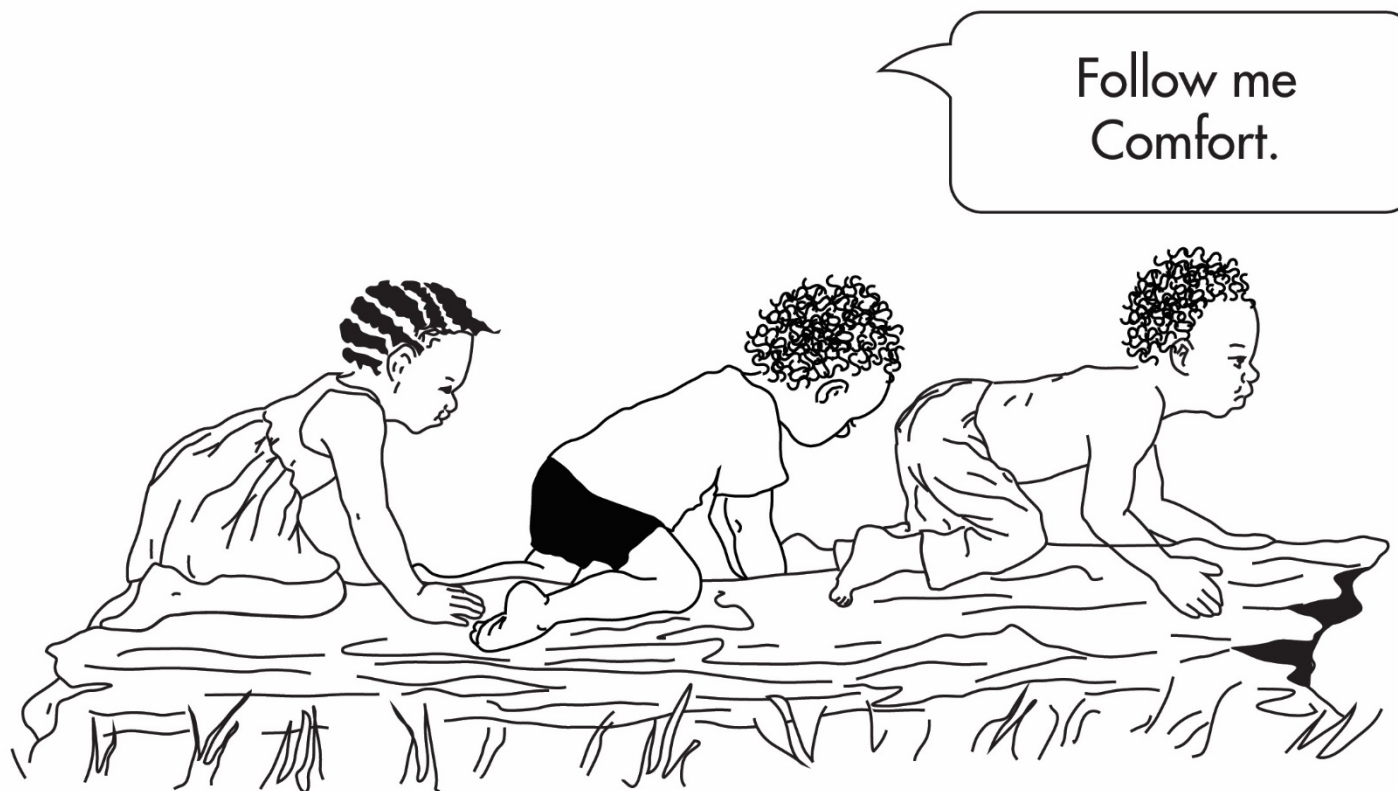
In particular, encourage them to think about what extra help the child will need to understand and feel secure in his or her surroundings if there is visual loss.

3. Using a doll or a rolled up a blanket show participants different approaches to promote play and communication and then ask them to demonstrate these to each other.

When doing this, ask participants to draw on the guidance presented in the relevant Activity Card under the headings **Play** and **Communicate** so they become familiar with the approaches laid out in each card.

Play – 3 years and older

Some children who cannot see well need help with independence. They may also need help to make friends and play with other children. Encourage your child to play with children of her age so that she gets used to being more independent. Make sure your child is able to join in the activities and is not left out.



Communicate - 3 years and older

A child who cannot see well may become sad at times and ask you questions about why she cannot do the same things as other children. Try to answer your child's questions and praise her for all the things she can do. Let her know that you care about the way she feels.



APPENDICES

1. What is the *ECD/VI Training Pack*?

The *ECD-VI Training Pack* was compiled and written by a team of practitioners with a particular interest in promoting quality ECD provision in Malawi. It was developed as an outcome of a funded research project undertaken in Malawi during 2013-14 – the *Early Child Development and Vision Impairment* (ECD-VI) project. The ECD-VI project was the first research study to demonstrate the feasibility of utilising an adapted form of the *Care for Child Development* (CCD) training programme (published jointly by World Health Organization and UNICEF) with children with disabilities, specifically with young children with vision impairment in Malawi (Lynch et al. 2018). The study examined the feasibility of developing an adapted CCD training programme to provide guidance for families, carers and practitioners on developmental stimulation for these young children. A key output of the initial study was a set of accessible and culturally sensitive resources which have been turned into this Training Pack. It is proposed that the *ECD-VI Training Pack* is made available for use to complement national ECD and CCD training programmes.

2. How was the ECD-VI Training Pack developed?

The *ECD/VI Training Pack* was developed as part of a feasibility study to develop and test a training programme targeted at parents, community professionals, specialist teachers and volunteers to provide advice on developmental stimulation for children with vision impairment in their homes in three districts (Blantyre Urban, Rural and Chikwawa) in Southern Malawi (Lynch et al. 2017). The aim of this study was to create, adapt and test the feasibility of a training package targeted at parents to provide advice on developmental stimulation for children with vision impairment in their homes in rural and urban settings of Malawi. The package was aligned with the *Care for Child Development* (CCD) training package and incorporated newly created materials to ensure cultural relevance to young children with VI in Malawi.

The study utilised a pre-and post- intervention design and was divided into three stages:

1. An exploration of carers' personal experience, knowledge and understanding of childhood disability (specifically vision impairment);
2. The development and running of a feasibility pilot over six months;
3. Post-pilot interviews with carers and trainers.

In preparing and adapting the materials, the project team integrated key areas that benefit all babies and young children with vision impairment (e.g. accommodating for difficulties in social behaviour, joint referencing and early communication) in line with acceptable cultural practices (Cole, 1996). Materials recommended for parents and community workers drew on a number of existing training tools that were identified from the literature. Further details can be found in the two research articles describing the project (Lynch et al. 2017;

Lynch et al.2018). High quality line drawings of culturally appropriate mothers, family members, children with VI and play objects were created and piloted as part of the programme. The project team designed a three-day training programme (two days based on UNICEF/WHO Care for Child Development training and a third day for the logistics of the feasibility study) to cover essential elements about childhood development and vision impairment using small and large group activities, role-play and material development sessions. Further information about the project can be found in the Reference list at the end of the Pack.

3. What conceptual framework is used to guide early intervention approaches?

In recent work, we have found it useful to draw on a bioecological systems theory proposed by Urie Bronfenbrenner to guide our thinking about early intervention approaches for young children with vision impairment. Further information can be found in the References section of this Pack (e.g. Bronfenbrenner, 2005; Lynch et al. 2018; Gladstone et al. 2017; McLinden et al, 2018). Through such a perspective we can think of early intervention as being influenced by many factors as part of a complex ecology. At the centre of this ecology is the young child who should always be considered to be a potentially active ‘agent’ (i.e. not passive!) in development! We can illustrate the complex nature of this ecology through the illustration of a bioecological systems model shown in Figure 1.

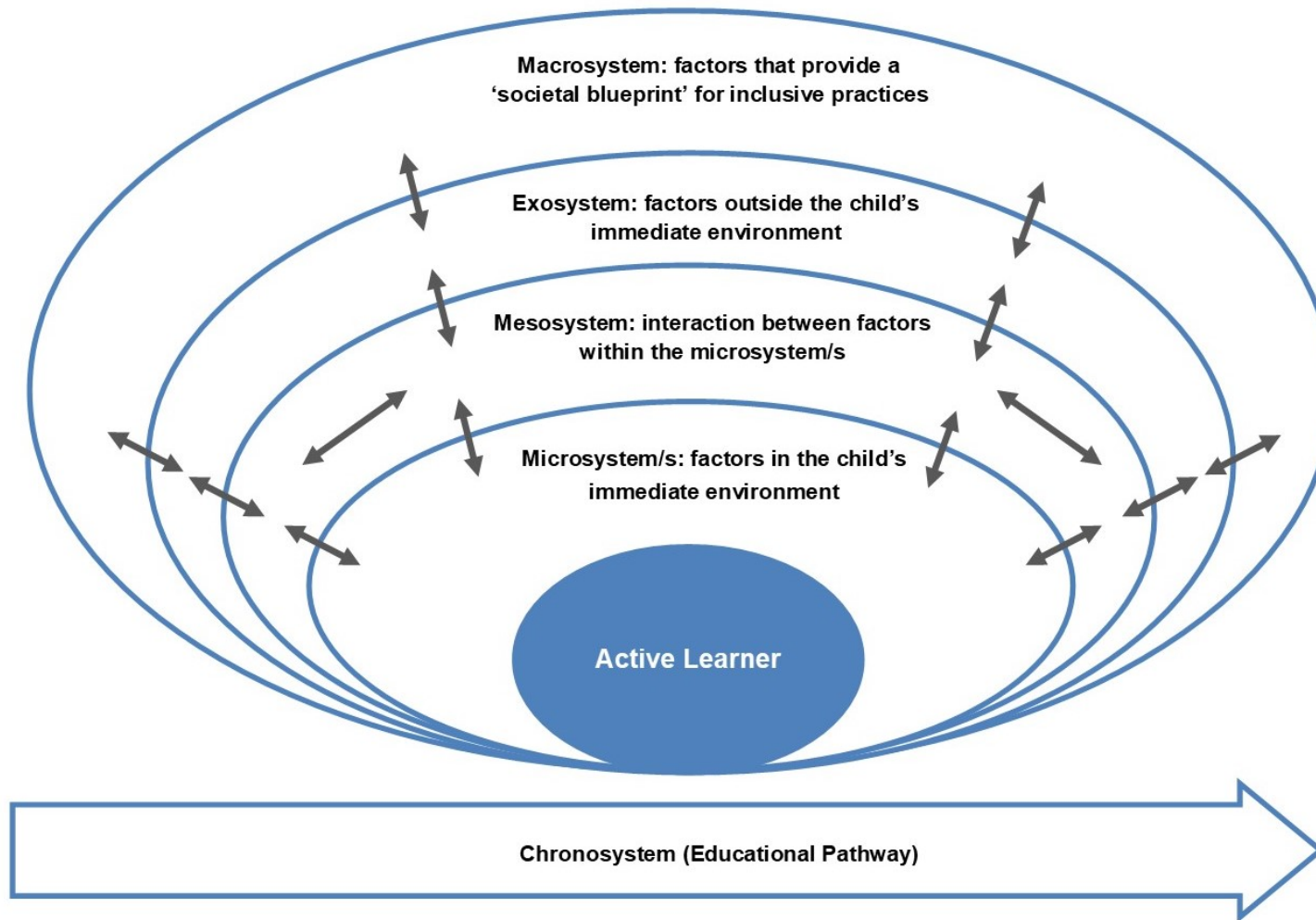


Figure 1. A bioecological systems model to illustrate the range of environmental factors that can influence the development of children (adapted from Bronfenbrenner 2005; McLinden et al. 2018)

Within the context of child development, the bioecological systems theory is often represented as a nested system of ‘environments’ often illustrated as a series of concentric circles situated around a developing individual. Each circle refers to nested but separate systems to reflect the complex ecology in which an individual develops (e.g. Bronfenbrenner, 2005). As we have noted, the individual child at the centre of the ecology is viewed as being an ‘active’ agent in development, and the ‘context’ in which such development takes place is described by Bronfenbrenner (2005) with reference to the five interrelated systems:

- *microsystem*—factors in the environment immediately around the individual;
- *mesosystem*—interactions between factors within the microsystems;
- *exosystem*—factors outside the individual’s immediate environment that impact upon their development;
- *macrosystem*—factors and culture outside the physical environment;
- *chronosystem*—human development over time (in relation to education this can be thought of as an educational pathway).

Bronfenbrenner’s bioecological systems theory has been drawn upon extensively in the literature for analysing the multi-layered influences on development including early child development in Malawi (e.g. McLinden et al. 2018; Lynch et al. 2018). Through this framework, intervention approaches will seek to promote the ‘interrelatedness’ between the growing child and the changing properties of the immediate settings in which the child develops. This ‘interrelatedness’ is important to acknowledge as it highlights the range of factors that can influence development and the importance of ensuring the child is considered to be as ‘active’ as possible in development – not just in the early years but throughout his or her education pathway. The child will therefore require appropriate opportunities over a given

developmental timeframe and within different environments to learn to access the world through intervention approaches that seek to help him or her develop with as much independence as possible.

We find it helpful therefore to think about creating learning environments which are dynamic and reactive to the young child's attempt to exert influence in order to develop increasing control of their environment. Distinctive input, including that provided by carers and practitioners, is therefore considered important in ensuring there is *equitable* access to information throughout different stages of education. Equity is a complex term to define succinctly but in this sense it includes ensuring these young children have *equality of opportunity* to achieve their full potential throughout early childhood and as they move into the early stages of an educational pathway.

Vision plays a very important part in the early developmental process and to ensure access to the world is equitable we need to think about distinctive ways in which we engage with the young child. Think for example how vision can be used by young children to see who is approaching them so they are not scared when they then speak; how it helps to form bonds with people for example through smiling at a person who is smiling at them. In the absence of consistent vision therefore we will need to consider other strategies that can be drawn upon. These strategies may involve vision if the child can still see people and objects that are close to them, but will also have a greater reliance on promoting a child's listening skills and their use of touch to know what is happening in the world. We provide some examples of these types of strategies later in the *ECD/VI Training Pack*.

We know from early years practice that the success of a creating a reactive environment depends on the involvement of the child with vision impairment in positive structured activities, which are designed to:

- be appropriate to his or her level of functioning;
- lead to the accomplishment of various objectives;
- encourage the child to solve problems, communicate, utilise any residual vision and hearing, and exercise control over his environment by making choices.

Through a bioecological systems perspective, the notion of the 'interrelatedness' between the child and the learning environment is of particular significance as it highlights a need for early intervention to focus not just on the learner, the environment or indeed each in isolation, but rather the changing relationships between these over a given period of time and across different settings within the early years of development. This is captured succinctly by Bronfenbrenner (2005) in making reference to 'progressive and mutual accommodation' between the developing child and the changing environment over a given timeframe. You can find out more about this perspective in the References section of the *ECD/VI Training Pack*.

4. What are the main causes of vision impairment in young children?

Vision impairment is a broad term that is used to describe many different types of conditions. Children with vision impairment can be described as being a heterogeneous population within which there is a wide spectrum of characteristics, abilities and needs. As noted in the 11th version of International Classification of Diseases (ICD 11), the term 'visual disability' is used to refer to deficits in the ability of an individual to perform vision-related activities of daily living, including reading, orientation and mobility, and other tasks (WHO, 2018). For young children such a definition will have only limited relevance of course, as they will still be learning how to perform these vision-related activities.

The ICD 11 classifies reduction in vision into two groups – 'distance' and 'near' – with the term 'near vision' in this context referring to the ability to perform tasks that require detailed vision at a close distance (WHO, 2018). This classification is based on a child's visual acuity, which equates to how well she or he is able to resolve detail at different distances. As you will be aware if you have had your eyes tested recently by an eye doctor or an optometrist, there are different ways of measuring visual acuity – including a Snellen or LogMAR chart which is used to measure an individual's ability to identify letters of different sizes at a fixed distance. This ability to resolve a letter then provides a measure of distance visual acuity, with international or national thresholds of visual acuity commonly used as criteria for a diagnosis of vision impairment. For example, the ICD 11 (WHO, 2018) makes a distinction between 'no vision impairment', 'mild', 'moderate' and 'severe vision impairment', and 'blindness' based upon different ranges of visual acuity. Further, an important addition to the ICD 11 is the inclusion of categories of higher-level cortical visual centres and pathways, and associated *cerebral* vision impairment (CVI) which include, for example, disorders of the optic nerve and visual cortex.

It is important to recognise, however, that visual *function* is considered to be broader than just visual acuity, and an individual's experience of vision impairment will vary depending on many different factors (WHO, 2018). A more comprehensive assessment of vision (and associated identification of vision impairment) will therefore include other significant aspects of visual function including visual field (the total area in which objects can be seen including the peripheral vision), colour perception, and visual fixation (the ability to maintain gaze on a single location). This type of assessment may be undertaken in settings that are familiar to the child and should include input from practitioners who are specialists in vision impairment education.

At an international level, the main causes of vision impairment include: uncorrected refractive errors; cataract; age-related macular degeneration; glaucoma; diabetic retinopathy; corneal opacity; trachoma (WHO, 2018). However, we know that there is considerable variation in the causes of *childhood* vision impairment between countries and in different regions of the world, and the population profiles in relatively 'low-resource' countries will differ from those in relatively 'high-resource' contexts (WHO, 2019). Thus, in relatively 'high-resource' countries the causes of childhood vision impairment are more likely to include conditions such as retinopathy of prematurity and Cerebral Vision Impairment (CVI) (WHO, 2018). The major causes in relatively 'low-resource' countries include largely preventable conditions such as, corneal scarring from measles, vitamin A deficiency, the use of harmful traditional eye remedies and rubella cataract (Gilbert and Foster, 2001). Other common causes of reduced vision and vision impairment in childhood within sub-Saharan countries include cataract, trachoma and glaucoma. For very young children it can be difficult of course to accurately assess if they have a vision impairment, given that vision develops during the early years of life.

A useful resource that you might want to refer to in order to find out further information about vision impairment and children is called [Low Vision Online](#). The resource has been designed for people who in their everyday life or work need to know more about low vision. You can locate the resource by selecting the hyperlink (if you are reading an online version of this document), by typing in the words 'low vision online' into your search engine or through the following address:

<http://lowvisiononline.researchsoftware.unimelb.edu.au/LowVision/index.htm>

You may want to share this very helpful resource with colleagues who have an interest in vision impairment.

5. In what ways can reduced vision affect early learning and development?

Vision plays a significant role in early development, serving as an important means for progressively independent exploration of the world. Through the use of their developing vision, young children develop increasingly sophisticated ways of establishing control within different learning environments, thereby helping them to exert influence as an active 'agent' or person.

As we have seen, vision impairment refers to a wide range of conditions. Some of these conditions affect a child's ability to see objects and people that are close to them, some affect their ability to see things at a distance. As the child gets older, some of these conditions can be addressed through wearing glasses or through using special lenses. An important point to stress is that vision impairment can have a significant influence on how learners are able to participate in all learning activities through creating distinctive barriers to access. In essence, a reduction in the *quality* or *quantity* of visual input can therefore create barriers to access in many areas of our lives including:

- **anticipation** - being able to anticipate what is coming next;
- **confirmation** - being able to confirm a sensory event using vision;
- **coordination/integration** –being able to put sensory events together;
- **incidental learning** – being able to draw on prior visual experiences.

Reduced vision can therefore serve as a significant barrier to a young child learning in line with his or her peers who are sighted. Families and caregivers can help by providing different activities to which young children with visual loss can respond to by using a range of senses and through creating opportunities for them to explore different textures, spaces and movements.

Effective learning opportunities for children with vision impairment will seek to reduce potential barriers to access in a number of ways. Distinctive input, including that provided by specialist practitioners (which may include yourself!), is considered integral to ensuring there is *equitable* access to education throughout different stages of education. As we have noted already, equity is a complex term to define succinctly but in this sense it can be seen to be about ensuring these learners have *equality of opportunity* to achieve their full potential whilst in education.

There is a wealth of literature that shows the unique barriers to learning associated with vision impairment as well as the importance of addressing these barriers through providing specialist intervention approaches. As an example, recent work indicates the importance of maximizing children’s ability to develop as independent learners within a given educational context (e.g. McLinden et al. 2017). Also, recent work in this area highlights the importance of ensuring these access skills are in place at an early stage in a child’s educational pathway to ensure successful transition from compulsory school education.

6. Sample timetable used for 2 day training programme

Two Day Residential Training Workshop for Community and Education Professionals

TIMETABLE

Day one	Activity
08:00 – 09:00	Welcome and Opening remarks
09:00 – 10:15	Introduction (Objectives) Role of vision in child development (short overview) Early identification Who is the caregiver? Discussion: What is care for development?
10:15 – 10:45	Refreshments
10:45 – 12:30	Counselling caregivers Advising the caregiver and helping to solve problems (Care for Development Participant Manual: p.37-41, Exercise cards p.39-41) and role play
12:30 – 13:30	Lunch
13:30 – 14:45	Playing and communicating with children who have vision impairment 1. Introduction to play and communication (present case studies) 2. Small group work: a) Play activities for different age groups b) Communication activities
14:45 – 16:00	Toys and activities Identifying toys, household objects and activities that children with vision impairment might enjoy.

	Activity: Making toys (basket of toys)
16:00 – 16:15	Refreshments
16:15 – 17:00	Debriefing: Play and Communication with children who have vision impairment

Day Two	Activity
8.30 – 9:00	Recap on Day one
09:00 – 10:30	Helping to solve problems Role play: Trainer, caregiver (P.43 in Participant Manual) Checking child's hearing and seeing (inside back cover of Facilitator's notes)
10:30 – 10:45	Refreshments
10:45 – 11:30	Children with complex needs and vision impairment Role play Small group discussion
11:30 – 12:30	Supporting children's learning: 'Let me do it!' 1. Learning and daily routine 2. Physical development 3. Developing language through communication (Small group work – developing ideas and activities)
12:30 – 13:30	LUNCH
13:30 – 14:30	Role of the community professional in the project How to work with the caregiver and families Role play: Acting out different scenarios Discussion: Identifying useful activities using work cards
14.45– 15:15	Refreshments
15:15 – 17:00	Recording information about visits Planning visits to families and recording progress

7. Short case studies that can be drawn upon and elaborated in training activities

Case study 1

Name Chifundo Age 5 years

Description: Chifundo finds it difficult to sit in one place for her porridge. She also finds it difficult to concentrate on most activities. She tends not to finish her activities and disturbs other children's play.

Case study 2

Name Dalito Age 4 years

Description: Dalito is the fourth of five children and he has a brother with a vision impairment. Dalito has a vision impairment and so finds it difficult to learn from watching. He can bump into objects when he is moving around the CBCC, and finds it difficult to run. He tends to miss days at the early child centre

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- United Nations (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. New York: UN Publishing.
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- Young Lives – Oxford Department of International Development (2016)
https://www.younglives.org.uk/sites/www.younglives.org.uk/files/YL-PB28_Early_Childhood_Development_in_the_SDGs.pdf

Useful links and resources

American Optometric Association

Helpful information about the steps in infant vision development, signs of eye and vision problems and what parents can do to help with visual development.

<https://www.aoa.org/patients-and-public/good-vision-throughout-life/childrens-vision/infant-vision-birth-to-24-months-of-age>

American Academy of Ophthalmology

Helpful information about a baby's vision development for pre-school and school aged children.

<https://www.aao.org/eye-health/tips-prevention/baby-vision-development-first-year>

Texas school for the Blind and Visually Impaired

This site contains helpful information to teachers supporting pre-school children with vision impairment.

<https://www.tsbvi.edu/curriculum-a-publications/3/1069-preschool-children-with-visual-impairments-by-virginia-bishop>

Low vision online

An online low vision course for practitioners produced by the University of Melbourne

<http://lowvisiononline.researchsoftware.unimelb.edu.au/Function/independence.htm>

Notes for Training Facilitators

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