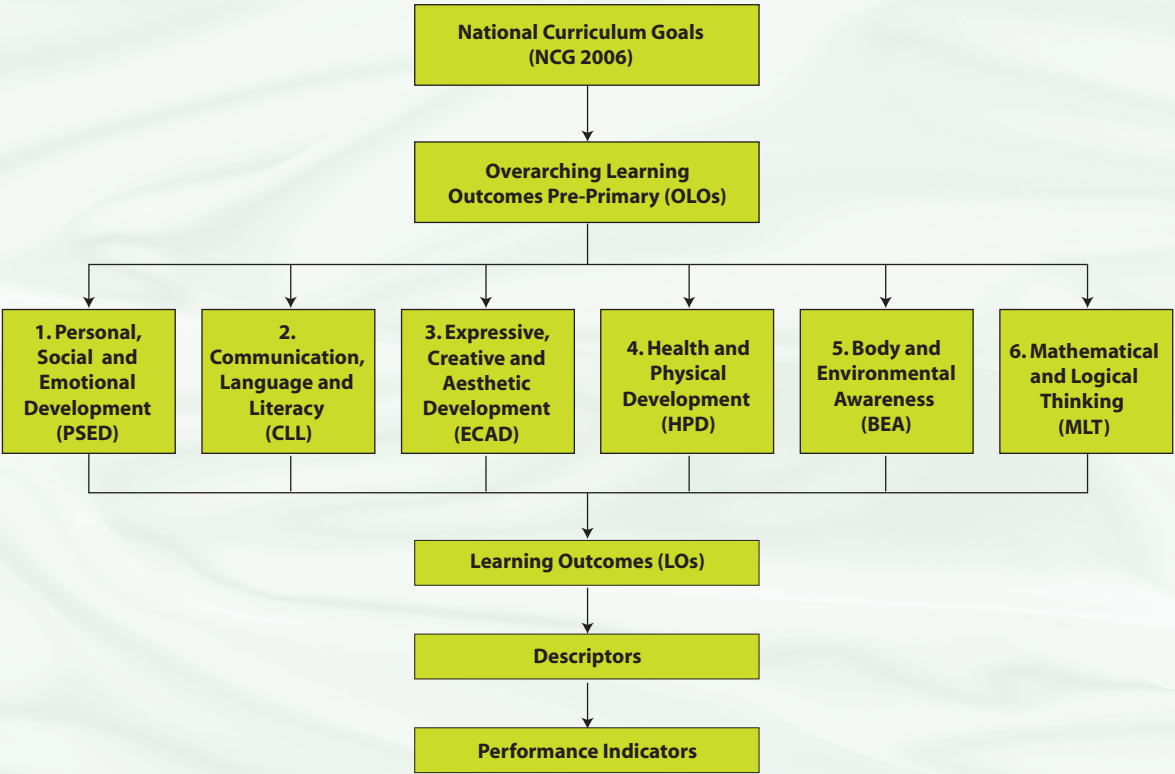


CHAPTER 4 - CONCEPTUAL FRAMEWORK PRE-PRIMARY

The conceptual framework shows how the National Curriculum Goals (NCG) is operationalised at the pre-primary level. This framework is based on the six areas of learning.



Each learning area is dealt with in a separate section so as to facilitate planning of activities. An integrated approach must be used to plan activities in all areas of learning in a thematic unit. At the end of the pre-primary schooling, the child will demonstrate readiness to step into primary school confidently, take pride in his/her achievements and develop a sense of patriotism.

The descriptors and performance indicators give an indication of what the child needs to achieve in the first year and the second year of pre-school education, based on a graded approach related to the developmental stage of the child.

4.1 PERSONAL, SOCIAL AND EMOTIONAL DEVELOPMENT (PSED)



4.1.1 Introduction

This area of learning is about knowing oneself, developing a positive self-concept and building self-confidence and self-esteem, which is critical for young children to be successful in all aspects of their lives. They learn how to interact with peers and adults and behave in socially acceptable ways. Children need to learn to be courteous and respect others by accepting their differences and making decisions based on fairness. During pre-school years, children have to achieve relevant social competence, care of self and respect for each other.

Children in pre-school years have to learn to cope with people and settings outside the family. In so doing, they need to become increasingly independent and able to form positive social relationships, particularly with other children. This is a crucial step to develop readiness for the child to integrate a new societal setup. Children develop increasing independence in choosing, organizing and tidying up during play and activities, in dressing and personal hygiene and in serving themselves and others at snack or lunch-time. An environment with a wide range of choices and well-defined areas of interest provides opportunities for self-initiated activities.

They are encouraged to persevere with tasks that initially present some difficulties but also learn when and how to seek help. Children will develop a sense of competence and regard themselves as capable and successful when they are faced with achievable challenges.

Rules are set to facilitate classroom management such that children become aware of rules for their safety and know where help can be sought in cases of worry or upset. Children can be involved in the setting of rules. In the process of making rules, children learn to listen to one another's views before making decisions and develop a sense of shared responsibility for what goes on in the classroom. Having ownership of these rules helps to promote cooperation, mutual respect, and self-control.

Children are curious and have a deep sense of compassion. As they grow they learn about the importance of friendship and develop pro-social and social skills. They learn to share toys, books and games. They also learn to care for one another. As such, educators need to help children verbalize their feelings, listen to others, understand and respect the feelings of others.

Children learn about cultural events and religious festivals which help them to develop an awareness of the beliefs and traditions of their own family and the way of life of others in their community. This promotes positive attitudes towards others, and mutual understanding that is so essential in our multicultural society. It also helps develop a positive self-image and personal well-being. This enhances the spiritual development of the child. According to Roehlkepartain et al. (2006) "spiritual development is viewed as part of personal well-being. In schools, learning should be life transforming". Bigger (1999) indicates this as "the formation of caring, morally and spiritually committed young people who reject selfishness, disregard for others and injustice".

4.1.2 The Learning Outcomes (LOs) for Personal, Social and Emotional Development

SN	OLOs Pre-Primary Education	Personal, Social and Emotional Development (LOs)
1.	Socialize with family, friends, peers, teachers and other adults.	Children interact with all children, family, teachers and other adults.
2.	Accept each other and live together,irrespective of gender, ethnicity, age and ability.	Children develop positive attitudes towards others.
3.	Adapt to and enjoy experiences of change, surprise and uncertainty.	Children learn to respond creatively to unexpected/ surprising events.
4.	Develop confidence by exploring the world using his/her body and senses.	Children show confidence in engaging in new activities, initiating ideas or speaking in a familiar group.
5.	Understand fairness in relation to themselves and for others.	Children learn to be considerate to others.
6.	Participate in the making, following and reworking of rules in the day-to-day activities.	Children learn to follow classroom and playground rules.
7.	Communicate thoughts and experiences creatively using many different forms of expression.	Children show understanding of culture, beliefs and traditions through creative and artistic expressions.
8.	Develop physical coordination and healthy habits.	Children can dress and undress independently and manage their personal hygiene.

4.1.3 The Descriptors for Personal, Social and Emotional Development

PERSONAL, SOCIAL AND EMOTIONAL DEVELOPMENT			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Develop self-awareness	• Refer to own self by first and last name	😊	😊
	• Respond when called by name	😊	😊
	• Identify own self by family , gender and age.	😊	😊
	• Show self-confidence		😊
	• Develop self-identity		😊
	• Develop an awareness of the social self (friends, class mates, family members...)	😊	😊
	• Develop an awareness of and recognise the emotional self		😊
	• Describe/name own feelings		😊
	• Develop an awareness of the moral self		😊
Care and respect for self and others	• Dress, undress independently	😊	😊
	• Manage own personal hygiene.	😊	😊
	• Eat skilfully	😊	😊
	• Use toilet with adult help	😊	😊
	• Use toilet independently		😊
	• State ways in which children are similar		
	• State ways in which children are different.		
	• Interact with all children regardless of gender, ethnic group, or ability.		
	• Be aware of own beliefs, culture and traditions and that of others.		
Share and relate to others	• Interact with one or more children	😊	😊
	• Play alongside others	😊	😊
	• Enter into or initiate a play situation	😊	😊
	• Build relationship through gestures and talk	😊	😊
	• Take turns and share with adult support	😊	😊
	• Share toys , books and games		
	• Form good relationship with adults and peers	😊	😊
	• Begin to play or work cooperatively.		😊
	• Seek help from peers and adults.		😊

Share and relate to others	• Communicate freely about home and community and experiences		😊
	• Use words to describe relationships, feelings.		😊
	• Recognise and respond to the feelings of others		😊
	• Use words to identify a conflict.		😊
	• Engage in developing solutions and work to resolve conflicts.		😊
	• Seek adult help when involved in a conflict.		😊
	• Participate in small-group and large-group activities.	😊	😊
	• Refrain from relating to strangers	😊	😊
Exercise self-control and independence	• Use words to express needs and feelings or emotions.	😊	😊
	• Manage transition from one activity to the next.		😊
	• Be aware of and follow the classroom routine		😊
	• Select and use activities and resources independently		😊
	• Show sustained interest, attention, concentration, self-motivation and the excitement to learn		😊
	• Try new activities, initiate ideas and speak in familiar group with confidence		😊
	• Demonstrate delight or satisfaction when completing a task or solving a problem.		😊
Spiritual Development	• Care for others		
	• Show compassion to others (Friends, parents, teachers and pets)	😊	😊
	• Show generosity	😊	😊
	• Endorse fairness	😊	😊

Spiritual Development	• Discriminate between right and wrong, good and bad	😊	😊
	• Are capable of sustained activity through commitment	😊	😊
	• Appreciate Diversity in terms of dressing, foods and festivals.	😊	😊
	• Participate in activities related to diverse cultures and traditions.	😊	😊

4.1.4 Teaching and Learning

In this area of learning educators need to:

- Provide opportunities to describe different aspects of the self, which will enable the children to develop self-awareness.
- Develop a secure, warm and caring relationship with children, where praise is given appropriately and where a sense of humor is encouraged. This will help children to develop self-esteem and self-confidence.
- Respond to the needs and interests of children, help each child to feel safe, to express their feelings as well as understand the feelings of others.
- Provide opportunities to care for others and for the environment, help children to develop positive attitudes and make them aware of ways that they can help others.
- Promote children’s learning by planning activities which are challenging but achievable.
- Organize the indoor and outdoor environment that allows a wide range of self-initiated activities that enable children to operate autonomously.

Some strategies that can be used in this area of learning are:

- **Demonstrations**

When the educator models out the behaviors he/she is expecting children to learn then children are also likely to develop those behaviors. Teachers can then create opportunities for children to display those behaviours, e.g self-care, self-control behaviors.

- **Stories/Rhymes/Songs**

Stories can be used to help support children's emotional, personal and moral development. By responding to stories children become aware of different types of positive feelings and learn to express these feelings. Children are exposed to issues such as perseverance, cooperation and morally appropriate behaviours.

- **Mimes**

Miming is another way of expressing emotions and thoughts. Miming enables children to translate feelings through gestures.

- **Group work**

When children work and play in pairs or small groups, they develop important social skills. They learn how to assume responsibility, interact with others, work co-operatively, negotiate, or resolve conflicts that arise.

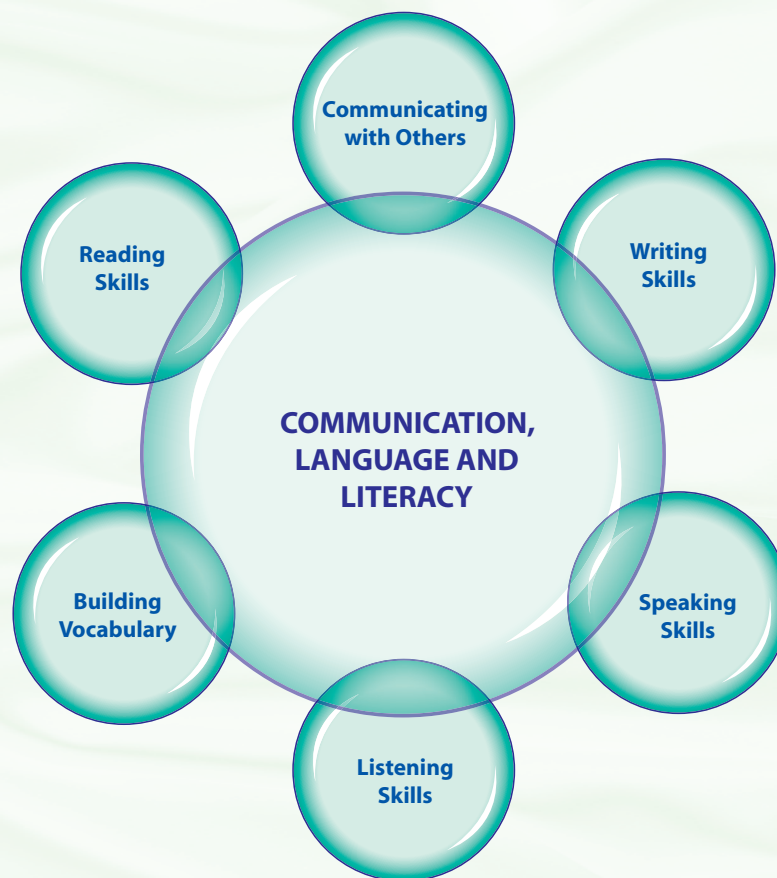
- **Dramatization**

When engaged in dramatization, children can explore a moral situation or resolve a conflict. They act out how best it would have been to behave in such situations. When role playing in a story, they learn how to take in the perspectives of others, engage in constructive dialogue with others and communicate feelings and ideas.

4.1.5 Assessment

For this area of learning, observation is the most important tool to assess children. Through observation the teacher assesses the behaviours of the child inside the classroom. These observations are reported in the form of anecdotal reports. These records help the educator to assess children's achievement and for future planning. The performance indicators are used to develop checklists to assess the child so as to plan follow-up activities.

4.2 COMMUNICATION, LANGUAGE AND LITERACY (CLL)



4.2.1 Introduction

Language refers to a particular set of sounds and conventions to represent objects, events, thoughts, opinions, perceptions and feelings. It is a major tool for organizing, interpreting and communicating information in an oral and/or written form.

The acquisition of language is a remarkable accomplishment which occurs in the very first few years of a child's growth and the development and use of language is crucial to young children's learning and cognitive growth as language is the basis of all learning. Thinking, reasoning, remembering and communicating develop at a rapid pace in early childhood and language is the medium through which all this is possible.

Language thus enhances the overall cognitive development of the child and is therefore one of the most important areas in the learning of the child that needs to be catered for as from an early stage, in order to accelerate and enhance the overall development of the child.

Home and Environmental Languages

Children at the pre-primary stage should normally have acquired an appreciable level of fluency in their mother tongue. This language readiness will be the basis on which languages used at school will be taught. Research has shown that home language facilitates effective transfer of learning because children's first language is intricately tied to their concept of self, family and home. Pre-school children must, therefore, be given full opportunities to express their ideas and feelings freely in their 'environmental languages'.

In today's world, being bilingual is an asset. In our context, our children are already exposed to a multilingual setup. Bilingual and trilingual children are exposed to target languages in their natural day-to-day interactions, and they begin to learn enough of a new language to converse in different social situations. This sets a challenge to our educators. Educators have to cautiously introduce and familiarize children with the target language/s through constant communication and meaningful activities like play, storytelling and simulation. The following two articles of the CRC highlight the above in the best interest of the child.

Article 5: Parents' Guidance and the Child's Growing Abilities

Governments should respect the rights and responsibilities of families to direct and guide their children so that, as they grow, they learn to use their rights properly.

Article 30: Children of Minorities or Indigenous Populations

Children have a right to learn and use the language and customs of their families, whether these are shared by the majority of people in the country or not.

4.2.2 The Learning Outcomes (LOs) for Communication, Language and Literacy

SN	OLOs Pre-Primary Education	Communication, Language and Literacy (LOs)
1.	Socialize with family, friends, peers, teachers and other adults.	Children learn to communicate and interact with peers and adults to express their needs and share their thoughts and feelings.
2.	Accept each other and live together,irrespective of gender, ethnicity, age and ability.	By interacting with their peers during language games and activities, children develop a bond with others.
3.	Adapt to and enjoy experiences of change, surprise and uncertainty.	Through different language games and activities, children develop the ability to respond to new and changing situations.
4.	Develop confidence by exploring the world using his/her body and senses.	Children become more confident about the world in which they live through involvement in a number of language activities.
5.	Understand fairness in relation to themselves and for others.	By being exposed to a variety of creative language exercises, children are able to differentiate between right and wrong.
6.	Participate in the making, following and reworking of rules in the day-to-day activities.	Children abide by and are encouraged to take decisions and create appropriate rules for their language games and activities.
7.	Communicate thoughts and experiences creatively using many different forms of expression.	Through creative language activities, children are encouraged to put forward and share their feelings and thoughts.
8.	Develop physical coordination and healthy habits.	Gross and fine motor skills are developed through language activities, and children are made aware of good health practices.

4.2.3 The Descriptors for Communication, Language and Literacy

COMMUNICATION, LANGUAGE AND LITERACY			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Communicate with others	Use gestures, facial expressions, body language such as eye contact and language to express personal needs, ideas, experiences and feelings.	☺	☺
	Use communication to develop bonds:	☺	☺
	• Participate in and contribute to group activities		
	• Share, play and interact with others	☺	☺
	• Show respect	☺	☺
	• Express and exchange ideas, opinions		☺
	• Listen to others	☺	☺
Develop and demonstrate appropriate Listening skills	• Inform others and self	☺	☺
	• Perceive, identify, discern and locate sound and voice sources	☺	☺
	• Respond to instructions	☺	☺
	• Sustain listening attention to speech, songs and playback of recorded audio materials	☺	☺
Share and relate to others	• Show interest in, enjoy listening to and participate/join in conversation, songs, nursery rhymes and stories	☺	☺
	• Respond to what has been heard through relevant questioning, by giving own comment, by asking for clarification or by expressing own thought, idea or feeling		☺
	• Anticipate main events and outcomes		☺
	• Recognise, interpret and value moments of silence		☺
	• Imitate, rehearse and reproduce what has been heard	☺	☺

Build and extend vocabulary and show interest in new words	• Use familiar and appropriate words in the target language to identify and describe objects and concepts, express feelings, thoughts and needs		😊
	• Use new words reflecting new learning to make communication more precise and extensive in the target language	😊	😊
	• Use words to add structure to space (on, under...), time (past, present and future), chronology (before, after...) and direction		😊
Engage in speech audibly, with clarity and confidence	• Develop distinct articulation	😊	😊
	• Use correct pronunciation	😊	😊
	• Control breath during speech	😊	😊
	• Use tone, pitch, loudness, rhythm/pace, pauses and voice modulation with effect	😊	😊
	• Use simple to more complex language structures to communicate orally for a range of purposes and over increasing duration	😊	😊
	• Use the target language progressively and with increasing confidence to express needs, thoughts, experiences and feelings	😊	😊
	• Adapt language to the audience (adults, peers, teacher, friends...) and to the context	😊	😊
	• Exploit language to describe a situation/an event		😊
	• Adopt appropriate communication behaviours, for example, by listening and responding to others, asking questions and clarification, initiating, sustaining and closing conversations, using polite forms: please, thank you, excuse me...	😊	😊
	• Narrate a simple story, recite a poem, sing a song, recite a nursery rhyme	😊	😊
	• Structure speech and narratives		😊

Acquire and develop reading skills	Picture reading		
	• Read and interpret pictures/drawings	😊	😊
	• Use drawings to convey meanings/messages	😊	😊
	• Make out and follow the story line expressed in pictures	😊	😊
	• Recognise conventional graphic displays e.g. traffic signs, classroom displays...		😊
	Text reading		
	• Be aware that print carries meaning and information	😊	😊
	• Decode common and simple prints		😊
	• Encode messages in print form		😊
	• Become familiar with written texts	😊	😊
	• Recognise a range of familiar sight/high frequency words (own name, days of the week, name of fruits...)		😊
	• Identify and read the letters of the alphabet		😊
	• Begin to read syllables, words and simple sentences under guidance		😊
Demonstrate early writing skills	• Show care, satisfaction, joy, understanding while interacting with books or other printed materials	😊	😊
	• Display curiosity and interest while interacting with printed materials (ask questions, identify familiar letters and words, enquire about new words...)	😊	😊
	• Adopt a correct writing posture	😊	😊
	• Hold a pencil properly	😊	😊
	• Draw and colour with interest	😊	😊
	• Draw frames, shapes skilfully		😊
	• Give meaning to graphical symbols (e.g. a tick indicates correctness)		😊
	• Form the letters of the alphabet with increasing precision		😊

	• Copy own name and familiar sight words	😊	😊
	• Engage in writing activities (e.g. produce greeting cards)	😊	😊
Engage in speech audibly, with clarity and confidence	<ul style="list-style-type: none"> • Reflect on what is heard • Question actions/events/meanings • Propose an intelligent opinion 		😊 😊 😊
Engage in creative output	<ul style="list-style-type: none"> • Add a part to a song • Draw, illustrate, colour, according to personal taste and in interesting ways • Retell a story using own words • Develop a story and bring it to closure • Be capable of dramatic oral productions • Enact a story/an event 	😊	😊 😊 😊 😊 😊

4.2.4 Teaching and Learning

The educator is of prime significance, especially in the early years of the child’s education, as he/she has a significant contribution to make in the development of the language skills of the child. At this early stage in their learning, children need to acquire secure foundations for their language development. Only the good practices of the educator can help children achieve a good level of proficiency in language. The language of the environment should be used to initiate meaningful activities like play and storytelling at school.

The educator needs to be a good communicator himself/herself and act as a role model. The major task of the educator is to plan and implement learning activities to develop all aspects of communication, language and literacy in the young learner. He/she needs to cater for the needs of all types of children, and to know when to use differential learning strategies, while adopting inclusive pedagogical principles. The role of the educator is to act as the initiator, motivator, guide and facilitator in the development of the language, communication skills and early literacy of the child, and to devise and implement lessons to enhance the language skills of the children in a systematic way.

Language and communication skills can only develop through sustained practice in meaningful and functional contexts. Children will, therefore, learn best in this area if they:

- are exposed to language, especially the target languages, through constant interaction and in a language-rich environment;
- interact with the educator and peers through purposeful talk and communicative activities;
- develop concepts, vocabulary and language structures through activities like play, storytelling,
- are allowed to handle and learn through books;
- engage in diverse activities that lead to purposeful drawing/scribbling/writing;
- engage critically in thinking, questioning, interpreting and evaluating processes.

In this area of learning, educators need to develop children's language and communication skills and initiate their literacy development through a variety of strategies and practices. They should:

- value talk and create opportunities for interaction and alternative communication forms;
- provide opportunities for language use to children to model their own oral and written speech ;
- value the importance of observation and information recording while performing the day-to-day activities based on children's likes.

Some strategies that may be implemented as a means to enhance Communication, Language and Literacy are:

- the use of activities, games and play;
- the use of songs, music, rhymes and other forms of poetry;
- the use of dramatization of familiar stories, miming, recitation, role play and simulation;
- the use of shared reading of stories and fiction books;
- the narration/(re)creation of stories;
- the use of practical experiences in context (such as cookery, gardening) and the learning of language in indirect ways.

4.2.5 Assessment

Assessment should be based principally on observation. The performance indicators can be used to establish a checklist for profiling. These indicators will assist the educators to profile the children's language abilities when they join the pre-school and chart out the progress of the child in his/her language acquisition skills and communication skills throughout pre-primary schooling.

4.3 EXPRESSIVE, CREATIVE, AND AESTHETIC DEVELOPMENT (ECAD)



4.3.1 Introduction

The fundamental dimension of ‘Expressive, Creative and Aesthetic Development’ can be attained through activities that would enable children to learn to respond, explore, express and communicate their ideas using their imagination.

The arts are a major form of human communication and expression. Children make use of arts to explore, express and communicate ideas, feelings and experiences. They provide a major means of personal artistic pleasure, offering children with immediate satisfaction, and serve as a basis for lifelong enjoyment. The arts also assist in the unfolding of the child’s character and cater for his/her behavioral development.

Through the arts, children develop verbal and physical skills, logical and intuitive thinking, interpersonal skills and rhythmic, aesthetic, spatial, visual and kinesthetic awareness. They promote emotional intelligence, a way of understanding and responding through emotions and intrapersonal qualities and experiences. To ensure children's self-expression and development, it is imperative that the children develop convergent thinking when finding solutions to the problem embedded in the task.

Imagination, creativity and innovation are present in every child. As such, children should be provided with the adequate opportunities to nurture and apply these.

(a) Creative Arts

Through creative arts, children are exposed to drawing, painting, construction, collage, etc. This enables them to develop expressive and imaginative thinking and logical deductions. It also promotes aesthetic skills in children, whereby they come to value and appreciate beauty, shapes and colours.

(b) Performing Arts

- **Music, Rhythm and Movement**

Music is one the most important areas of creative expression for young children. Learning to listen to music, to sing or to experiment with musical instruments is a way to express themselves.

- **Drama**

Drama is an excellent means for developing creativity and imagination in young children. Through drama the child is encouraged to explore his/her senses and is engaged with the body, which aims at harnessing and building of the fine motor skills.

(c) Poetry and Story Telling

Reading and writing are based on aural and oral skills. The process of decoding sounds necessarily comes first before the child can move on to producing the sounds, especially in written form. One of the most effective means to develop aural and oral skills is the use of storytelling and poetry.

(d) Human Values

The Human Values programme plays a fundamental role in the all round development of the child. The main objective of including Human Values at the pre-primary level is to maintain moral values and ethics in line with the tremendous progress of science and technology.






































4.3.2 The Learning Outcomes (LOs) for Expressive, Creative, and Aesthetic Development

SN	OLOs Pre-Primary Education	Expressive, Creative and Aesthetic Development (LOs)
1	Socialise with family, friends , peers, teachers and other adults.	Children interact and develop healthy relationship with friends and adults through creative activities.
2	Accept each other and live together, irrespective of gender, ethnicity, age and ability.	By sharing and interacting with peers from diverse backgrounds during creative tasks, children develop tolerance, love and a sense of respect for others.
3	Adapt to and enjoy experiences related to change, surprise and uncertainty.	During creative and interactive activities, children adapt to and enjoy improvisation and free expression.
4	Develop confidence by exploring the world using his/her body and senses.	Children understand and interact confidently with their environment by using their bodies and senses in creative activities.
5	Understand fairness in relation to both themselves and others.	Children learn what is right or wrong both for themselves and for others through drama and role play activities.
6	Participate in the making, following and reworking of rules in the day-to-day activities.	Through creative activities children develop an awareness of rules, abide by them and develop the ability to set new ones.
7	Communicate thoughts and experiences creatively, using many forms of expressions.	Children communicate and represent objects, ideas and experiences creatively through music, physical movement and by using a variety of art media.

8	Develop physical coordination and healthy habits.	Children discover how their bodies can be used for individual/ group creative expressions and develop healthy practices.
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4.3.3 The Descriptors for Expressive, Creative and Aesthetic Development

CREATIVE ARTS			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Tracing	• Trace using cut out shapes (templates)		☺
	• Draw the outline of an image		☺
Modeling	• Manipulate dough and plasticine	☺	☺
	• Use flour dough/plasticine to create forms		☺
Scratching paint	<u>Use an old biro pen to:</u>		
	• Create marks on a surface	☺	☺
	• Draw on a surface through scratching		☺
Using crayons	<u>Use crayon confidently to:</u>		
	• Draw marks	☺	☺
	• Shade shapes		☺
Crayon Rubbing	• Experiment to create different textures	☺	☺
	• Manipulate crayons on paper placed on a textured surface to record the textures.	☺	☺
	• Describe textures recorded through rubbing		☺
Paper batik	• Use wax crayons to draw and apply paint onto the drawing	☺	☺
	• Describe the resist technique		☺

Painting	<u>Experiment with a variety of colours:</u> <ul style="list-style-type: none"> Name and select colours Manipulate paint confidently Experiment with colour mixing Experiment with dribbling and trickling to produce patterns and marks 	 	   
Wet on Wet	<ul style="list-style-type: none"> Manipulate paint onto a wet surface Explore and describe what happens when paint is applied on a wet surface 		
Printing	<ul style="list-style-type: none"> Apply paint to objects and make print on paper Make prints from a variety of objects 	 	 
Beading	<ul style="list-style-type: none"> Thread beads freely Identify colours of beads for threading Create pattern through beading 	  	  
Collage (Tear, Cut and Paste)	<ul style="list-style-type: none"> Tear, cut and paste materials Sort out and paste materials Select, discriminate and use materials to make a picture composition 	  	  
Constructing with scrap materials (Assemblage)	<ul style="list-style-type: none"> Participate in collecting scrap materials Sort out and classify objects Arrange objects vertically and horizontally Make an assemblage using different objects 	  	   
Organising and Maintenance	<ul style="list-style-type: none"> Take responsibility for cleanliness Take/place back materials Keep objects, satchel contents in order 	  	  

MUSIC, RHYTHM & MOVEMENT			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Listening	<u>Be aware of the sounds in the environment:</u>		
	• Memorise and reproduce the sounds	😊	😊
	• Recognise and identify sounds and silence in the environment	😊	😊
	• Compare different sounds	😊	😊
	• Recognise loud, soft, high and low sounds and fast and slow sound sequences	😊	😊
	• Relate sounds to their sources	😊	😊
	• Discriminate individual sounds from a mixed set		😊
	• Use focused attention and learn to discriminate sounds through listening games, guessing environmental sounds		😊
	• Recognise voices		😊
	• Locate sound sources		😊
Developing rhythm	• Detect movements through sounds made	😊	😊
	• Mentally organise sounds for recall and reproduction	😊	😊
	• Become an attentive listener		
	• Recognise rhythm		😊
	• Repeat and follow rhythms by clapping	😊	😊
	• Reproduce the rhythm by using the body and clapping	😊	😊
	• Listen to the beat of music	😊	😊
	• Combine beat and rhythm		😊
	• Keep the beat and rhythm with walking and other motions	😊	😊
	• Feel and move to a beat	😊	😊
	• Match any chant in terms of beat and rhythm		😊

	• Repeat single words as the children move	😊	😊
	• Whisper chants		😊
	• Add music and clear beat/rhythm to activities		😊
	• Vary music and movement with additional experiences to include clapping, hopping, marching, running, skipping and galloping		😊
Play musical instruments	• Create rhythmic patterns	😊 😊	😊
	• Identify the instruments		😊
	• Recognise sounds of instruments through guessing games		😊
	• Recognise the sound of musical instruments by detecting the quality of sound they make		😊
	• Experience and play with a range of musical instruments.		😊
	• Categorise the types of instruments according to the way they produce sound.		😊
	• Create their own instruments & play with them		😊
	• Create &re-create rhythmic patterns		😊
	• Play along with recorded music		😊
Singing / chanting	• Play with the voice to express different emotional states		😊
	• Experience own recorded voice	😊	😊
	• Respond to specific motor, language and vocabulary skills		😊
	• Discriminate sounds in relation to pitch and octave		😊
	• Match the songs to rhythmic patterns	😊	😊
	• Listen to the songs and replicate them	😊	😊
	• Learn the words of a song	😊	😊
	• Move from rhythms to phrases	😊	😊
	• Use recorded music to introduce/sing songs	😊	😊

	• Repeat the songs	😊	😊
	• Match singing with movements	😊	😊
	• Rehearse the recordings until both teacher and children feel comfortable		😊
	• Sing in correct pitch and rhythm		😊
	• Sing either in solo or group without inhibitions		😊
	• Enjoy singing and dancing and participate in cultural activities	😊	😊
Axial movement and personal space	• Move all joints in as many directions as possible		😊
	• Respect the boundaries of being and moving without touching another person/object.	😊	😊
	• Bend circle, and/or move all joints (body parts) in as many directions as possible, independently and together without moving the feet.	😊	😊
Locomotion in general space	• Demonstrate ways of travelling through general space from point A to point B.		😊
	• Perform basic locomotive skills.	😊	😊
	• Demonstrate fast and slow movements	😊	😊
Respond to a range of opposites	• Demonstrate opposites through axial and locomotor movement using entire body		😊
	• Demonstrate circles and lines in a group		😊
	• Move safely through space, individually and in group	😊	😊
Respond to verbal directions	• Recognise and respond to action words	😊	😊
	• Perform simple movements in response to oral instructions	😊	😊
	• Respond to stop, go and freeze signals	😊	😊
	• Demonstrate geometric shapes and patterns with the body.		😊
Historical and cultural dimensions	• Recognise and perform group dances in lines or circles knowing that these are often folk/traditional dances.		😊
	• Name and perform folk/traditional dances from Mauritius and other countries		😊

Identifying the basic features of dancing styles	<ul style="list-style-type: none"> • Recognise basic features that distinguish the kind of dance from another (speed, force/energy use, costume, setting, movement combinations music) 		😊
	<ul style="list-style-type: none"> • Differentiate between the various styles of dance and their visible differences (solo, pairs, groups, ethnic costumes, special shoes, fast/slow tempo, line and circle formations and strong and smooth energy). 		😊

DRAMA			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Sensory games	<ul style="list-style-type: none"> • Develop sense awareness • Interact and use all senses to experience • Respond beyond visual 	😊 😊	😊 😊 😊
Sound and speech Games	• Listen and respond orally	😊	😊
	• Express oneself orally without inhibitions		😊
	• Combine voice with bodily movements		😊
Mime and mimicry	<ul style="list-style-type: none"> • Use self expression and improvisation • Imitate, reproduce sounds, voices, gestures and work as a group 	😊	😊 😊
Movement and concentration games	<ul style="list-style-type: none"> • Perform actions and respond to specific instructions • Produce physical actions with enhanced effect 	😊 😊	😊 😊
Dramatisation of common situations	<ul style="list-style-type: none"> • Perform an act to enhance skills of improvisation based on action-reaction, continuity and sequence • Enact various situations under teacher's guidance 	😊	😊 😊
Role-playing	<ul style="list-style-type: none"> • Use voice, facial expressions, movement with dramatic effects • Enact a character • Enact a situation confidently, individually and in groups 		😊 😊 😊

POETRY AND STORY TELLING			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Storytelling and Story-making	• Listen to a story	😊	😊
	• Re-tell the story	😊	😊
	• Use both oral and aural skills as well as the imagination	😊	😊
	• Create a personal story		😊
	• Read/tell out the story		😊
	• Use props and pictures to convey a story creatively		😊
Poetry reading	• Listen to a poem	😊	😊
	• Explore a poem in order to increase vocabulary items.		😊
	• Focus on specific words or high-frequency words, rhyme and rhythm		😊
	• Use pictures and other visuals to show understanding	😊	😊
Poetry recitation	• Develop familiarity with and identify new words, sounds and reproduce these with confidence		😊
	• Learn/recite a poem with rhythm and feelings		😊
Dramatization	• Listen to a story/poem	😊	😊
	• Differentiate the movements in the text.	😊	😊
	• Dramatize the action	😊	😊
	• Represent the action via different tableaux	😊	😊
	• Draw/paint/use pictures to represent the different sequences		😊

HUMAN VALUES			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Truthfulness	• Practice truthfulness	😊	😊
	• Show honesty in daily life	😊	😊
Etiquette	• Practice good manners.	😊	😊
	• Develop good habits which form character.	😊	😊
Patriotism	• Develop strong love for the Nation		😊
Care & consideration for others	• Show concern and care for others	😊	😊
	• Care for pet/things in the environment.	😊	😊

4.3.4 Teaching and Learning

In this area of learning, the educator needs to

- Provide opportunities for children to express their ideas through a wide range of types of representation
- Value children’s ideas
- Organize the environment which supports children’s ability to discover, explore and express their creativity.
- Take appropriate safety measures while manipulating different materials.

Some strategies that can be used in this area of learning

- **Active Participation**

The teacher should arrange materials in different areas of the classroom and allow freedom for varied interactions. This enables the child to feel free to move around and initiate activities such as spontaneous imitation, role playing and free expression through visual arts.

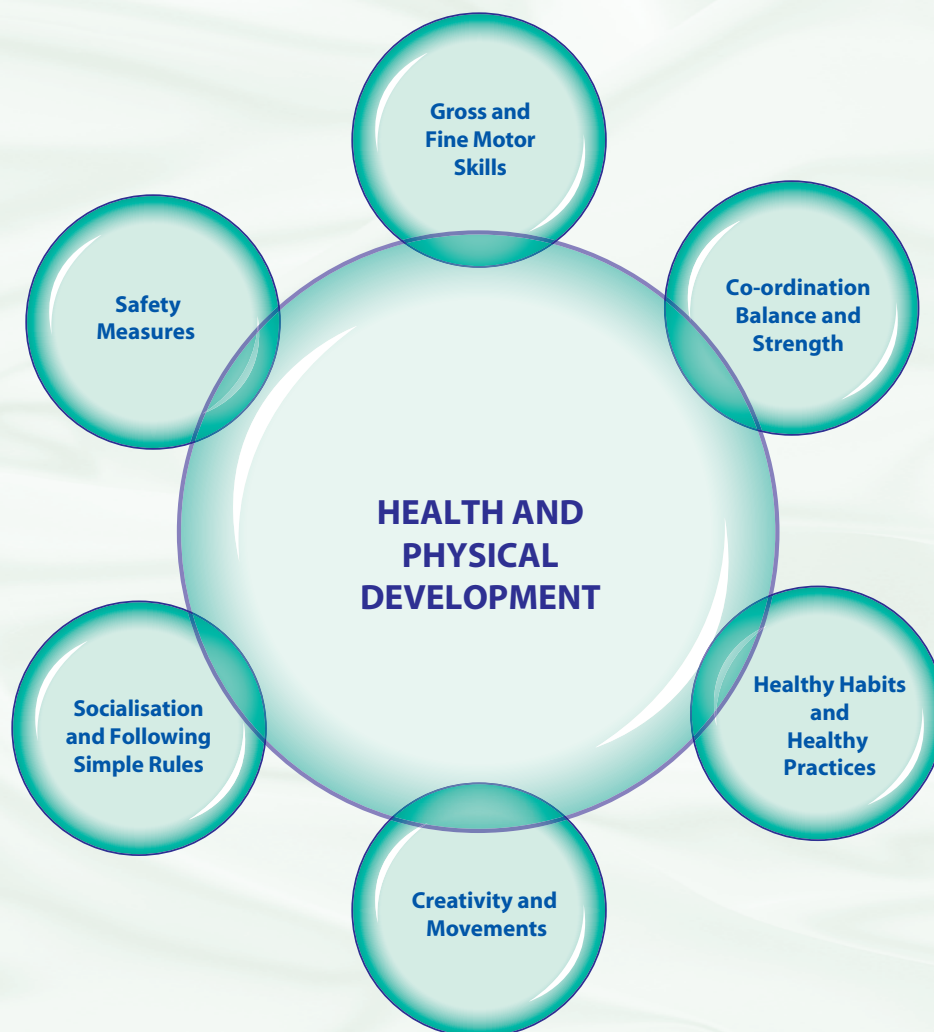
- **Exploration and Discovery**

Children enjoy finding materials and discovery of materials can be celebrated and shared in a 'beauty corner' where newly found leaves, ribbons and other materials can be placed. As they find that their discovered materials make their day- to- day work more interesting, they become more alert to new possibilities.

4.3.5 Assessment

Assessment in this area will be growth oriented. The concept of assessment should be based on a broad comprehensive concept concerned with a variety of tools and techniques and all aspects of the child's growth. The educator's observation will be the main tool for assessment and will serve both formative and diagnostic achievement purposes.

4.4 HEALTH AND PHYSICAL DEVELOPMENT (HPD)



4.4.1 Introduction

Young children are active learners and movement is at the very centre of their lives. Movement and play constitute an important strategy for learning at this age. Children usually like to play and it is particularly important in the overall development of the child. Movement is an important facet of all aspects of our children's development whether in the motor, cognitive or affective domains.

This area of learning involves learning how to move by moving and developing healthy habits. The benefits derived from this area of learning include reaching optimal growth and development, possessing sufficient energy to function in today's world and maintaining proper weight. One way pre-school educators can impact the

health and well-being of the next generation of school children is to spread the word about the importance of early and appropriate physical activity and healthy food choices for pre-school children.

Today, there is great concern that a lack of physical activity together with television, video games and computers are all resulting in sedentary lifestyles for even the youngest children. Obesity is a serious problem with multiple causes and consequences and schools and educators must take simple steps to make a difference. The early experiences of young people participating in regular physical activities and healthy eating habits are critical to developing a lifelong attitude towards acquiring a healthy lifestyle in their adulthood. This curriculum framework re-examines and revises the traditional views of children's physical activity levels and health habits.

Brain research shows that the best time for children to learn the fundamental motor skills is during early childhood. Movement activates the neural wiring throughout the body making the whole body the instrument of learning. Physical movement plays an essential role in creating nerve cell networks that are the essence of learning. Research on the relationship between healthy lifestyle and academic achievement supports the equation:

Good nutrition + Exercise = Optimal Learning

Research also confirms that proper nutritional support is crucial to maximize brain functioning and to enhance learning. Healthy habits (nutritional, social, environmental and life style) learned early in life help ensure normal physiological and neurological growth and development. The future health problems facing our young children are substantial and call for immediate action. This framework will equip children with the skills to make healthy lifestyle choices. It offers solutions, strategies for change, getting children moving and eating well.

4.4.2 The Learning Outcomes (LOs) for Health and Physical Development

SN	OLOs Pre-Primary Education	Health and Physical Development LOs
1.	Socialise with family, friends , peers, teachers and other adults	Children learn to co-operate, share and relate with others through co-operative / opposition games and during meal time.
2.	Accept each other and live together, irrespective of gender, ethnicity, age and ability	Children learn to accept and respect each other, irrespective of their physical abilities. Children engage in all spontaneous movement activities happily.
3.	Adapt to and enjoy experiences related to change, surprise and uncertainty.	Children develop gross and fine motor skills and begin to show independence in personal hygiene.
4.	Develop confidence by exploring the world using his/her body and senses.	Children learn to abide by simple rules set during games.
5.	Understand fairness in relation to themselves and others.	Children learn to create new steps in dance and pattern of movements during structured and unstructured play.
6.	Participate in the making, following and reworking of rules in the day to day activities	They also start to observe some table manners at meal time.
7.	Communicate thoughts and experiences creatively, using many forms of expressions	Children use language and body movements to express their feelings. Children learn to participate regularly in physical activities.
8.	Develop physical coordination and healthy habits	They also demonstrate an awareness of good eating habits.

4.4.3 The Descriptors for Health and Physical Development

HEALTH AND PHYSICAL DEVELOPMENT			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Participate regularly in physical activity.	• Practice breathing exercises	😊	😊
	• Practice warming up exercises	😊	😊
	• Practice correct postures	😊	😊
	• Play on/with outdoor equipment(e.g., slides, balls, wheeled toys)	😊	😊
	• Engage in active play (e.g., running, jumping, chasing, moving to music)	😊	😊
	• Join in indoor or outdoor games (e.g., musical games)	😊	😊
Demonstrate balance, strength, movement and coordination in gross motor skills	• Engage in active play (e.g., running, jumping, chasing, moving to music)	😊	😊
	• Join in indoor or outdoor games (e.g., musical games)	😊	😊
	• Run a distance of 10 m without falling	😊	😊
	• Jump from a low step/on the spot with feet together	😊	😊
	• Climb up and down stairs placing one foot on each step	😊	😊
	• Balance along a bench/plank raised 10 cm from floor	😊	😊
	• Balance on either foot for 5 or more seconds	😊	😊
	• Move according to given or self stated directions	😊	😊
Demonstrate coordination and strength in fine motor tasks.	• Establish hand preference.		😊
	• Thread a determined sequence of large beads		😊
	• Fasten buttons, zips, fasteners on clothing.		😊
	• Lace shoes.		😊

	• Reassemble a screw toy/remove the top from a jar/bottle	😊	😊
	• Complete 6 pieces puzzle/jigsaw	😊	😊
	• Copy simple shapes, lines, cross, circle square	😊	😊
	• Ride a tricycle and can change direction		😊
	• Catch a moving ball with one hand		😊
	• Throw a small ball at a target		😊
	• Hit a ball with a racket		😊
	• Kick with specific parts of foot		😊
	• Carry objects	😊	😊
	• Roll on flat surfaces	😊	😊
Show independence in personal hygiene.	• Hang from bars...		😊
	• Use eating utensils		😊
	• Manage toileting.	😊	😊
	• Wash and dry hands.	😊	😊
Demonstrate awareness of good eating habits.	• Cover mouth and nose when sneezing.	😊	😊
	• Brush teeth.	😊	😊
	• Can self-feed (uses utensils for eating and drinking).	😊	😊
Demonstrate caution within the environments and around potentially dangerous objects.	• Observe table manners.		😊
	• Eat a variety of foods.	😊	😊
	• Safely negotiate stairs, curbs and uneven surfaces.		😊
	• Stay with an adult when crossing the street, in parking lots and in public places.	😊	😊
	• Stay away from machinery (e.g., lawn mower, power tools).	😊	😊
	• Know that objects such as syringes, matches, knives, can be dangerous and should not be touched.	😊	😊
	• Display caution around water, fire, unsafe heights, unfamiliar people or animals.	😊	😊
	• Know not to take /eat/drink/ swallow unknown substances such as medicines, poisons, household cleaners, etc.	😊	😊

4.4.4 Teaching and Learning

In this learning area, the educator needs to:

- Plan and provide an environment that encourages children's learning.
- Provide opportunities for regular and frequent physical activities, indoors and outdoors.
- Ensure that the environment is safe and be aware of the potential risks in the environment.
- Discuss about different activity zones and be aware of children's health condition before engaging in vigorous physical activity.
- Ensure that a full range of stimuli (music, stories, rhymes) for movement is offered.
- Establish some routines that will help the children to respond to oral and non-verbal signals, thus, maximizing time and getting all the children to participate in the activity.
- Provide children with opportunities to choose nutritious meals, snacks and practice basic hygiene and self help skills.
- Design activities for children to learn how to look after themselves and to acquire knowledge of self- care, hygiene, table manners and safety.
- Set a good example by modeling hygienic and safe behaviours. He/she should help children develop good eating habits and good hygiene through daily routines at snack time and toileting.
- Engage children in conversation about healthy and safe behaviours and their importance. Children should be increasingly involved in developing the skills required to take care of their bodies (washing, dressing themselves, cleaning their teeth), to protect themselves from harm and to become more independent at meal times.

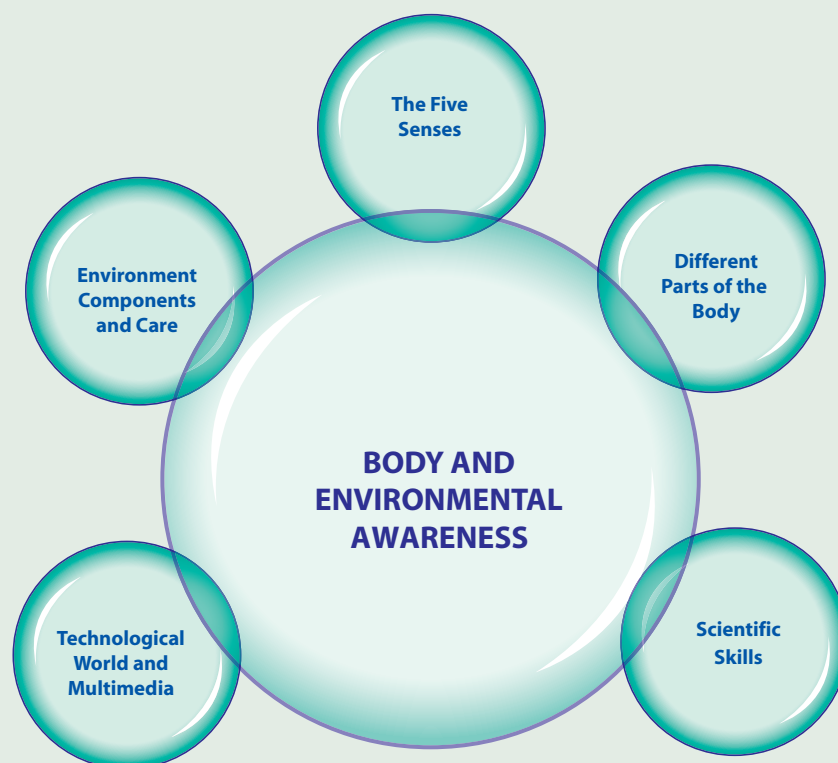
Some strategies that can be used in this area of learning are:

- Get children to participate actively in physical activities and adopt healthy habits.
- Make meal times at school enjoyable to foster healthy habits such as hand washing, healthy eating and table manners. Children not only develop physical skills but also grow in confidence and self-esteem.
- Provide opportunities for children to play with their friends; they learn to share, take turns and negotiate with others.
- Integrate music in physical activities.
- Maintain an open and trusting communication between educators and parents.
- Provide parents with information concerning health and safety issues.

4.4.5 Assessment

Assessment has to be an integral part of pre-primary schooling. The educator may use observation and record keeping to evaluate the children's performance. Record keeping will gather information needed for effective reporting and evaluation. This process also informs decisions for teaching and learning.

4.5. BODY AND ENVIRONMENTAL AWARENESS (BEA)



4.5.1 Introduction

Children are naturally curious about their body and their environment. Since their early years, they have been exposed to a large variety of objects as well as to the different components of the natural environment; they indulge in different kinds of activities, some routine and some of the investigative/exploratory types. They observe and are curious to understand about themselves, about objects, changes and phenomena around them by asking questions. Indeed, young children are continuously trying to make sense of everything around them.

The environment includes all things as well as the different kinds of phenomena occurring around the children; being aware of all the environmental components is a crucial part of education.

To this end 'Body and Environmental Awareness' is fundamental for the pre-primary learners to develop an awareness of and to promote an understanding about themselves and their surroundings.

This learning area also aims at engaging the learners in activities that would help them to develop important science process skills like observing, classifying, pattern-seeking, hypothesizing, inferring and predicting. In addition, it is also expected that pre-primary learning in this area would provide children with opportunities to extend their natural curiosity, to ask questions and to discover things for themselves. They would also be guided to use their prior experiences to develop understanding about things and happenings in their immediate surroundings as well as to seek answers and look for solutions to simple problems. This learning area will encourage them to develop care and respect for all living things. It would also aim at developing an awareness about environmental protection, safety measures for self and others as well about the need for consideration of sustainability in life.

Furthermore, children are surrounded since their very young age by technology. They are exposed to television, radio, mobile phones and computers. Video games, remote-controlled cars, microwave ovens and other electronic appliances form part of their immediate environment. The importance of technology in their everyday lives cannot be ignored. In view of this, the present learning area also aims at allowing pre-primary children to be exposed to and learn about simple technological equipment that are used for different purposes in their everyday lives.




















It is imperative that in dealing with this learning area, pre-primary educators take advantage of the learners' natural curiosity and further encourage them to ask questions through inquiry-based sessions.

4.5.2 The Learning Outcomes (LOs) for Body and Environmental Awareness

SN	OLOs Pre-Primary Education	Body and Environmental Awareness (LO)
1.	Socialise with family, friends , peers, teachers and other adults	Children work cooperatively with peers during practical activities in the learning area.
2.	Accept each other and live together, irrespective of gender, ethnicity, age and ability	Children work cooperatively during field trips, indoor and outdoor science activities. Children happily engage in discovery activities.
3.	Adapt to and enjoy experiences related to change, surprise and uncertainty.	Children use their senses to participate fully in indoor and outdoor activities while learning about the different components of the environment, like soil, water, sun, animals and plants.
4.	Develop confidence by exploring the world using his/her body and senses.	Children develop an awareness of their five senses and use them to appreciate, and discover the environment
5.	Understand fairness in relation to themselves and others.	Children show care, respect and love for friends, animals and plants.
6.	Participate in the making, following and reworking of rules in the day to day activities	Children develop safety habits and avoid dangers such as playing with sharp objects and plants which are poisonous.
7.	Communicate thoughts and experiences creatively, using many forms of expressions	Children use their senses to learn about objects and living things and communicate their findings through different simple words, drawings and play.
8.	Develop physical coordination and healthy habits	Children are actively involved in handling and manipulating objects during indoor and outdoor activities. Children demonstrate an awareness of plants and animals as sources of food.

4.5.3 The Descriptors for Body and Environmental Awareness

BODY AND ENVIRONMENTAL AWARENESS			
DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Develop body awareness	• Inquire and learn about their body	☺	☺
	• Name and describe the different parts of the body as well as their functions	☺	☺
	• Show an awareness of the need for healthy habits and safety measures for themselves and for others and demonstrate evidence of acquisition of these habits and safety measures		☺
Use the five senses	• List the five sense organs	☺	☺
	• Describe, compare and classify different perceptions (tactile, olfactory, auditory, visual, gustatory)		☺
	• Express degrees/varieties of sense signals		☺
	• Use the senses to identify, recognize and describe objects, events and organisms	☺	☺
Acquire scientific skills	Demonstrate evidence of acquisition and use of scientific skills:		
	• Observe	☺	☺
	• Question	☺	☺
	• Investigate		☺
	• Collect information	☺	☺
	• Infer		☺
	• Predict		☺
	• Use simple equipments to measure and record data	☺	☺
	• Suggest solutions to simple problems		☺
	• Demonstrate the ability to think, reason and solve simple problems through active exploration		☺

Identify the different components in the environment including living and non-living things	<ul style="list-style-type: none">• Ask questions and seek answers about their natural environment as well as about objects, features, living things and phenomena around them• Examine, classify, identify, compare and sort objects and living things in their environment, according to observable attributes and properties		
			
	<ul style="list-style-type: none">• Demonstrate knowledge and understanding of the existence and importance of the common physical and living components of their natural environment, like soil, water, sun, animals and plants• Respect and care for the environment and all living organisms.		
	<ul style="list-style-type: none">• Distinguish between living and non-living things.• Identify the characteristic features of plants and common animals.• Compare and identify similarities and differences• Discriminate sound made by animals, human beings, musical instruments	  	   
Explore the environment	<ul style="list-style-type: none">• Discriminate between soft, hard and rough surfaces, wood, metal and plastic materials;• Identify objects and familiar smells from the environment• Make things using a range of tools and materials safely and effectively.• Begin to demonstrate safe practices and appropriate use of materials• Take security into consideration (dangerous objects, plants, vehicles)		    

Study the environment	• Develop an awareness that investigations help them learn about the natural world		😊
	• Demonstrate an appreciation of their roles and responsibilities in protecting the environment and keeping it clean		😊
	• Gather information using simple tools such as a magnifying lens and an eyedropper		😊
	• Participate in creating and using simple data charts		😊
	• Talk and think critically and creatively about their observations and begin to record them with adult support.		😊
	• Share observations and findings with others through pictures, discussions, or dramatizations.	😊	😊
	• Sort objects and organisms into groups and begins to describe how groups were organized		😊
Develop awareness of the technological world	• Select and use materials and simple equipment.		😊
	• Describe the function/use of technological appliances and apply the safety measures		😊
	• Show an interest in ICT and recognize the importance of computers and other technologies.		😊
	• Incorporate ICT into play situations and use ICT to support their learning across the curriculum.		😊

4.5.4 Teaching and Learning

This area aims at developing scientific awareness and provides the foundation for further learning of science at the primary level. Developing body and environmental awareness during the pre-primary years should be based on a sense of wonder and joy of discovery and should take maximum advantage of children's natural curiosity.

Given the nature of the pre-school children and the nature of science, learning in this area should be hands-on, experiential and should be based on activities and investigations. Children should experience learning as challenging, motivating, interesting and rewarding; they should be active participants and at the centre of all learning activities. Learning will be effective and meaningful only if the children are motivated and actively engaged. For effective teaching and learning of 'Body and Environmental Awareness', it is important for the pre-school educator to:

- Prepare a learning environment that would arouse learners' interest and encourages them to observe, investigate, manipulate and to be actively involved in the teaching / learning process. Educators must make effective use of school outdoors/immediate environment.
- Make use of resources as well as teacher-developed teaching/ learning aids.
- Plan relevant activities that would support and encourage experimentation and self-discovery.
- Organize field trips / educational trips which are very important to increase children's knowledge and understanding of the environment.
- Use carefully framed open-ended questions that would encourage pupils' curiosity and creativity and also enhance critical thinking.
- Work collaboratively with the parents of each child in the early years of schooling. Educators will have first-hand information about each child's characteristics, special ability or special need. This will help in effectively teaching the children and also in providing appropriate and individual support to the children during the lessons and activities.
- Encourage all children to communicate and to share their views. Children should be given opportunities to answer freely in the language they are more at ease with; it is important that language should not be a barrier in the teaching and learning of this area.

- Take advantage of children's interest in music, songs and poems to enhance teaching of "Body and Environmental Awareness."
- Model appropriate behaviors, responses, skills and values: educators should be able to model enthusiasm, curiosity, questioning, observing closely and showing wonder during the learning activities.
- Work alongside the children, acting as guide and facilitator.

Children need to be provided with opportunities to:

- Make observations and manipulate objects and be involved in hands-on activities.
- Solve simple problems.
- Build knowledge based on their interests and experiences.
- Learn at their own rate of progress (recognize that each child is an individual with his/her own ability and perception).
- Form opinions and conclusions.
- Describe and communicate their discoveries.
- Talk about their prior experiences

For successfully teaching 'Body and Environmental Awareness', different strategies need to be employed in order to enhance children's motivation, understanding and engage the children in the lessons.

Some teaching strategies that can be used in this area of learning are:

Discovery Method

Educators will allow children to observe, investigate, communicate and share views during activities based on experimentation.

Inquiry-based Learning

Educators need to provide opportunities during the activities for children to observe, investigate, hypothesize, discover and solve problems.

Activity-based Learning

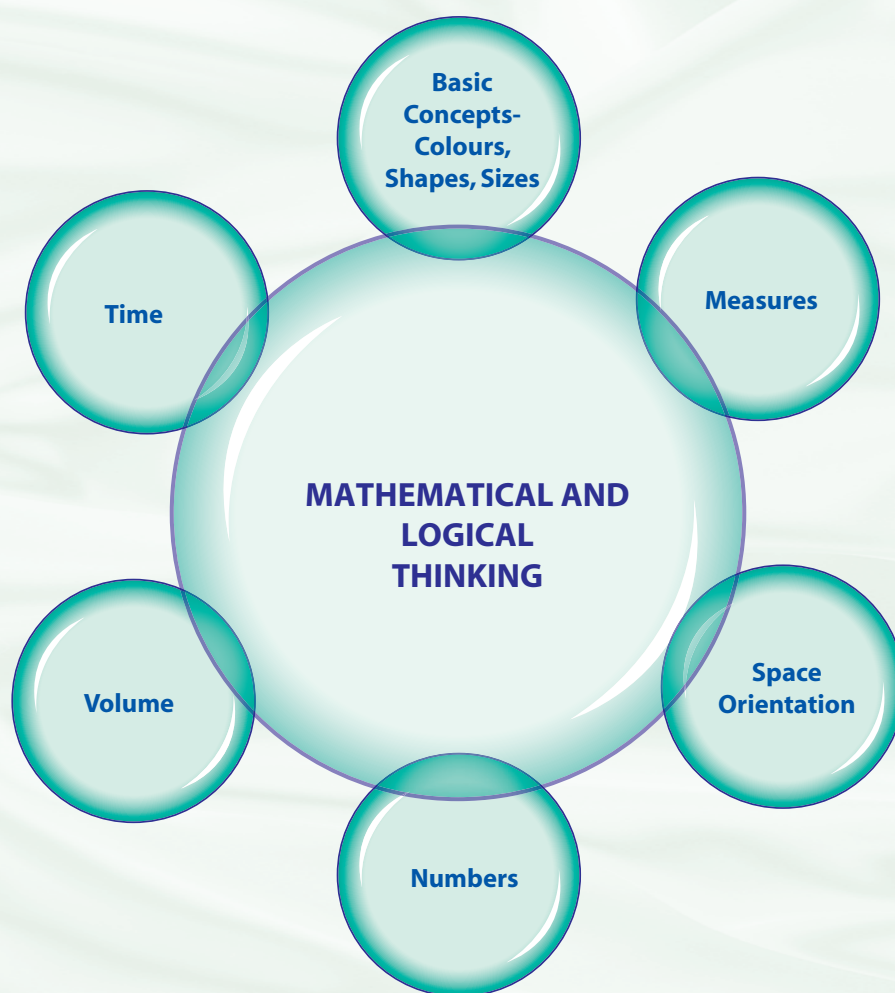
Educators will involve learners in such activities based on objects in his/her immediate environment through group work and role playing.

4.5.5 Assessment

Assessment of children's learning in this learning area would be carried out through:

- Observing children's participation, responses and manipulation during learning activities.
- Drawing activities.
- Role play.

4.6 MATHEMATICAL AND LOGICAL THINKING (MLT)



4.6.1 Introduction

Mathematics helps children to make sense of their world and to develop logical and rational thinking. The early years of mathematical development play a fundamental role in developing a foundation for life-long learning.

Children encounter various opportunities to be engaged in early mathematical thinking in their everyday life experiences. They need to be encouraged to acquire the underlying mathematical concepts through a lot of hands-on experiments and through play. These activities should be organised in such a way as to arouse curiosity and make mathematics fun. This will help children to develop a positive attitude towards learning of mathematics. They should also be allowed to interact with others in exploring objects and communicating with their peers. Opportunities need also to be provided to allow them to use their mathematical knowledge and logical thinking in solving problems of daily life.

4.6.2 **The Learning Outcomes (LOs) for Mathematical and Logical Thinking**

SN	OLOs Pre-Primary Education	Mathematical and Logical Thinking (LOs)
1.	Socialise with family, friends , peers, teachers and other adults	Children develop friendship with others while playing and participating in hands-on mathematical activities.
2.	Accept each other and live together, irrespective of gender, ethnicity, age and ability	
3.	Adapt to and enjoy experiences related to change, surprise and uncertainty.	Children enjoy experimenting with: number, shapes and size by exploring various objects in their environment.
4.	Develop confidence by exploring the world using his/her body and senses.	Children show confidence when engaged in counting, sorting and classifying objects in everyday life.
5.	Understand fairness in relation to themselves and others.	Children learn about fairness in everyday life through using, sharing, lending and borrowing of resources in all mathematical activities.
6.	Participate in the making, following and reworking of rules in the day to day activities	Children follow rules while playing different mathematical games.
7.	Communicate thoughts and experiences creatively, using many forms of expressions	Pupils use simple mathematical terms, drawings, patterns and gestures to express themselves.
8.	Develop physical coordination and healthy habits	Pupils use games in mathematics to develop manipulative skills and coordination for a healthy life style.

I.6.3 The Descriptors for Mathematical and Logical Thinking

DESCRIPTORS	PERFORMANCE INDICATORS	YEAR 1	YEAR 2
Recognise basic colours	Name common colours(red, blue, yellow, green...)	☺	☺
	Match colours	☺	☺
	Sort according to given colour		☺
Recognise basic shapes	Name basic shapes i) circle, rectangle ii) triangle, square	☺	☺ ☺
	Select/sort given shapes	☺	☺
	Reproduce, in freehand, lines, curves and basic shapes	☺	☺
	Model into given shapes	☺	☺
Distinguish between different sizes	Describe, compare objects by size i) Little/big ii) Small/large iii) Short/ tall iv) Long/short	☺ ☺	☺ ☺ ☺ ☺
	Sequence objects by increasing/ decreasing size		☺
Classify/ group items	Select/classify/groups items by one attribute (either colour or size or shape)	☺	☺
	Single out/remove objects that do not belong to a group	☺	☺
	Match objects by i) Similarity ii) Difference	☺	☺ ☺
Match items between two groups	Build one-to-one correspondence between members of two groups		☺

Count	Count, orally, number of objects	😊	😊
	Count 1 to 3...	😊	
	Count 1 to 5 or 6 or 7 or...		😊
	Recognise and read the numerals 1 to 10...		😊
	Read the numerals of a phone number		😊
	Reproduce the numbers 1 to 5...		😊
Acquire a sense of relative positions and directions	Acquire and use a vocabulary to describe position and direction		
	i) Up/Down	😊	😊
	ii) Inside/outside)	😊	😊
	iii) Far/near	😊	😊
	iv) First/last		😊
	v) Under/over		😊
	<u>Begin to show awareness of the following terms and their meanings:</u>		
	vi) Right/left		😊
	vii) Front/back		😊
	viii) Forward/backward		😊
Manipulate/ model objects or materials	<u>Follow instructions to:</u>		
	i) Imitate	😊	😊
	ii) Reproduce/draw	😊	😊
	iii) Trial out	😊	😊
	iv) Reshape		😊
	v) Model		😊
	vi) Rearrange		😊
	<u>Display initiative to:</u>		
	vii) Use free style manipulation	😊	😊
	viii) Propose		😊
	ix) Discover		😊

Carry out organised manipulations	i) Duplicate 2D and 3D designs using lamina and blocks (aligns, stacks)	😊	😊
	ii) Put selected objects of a kind into containers	😊	😊
	iii) Align objects according to given criterion		😊
	iv) Recreate simple sequences and patterns	😊	😊
	v) Create simple sequences and patterns	😊	😊
	vi) Reconstruct a puzzle from given parts		😊
Experience and compare quantities/ qualities	Use the terms		
	i) Less/more	😊	😊
	ii) Few/many	😊	😊
	iii) Empty/full		😊
	iv) Light/heavy		😊
	v) Equal to/as many as		😊
	vi) Part, piece/whole		😊
	vii) Soft/hard, Smooth/rough textures...		😊
Acquire and use the concept of volume	i) Pour seeds/beads from one container to another	😊	😊
	ii) Pour liquid from one container to another	😊	😊
	iii) Compare volume		😊
	iv) Estimate volume required (e.g. in terms of cups) and carry out simple experiments to verify		😊
Use the concept of time	Use the terms		
	i) Day, night	😊	😊
	ii) Morning, afternoon	😊	😊
	iii) Yesterday, today, tomorrow		😊
	iv) Before, now, after		😊
	Describe a sequence of events in time		😊

Display the ability for spatial orientations	i) Explore the immediate environment	😊	😊
	ii) Describe the immediate environment	😊	😊
	iii) Rearrange objects in the immediate environment		😊
	iv) Follow a given route (whether traced/marked or described)	😊	😊
Use expressive mathematics	i) Acquire, and exercise with, a vocabulary for numbers through games/ rhymes/songs/plays...	😊	😊
	ii) Confidently use the mathematical concepts/terms stated above in the description of everyday life experiences and the interactions with people.	😊	😊
	iii) Address uncertainties by generating alternative and/or novel solutions		😊

4.6.4 Teaching and Learning

Pre-primary children come to school with a natural curiosity about quantitative events and some informal but powerful problem-solving skills. As such, they have already constructed intuitive mathematical notions. Teachers should use the child’s physical and social environment to build further the quantitative reasoning and problem-solving skills. All the mathematics taught at this level should be built on the informal mathematical knowledge and experiences acquired by the children at home and outside classroom settings.

In this area of learning, educators need to:

- Assess the prior mathematical knowledge and the thought processes of their children.
- Provide opportunities for children to build links between previously encountered mathematical ideas and new learning situations.

- Adapt their methods to the needs, abilities, interests, experiences and learning styles of the children
- Organise a sound environment to make learning meaningful and enjoyable.

Pre-primary school educators will need to devise strategies for creating an atmosphere which arouses children's curiosity and interests in learning mathematics. The affective domain also needs to be taken into consideration as a teacher will deal with pre-school children who need to feel confident and enthusiastic to join in or talk about mathematical activities.

Some Teaching Strategies

- **Experimentation**

The child-centered concept is pivotal in the teaching and learning process at the early childhood level. Teachers are thus called upon to offer maximum opportunities to children to be actively involved in their own learning.

- **Play**

It is universally acknowledged that, for successful mathematics learning at the pre-primary level, play is an educational tool that should be used to foster effective learning. Play activities that engage pre-school children in mathematical investigations are:

- ? counting how many cups of sand are needed to fill the bucket in the sand corner;
- ? reproducing a design/pattern from mother's dress;
- ? comparing the heights of two children.

- **Games**

In addition, outdoor games and educational toys (such as puzzles, die games etc) can be devised to create and engage in interesting problem-solving tasks, which is central to mathematics learning

- **Investigation and Exploration.**

While planning new investigations and activities, teachers should engage children in revisiting concepts they have previously explored. These experiences enable children to build links between previously encountered mathematical ideas and new learning situations. For early mathematical development, it is important that there is a connection between an intuitive, informal mathematics that children have learnt through their own experiences and the mathematics they are learning.

- **Discussion**

Whole group discussions are used to extend children's understanding of mathematical concepts by providing opportunities to transfer or generalize knowledge of concepts or skills learnt previously.

4.6.5 Assessment

Mathematics at pre-primary level comprises activities, play and children's involvement in their learning. Children need to derive pleasure in performing mathematical activities and working together with their peers. Appropriate social skills are developed which will benefit the children throughout their lives. The assessment of children's learning needs to be conducted in an authentic learning environment. Consequently, analysis of children's abilities and performance is carried out objectively based on the following:

- Observation
- Record of conversation
- Behaviour checklist
- Portfolio

Educators should ensure that different tools for assessment are used for appropriate diagnostic and formative purposes.

CHAPTER 5

IMPLEMENTATION

To ensure that the National Curriculum Framework Pre-primary is implemented effectively at national level, it is imperative that the following strategic goals as spelt out in the Education and Human Resources Strategic Plan (EHRSP, 2008-2020) be operationalised:

1. Review legislative and regulatory framework for the provision of ECCE to standardise practices.
2. Establish a network for a holistic approach to ECCE.
3. Improve the quality of learning environments.
4. Embed technology in the system.
5. Undertake review of curricula for ongoing improvement.
6. Ensure that all pre-primary educators are fully trained and qualified.
7. Encourage and support the inclusion of children with special needs and those from disadvantaged socio-economic backgrounds.
8. Foster research and development in ECCE.
9. Enhance professional development for the general improvement for early childhood education.

REQUISITES

Resources: Young children's cognitive and socio-emotional development often occur through interactions with physical objects. Resources are essential to support teaching and learning in this very dynamic field.

Training: To implement this curriculum framework, educators, parents and all stakeholders should be informed and trained, taking into consideration the realities of teachers' classrooms.

ANNEX A

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ANNEX B

CONVENTION ON THE RIGHTS OF THE CHILD

(Short version)

Article 1: Definition of a child

Everyone under 18 years of age has all the rights in this Convention

Article 2: Non-discrimination

The Convention applies to everyone whatever their race, religion, abilities, whatever they think or say, whatever type of family they come from.

Article 3: Best interests of the child

All organizations concerned with children should work towards what is best for each child.

Article 4: Rights in practice

Governments should make these rights available to children.

Article 5: Parents' guidance and the child's growing abilities

Governments should respect the rights and responsibilities of families to direct and guide their children so that, as they grow, they learn to use their rights properly.

Article 6: Survival and development

All children have the right to life. Governments should ensure that children survive and develop healthily.

Article 7: Name and nationality

All children have the right to a legally registered name, and nationality. Also the right to know and, as far as possible, to be cared for, by their parents.

Article 8: Identity

Governments should respect children's right to a name, a nationality and family ties.

Article 9: Separation from parents

Children should not be separated from their parents unless it is for their own good. For example, if a parent is mistreating or neglecting a child. Children whose parents have separated have the right to stay in contact with both parents, unless this might hurt the child.

Article 10: Family reunification

Families who live in different countries should be allowed to move between those countries so that parents and children can stay in contact, or get back together as a family.

Article 11: Transfer and non-return of children

Governments should take steps to stop children being taken out of their own country illegally.

Article 12: The child's opinion

Children have the right to say what they think should happen, when adults are making decisions that affect them, and to have their opinions taken into account.

Article 13: Freedom of expression

Children have the right to get and to share information, as long as the information is not damaging to them or to others.

Article 14: Freedom of thought, conscience and religion

Children have the right to think and believe what they want, and to practice their religion, as long as they are not stopping other people from enjoying their rights. Parents should guide their children on these matters.

Article 15: Freedom of association

Children have the right to meet together and to join groups and organizations, as long as this does not stop other people from enjoying their rights.

Article 16: Protection of privacy

Children have a right to privacy. The law should protect them from attacks against their way of life, their good name, their families and their homes.

Article 17: Access to appropriate information

Children have the right to reliable information from the mass media. Television, radio, and newspapers should provide information that children can understand, and should not promote materials that could harm children.

Article 18: Parents' responsibilities

Both parents share responsibility for bringing up their children, and should always consider what is best for each child. Governments should help parents by providing services to support them, especially if both parents work.

Article 19: Protection from abuse and neglect

Governments should ensure that children are properly cared for, and protect them from violence, abuse and neglect by their parents, or anyone else who looks after them.

Article 20: Protection of a child without a family

Children who cannot be looked after by their own family must be looked after properly, by people who respect their religion, culture and language.

Article 21: Adoption

When children are adopted, the first concern must be what is best for them. The same rules should apply whether the children are adopted in the country where they were born, or if they are taken to live in another country.

Article 22: Refugee children

Children who come into a country as refugees should have the same rights as children born in that country.

Article 23: Disabled children

Children who have any kind of disability should have special care and support, so that they can lead full and independent lives.

Article 24: Health and health services

Children have the right to good quality health care, clean water, nutritious food, and a clean environment, so that they will stay healthy. Rich countries should help poorer countries achieve this.

Article 25: Review of placements

Children who are looked after by their local authority rather than by their parents should have their situation reviewed regularly.

Article 26: Social security

The government should provide extra money for the children of families in need.

Article 27: Standard of living

Children have a right to a standard of living that is good enough to meet their physical and mental needs. The government should help families who cannot afford to provide this.

Article 28: Education

Children have a right to an education. Discipline in schools should respect children's human dignity. Primary education should be free. Wealthy countries should help poorer countries achieve this.

Article 29: Aims of education

Education should develop each child's personality and talents to the full. It should encourage children to respect their parents, and their own and other cultures.

Article 30: Children of minorities or indigenous populations

Children have a right to learn and use the language and customs of their families, whether these are shared by the majority of people in the country or not.

Article 31: Leisure, recreation and cultural activities

All children have a right to relax and play, and to join in a wide range of activities.

Article 32: Child labour

The government should protect children from work that is dangerous, or that might harm their health or their education.

Article 33: Drug abuse

The government should provide ways of protecting children from dangerous drugs.

Article 34: Sexual exploitation

The government should protect children from sexual abuse.

Article 35: Sale, trafficking and abduction

The government should make sure that children are not abducted or sold.

Article 36: Other forms of exploitation

Children should be protected from any activities that could harm their development.

Article 37: Torture and deprivation of liberty

Children who break the law should not be treated cruelly. They should not be put in prison with adults and should be able to keep in contact with their families.

Article 38: Armed conflicts

Governments should not allow children under 15 to join the army. Children in war zones should receive special protection.

Article 39: Rehabilitation care

Children who have been neglected or abused should receive special help to restore their self-respect.

Article 40: Children in conflict with the law

Children who are accused of breaking the law should receive legal help. Prison sentences for children should only be used for the most serious offences.

Article 41: Respect for higher standards

If the laws of a particular country protect children better than the articles of the Convention, then those laws should stay.

Article 42: Putting the CRC into practice

The government should make the Convention known to all parents and children.

Source:

UNICEF brochure, What Rights:

<http://www.unicef.org/magic/media/documents/what-rights-flyer-english.pdf>.

ANNEX C

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