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CHAPTER



INTRODUCTION

1.1 The Significance of Early Childhood Care Education (ECE)

Early childhood is a critically important developmental stage of human life in which a child's brain develops rapidly. Neuroscience suggests that the development of a child's brain begins during the prenatal stage and continues after birth. A child is born with 100 billion brain cells, which need proper nurturing through early stimulation, nutrition and care to help the child in making proper neural connections/wires and pathways. The years starting from prenatal to age 8 are considered to be the critical window for optimum brain development. This period is not only important for brain development but also for cognitive, physical, social, emotional, and language development. In particular, the first 1,000 days of a human life, the time spanning roughly between conception and one's second birthday, is a unique period of opportunity when the foundations of optimum health, growth, and neuro-development across the lifespan are established. In the first years of life, neurons in our brain form new connections at the astounding rate of 700–1,000 per second – a pace never repeated again (UNICEF).

A sound foundation laid in the early years makes a difference through adulthood and even gives the next generation a better start. Educated and healthy people participate in, and contribute to, the financial and social wealth of their societies. Early years of childhood form the basis of intelligence, personality, social behaviour, and the capacity to learn and nurture oneself as an adult. Latest research on brain development suggests that genes provide the blueprint while the environment, early experiences and the relationships in which children are exposed to, shape the quality of their brain development. Therefore, early interventions, focusing on the achievement of milestones in this developmental stage, need to be developed and implemented as a key national priority.

ECE is increasingly being seen as one of the most cost-efficient investments in human capital, and a key contributor to sustainable development. Economic analyses from all over the world indicate that investing in the earliest years of children's development yields the highest rates of return to families, societies and countries. The investment case is not only made with respect to returns but also with respect to the cost of inaction. Science has demonstrated that early childhood interventions, early in life are important because they help mitigate the impact of adverse early experiences which if not addressed lead to poor health (e.g., non-communicable diseases such as obesity, cardiovascular disease and diabetes), poor educational attainment, economic dependency, increased violence and crime, greater substance abuse and depression – all of which add to the cost and burden in society.

Globally, 250 million children are unable to meet their developmental potential in the first 5 years of their life due to a complex set of co-occurring risks and inadequate access to early interventions and children in the lower and middle-income countries, including our country, suffer the most. Implementing a comprehensive curriculum like this one as a part of early interventions, can contribute to averting this situation.

The Change in Nomenclature

The 2020 edition of this document 'Early Childhood Education and Care' has been renamed as 'Early Childhood Education'. The word 'Care' has been removed in order to avoid any possible enforcement of this document in 'daycare' or 'child care' settings.

Care however remains at the heart of early childhood education where teachers not only demonstrate an understanding of the personal, social, emotional needs of each individual child but take concrete steps to address these.

1.2 Philosophy and Values in ECE

Every child should have the opportunity to grow up in a setting that values children, that provides a safe and secure environment, and that respects diversity. Because children are both the present and the future of every nation, they have needs, rights, and intrinsic worth that must be recognised and supported.

Children must receive appropriate nurturing and education within and outside their families before birth and onwards, if they are to develop optimally. Attention to health, nutrition, early stimulation, education, and psychosocial development of children during their early years is essential for the future wellbeing of nations and the global community. Knowledge about human development is now more substantial than at any given point in history. The new century offers opportunities to consolidate recent gains and respond to new challenges that lie ahead. It is important to bear in mind that children, just like adults, need to be respected as capable, thinking and feeling individuals with unique personalities.

Central to the key considerations of the curriculum, to which the Government of Pakistan is signatory, is the Convention on the Rights of the Child (CRC). A core value of the CRC is the human dignity of the child. Related to this basic value, the Convention consists of the following four principles:

- **1.2.1** Non-discrimination
- **1.2.2** The child's best interest
- **1.2.3** The child's right to life and full development
- **1.2.4** Giving due weight to the views of the child

Learning through Play

This ECE curriculum for Pakistan takes a play based approach to teaching and learning. A play based approach places the child at the centre, ensuring learning experiences are first and foremost hands on, concrete, relevant and meaningful. These learning experiences can be led by the teacher or the child however these are always supported, extended, and supervised by the teacher. Children in a play based environment have the freedom to choose between activities, they have opportunities to work in groups or on their own depending on their stage of development, and they have opportunities to question, investigate and develop skills across all areas of learning (UNICEF, 2018).

Learning through Play

All young children need periods of uninterrupted time in which they can engage in active learning, explore their environment, make their own discoveries and set their own challenges. They need opportunities to work with other children, and they need adults who are able to understand and extend their natural interests. Above all, they need opportunities for learning through play.

"Play acts as an integrating mechanism which enables children to draw on past experiences, represent them in different ways, make connections, explore possibilities, and create a sense of meaning. It integrates cognitive processes and skills which assist in learning. Some of these develop spontaneously, others have to be learnt consciously in order to make learning more efficient. We would all like children to become successful learners."

Bennet et al (1997)

1.3 National Commitments to Ensure Steps to be taken to Improve Statistics and Quality of Education in the Country

1.3.1 EFA-Education for All

Advancement in research on education and human development, highlight the crucial nature of the early years and its implication for a healthy and peaceful life at later stages. The world recognises the importance and need for ECE (Early Childhood Education) by endorsing expansion and improvement of comprehensive early childhood education, especially for the most vulnerable and disadvantaged children as a key means for creating a better world.

The Education for all declaration and subsequent reiteration at World Education Conferences has brought ECE into the main policy discourse of more than 180 countries. As a signatory to the framework, Pakistan has also made a commitment to support ECE programs in the country.

1.3.2 Commitment to Achieve EFA Goals at E-9 Forum

Recognising that the 'Education for All' goals remains unachieved in the nine most populous countries of the world, E-9 member countries gathered to sign a commitment to strengthen collaboration with each other to improve education standards in their countries. The E-9 Initiative, a **consortium of the nine most populous countries of the South** was put in place in 1993, following the World Conference on EFA in Jomtien, Thailand in 1990. "E" stands for education and "9" for those nine countries which are home to over half of the world's population as well as to almost half of the world's out of school children and two thirds of the world's illiterates: **Bangladesh**, **Brazil**, **China**, **Egypt**, **India**, **Indonesia**, **Mexico**, **Nigeria and Pakistan**. The nine countries committed to pursue "with determination" the Jomtien goals and have become over the years a driving force within the Education for All partnership.

"Inclusive, relevant quality Education for All" has been identified as the thematic focus for cooperation among the E-9 countries. With contribution from high-profile academia from all the E-9 signatory countries, following four sub-themes have been identified:

- 1. Qualifications framework and competency standards for inclusive quality education
- 2. Management of teacher education and the issue of quality inclusive education
- 3. Teacher education and training for inclusive quality education
- 4. Financing teacher education for inclusive quality education (UNESCO, 2012)

1.3.3 Sustainable Development Goal for Education (SDG-4)

Pakistan is also a signatory to the Education 2030 vision which was adopted in the Incheon Declaration on May 21, 2015 at the World Education Forum (WEF 2015) held in South Korea. The Incheon Declaration constitutes the commitment of the education community to Education 2030 and the 2030 Agenda for Sustainable Development, recognizing the important role of education as a primary driver of development.

Education 2030 proposes ways of implementing, coordinating, financing, and monitoring efforts to achieve equal education opportunities for all, outlining how the commitments made in the Incheon Declaration may be translated into practice at the national and global levels. It also includes indicative strategies which countries may contextualize in the light of their national realities, capacities and their own policies and priorities. It thus presents a serious attempt at providing guidelines for overcoming deficits in implementation when global reform agendas are agreed upon.

In the post-devolution scenario of education in Pakistan, all provinces and areas have developed their respective Education Sector Plans (ESPs) and are also working on implementation plans for SDG-4 with specific focus on ECE. In addition, the active forum of Inter-Provincial Education Ministers' Conference (IPEMC) discusses key issues, makes recommendations and develops collaboration among all provinces and areas. IPEMC provides an excellent forum to the provinces and areas for experience sharing in implementation of two years pre-primary grades and to develop a way forward.

SUSTAINABLE DEVELOPMENT GOAL FOR EDUCATION (SDG-4)

Obtaining quality education is the foundation to improving people's lives and sustainable development. Major progress has been made towards increasing access to education at all levels and increasing enrolment rates in schools particularly for women and girls. Basic literacy skills have improved tremendously, yet bolder efforts are needed to make even greater strides for achieving universal education goals. For example, the world has achieved equality in primary education between girls and boys, but few countries have achieved that target at all levels of education (2015, EFA Global Monitoring Report); hence the need is to renew the world's commitment to achieve education related targets by 2030. A summary of SDG-4 targets is:

- 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes
- 4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, pre- primary education so that they are ready for primary education
- 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills for employment, decent jobs and entrepreneurship
- 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- 4.6: By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- 4.8: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all
- 4.9: By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small islands, developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
- 4.10: By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states (United Nations, 2015)

SDG target 4.2 is directly linked with the provision of access to quality Early Childhood Education or pre-primary education regardless of gender or area. Though little has been done under the slogan of EFA and efforts to introduce and implement at least one-year pre-primary education across the country, a lot remains to be done for ensuring quality ECE across Pakistan.

1.4 Principles Underlying Quality ECE Programmes

Schools should be ready to accommodate and cater to the needs of all young learners by providing adequate resources including sufficient space.

Children learn best when:

- The environment provided is secure and enabling, where teachers appreciate their previous experiences, and take them forward from where they are.
- A partnership between home and school is valued.
- Adults are interested in them and the interaction between them is positive.
- They are respected; a positive self-image and high self-esteem are fostered.
- They are motivated to be independent active learners through first hand experiences
- They are given opportunities to make choices and decisions which develop their confidence, helping them to take responsibility for their own learning and growth.
- Activities are planned to match their own pace, and are varied, with periods of activity and quiet reflection.
- The experiences offered are relevant to their immediate interests and match their individual needs.
- The programme is holistic and not compartmentalized with an established daily routine.
- The programme is inclusive and adaptable to the diversified educational needs of the learners.

1.4.1 Holistic Development through Early Childhood Education

One of the guiding principles of holistic childhood development is the unfolding process of learning which is more important than the product. It is the approach to stimulate willingness to learn rather than mere memorisation of facts and figures. Pushing children to absorb facts and knowledge will not increase their desire to learn. It will, in fact, be to the detriment of the child's development later on and his/her ability to learn effectively. Learning by doing and the very basic need to know are the main motors in stimulating children.

All educators, implementers and policy makers have a huge responsibility to ensure that children, who enter schools at age three, are given a sound learning environment. The age for pre-primary grade (03-04 & 04-05) specified directly connotes the existing structure of **ECE** grade Nursery/Nursery/Prep/Katchi/Undakhil as prevalent across the country. This aspect is the SDG's (SDG-4.2) indication of the need for implementation of a two years ECE Programme. In this regard, it may well be noted that this curriculum for ECE has been expanded and a pre-primary grade for children aged 03-04, has been included for schools which offer this grade. This document will provide the baseline for preprimary grades in the Education System of Pakistan. It is important to have a fair level of understanding about the different domains of development, so that developmentally appropriate provisions can be made in response to children's collective and individual needs.

Development is not a linear process; it is simultaneous and integrated. However, for the purposes of explanation and understanding, the domains have been compartmentalized into the following major areas.

Cognitive Development

This refers to the development of mental processes and capabilities; it focuses on how children learn and process information. It is the development of the thinking and organizing systems of the mind. It involves language, imagining, thinking, creating, exploring, reasoning, problem solving, developing and rejecting ideas and concepts, memory, expression through multiple media and experimenting and applying what they learn. When they come to school, children are already equipped with the basic thinking and processing skills - they have learnt it all as part of growing up. Sound cognitive development enhances critical thinking and creativity in human beings. A conducive ECE environment provides learning opportunities where children are given the freedom to explore, think, imagine, question, and experiment, as they develop the ability to create novel ideas and solutions.

The Key Learning Areas

• **Physical Development**: Involves the way children use their muscles, both large and small. The large muscles are used for activities such as walking, jumping and lifting large objects. The small muscles are used for fine motor activities such as threading beads, writing, and drawing, cleaning rice and working with small objects. Exposures to activities that help in muscle development help children in doing small tasks on a daily basis. They start feeling capable of helping elders and gain confidence.

• Personal, Social, and Emotional Development

Refers to the development of a child's capacity to experience, manage and express a full range of positive and negative emotions. The development of self-esteem is critical throughout the early years and Feeling important, being listened to and cared for, are essentials for creating a positive self-concept in children.

While growing up, children develop relationships with people around them, start to learn and interact with their culture and the environment in general.

The social setting and value system form the core of a person's identity – children at a very young age try to figure out what is good, what is appreciated or beneficial, based on what they observe in their surroundings. Quality ECE environment provides opportunities for children to learn and nurtures them to become kind and empathetic thinkers.

- Language and Literacy: Refers to the process by which children make sense of the words, symbols and information around them. Children are born with the ability to learn language but again, conducive learning environment is essential to help them develop optimally. Learning to read and write the alphabets and make small sentences is just one component of language development. Over emphasis on this component especially through rote memorization, without giving children a chance to process the information and relate it to their lives, cripples not only their language development, but also their cognitive capacities.
- Basic Mathematical Concepts: Refers to the development of concepts, skills, knowledge and understanding in solving mathematical problems, communicating and reasoning using mathematical language. Children's mathematical learning should be meaningful and relevant to their daily lives. Opportunities to talk about mathematics and mathematical concepts play a

key role in helping children make sense of their learning. The expected learning outcomes for this learning area are organised under four broad competencies i.e. 'Number Sense and Quantity', 'Number Relationships and Operations', 'Measurement', 'Comparison and Ordering', 'Geometry & Spatial Sense' (*Mathematical development* 1970).

- The World around Us: The focus of this is on development of children's knowledge and understanding of their environment, other people, features of the natural and 'human world'. They provide a foundation for historical, geographical, scientific and technological learning
- Health, Hygiene and Safety: It focuses on children developing physical control, mobility, awareness of space and manipulative skills in indoor and outdoor environments. They include establishing positive attitudes and understanding of a healthy and active way of life. It encompasses children's conception and understanding of safety measures to be taken in various situations in the surrounding.
- Creative Arts: It focuses on the development of children's imagination and their ability to communicate and to express ideas, feelings, observations and experiences in creative ways. This includes encouraging children to think of new and innovative ideas which can be expressed through varied media.

1.5 The Aims of Education

"To educate Pakistanis to be:

- Seekers of truth and knowledge who can apply both for the progress of society;
- Creative, constructive, communicative, and reflective individuals;
- Disciplined, productive, moderate and enlightened citizens;
- Capable of effectively participating in the highly competitive global, knowledge-based economy
 and the information age; citizens committed to creating just civil society that respects diversity
 of views, beliefs and faiths."

(Ministry of Education, Government of Pakistan, 2006)

Recent deliberations and group discussions also yielded the recommendation of adding the following aims to augment the above-mentioned National level aims of education.

- Empathetic & patient participants in the world around them;
- Contributors towards building harmonious and tolerant society;

1.5.1A Statement of Beliefs

The principles given below carry important implications for practice:

- Holistic development of a child is important social, emotional, physical, cognitive and moral developments are interrelated.
- Learning is holistic and for the young child it is not compartmentalized under subject headings.
- Intrinsic motivation is valuable because it results in child-initiated learning.
- The child's sense of dignity, autonomy and self-discipline are of critical importance.
- In the early years, children learn best through active learning (using all five senses) learning by doing.

- What children can do, not what they cannot do, is the starting point in children's education.
- There is potential (multiple intelligences) in all children which emerges powerfully under favourable conditions.
- The adults and children to whom the child relates are of central importance.
- The child's education is seen as an interaction between the child and the environment, which includes people as well as materials and knowledge.
- The teacher understands the importance of inclusive education and also practices it in the classrooms.

1.5.2 A Statement of Objectives

The National ECE Curriculum aims to:

- Provide for the holistic development of the child, which includes physical, social, emotional, cognitive and moral development.
- Provide knowledge and understanding of Islam and Islamic society.
- Develop an understanding and respect for the beliefs and practices of all other religions.
- Develop critical thinking skills.
- Nurture tolerance and respect for diversity.
- Nurture in children a sense of identity and pride in being Pakistani.

- Create in children a sense of citizenship in community, country and the world.
- Foster a sense of independence, self-reliance and a positive self-image.
- Equip the child with life-long learning skills.
- Provide opportunities for active learning.
- Provide opportunities for self-initiated play and decision making.
- Developing values, morals, ethics and civic sense.
- Sharpen aesthetic sense of children.
- Develop intrinsic motivation.
- Develop teamwork and sharing attitude.

This curriculum is divided into four chapters to ease the understanding of concepts and their implications.

Chapter 1 introduces the significance of ECE while providing the underlying theoretical frameworks of developmental domains catered for in this document. Chapter 2 enlists the key learning areas, competencies and expected learning outcomes for each developmental domain while identifying implementable ideas for teachers, practitioners and textbook/classroom material developers. Chapter 3 provides detailed guiding principles for establishing the learning environment in an ECE classroom, assessment and evaluation, teachers' selection, training and continuous professional development programs, devising roles of school administrators, parents, developing text book/materials for ECE, and suggested timelines for future curriculum revisions and its practical implications are also included in this chapter. Chapter 4 provides the theoretical perspectives of age appropriate brain development, cognitive development, psychosocial and emotional development as well as ecological system development theories to help understand the holistic development of a child.

CHAPTER



KEY LEARNING AREAS, COMPETENCIES AND EXPECTED LEARNING OUTCOMES FOR ECE



KEY LEARNING AREAS, COMPETENCIES AND EXPECTED LEARNING OUTCOMES FOR ECE

2.1 Introduction to the Key Learning Areas and Competencies

The key learning areas outlined in this curriculum contains competencies, or goals which have been outlined for children at the pre-primary stages of education. These six areas of learning provide a foundation for later learning and achievement. It is important to remember that children progress at different rates, that individual achievement will vary and that ECE teachers must appreciate and recognise the language and culture of the children.

Children whose achievements exceed the expected outcomes should be provided with opportunities which extend their knowledge and skills. There may be others who will require continuous support to achieve all or some of the outcomes at entering Grade I. Care must be taken to ensure that they get the opportunities of revision and reinforcement. Children with special educational needs may also need varied kinds of support throughout schooling.

This curriculum for the early years has been divided into the following key learning areas. Each key learning area has been assigned between three to ten competences of learning goals.

2.1.1 Personal Social and Emotional Development

These outcomes focus on children' learning how to work, play, cooperate with others and function in groups beyond the family. They cover important aspects of personal, social, moral and spiritual development and of personal values agreed upon by the adults in the community, including the parents.

2.1.2Language and Literacy

These outcomes cover important aspects of language development and provide the foundation for literacy. At the start, the language used in the programs for all six areas of development, could be in mother tongue, based on local culture and it can then gradually and progressively be further developed to acquire competence in English. Children should be helped gradually to acquire competence in Urdu, making use where appropriate, for developing understanding and skills in languages. The outcomes focus on children's developing competence in talking and listening and becoming readers and writers. It is important to note that the other areas of learning make a vital contribution to the successful development of communication and literacy.

2.1.3 Basic Mathematical Concepts

These outcomes cover important aspects of understanding mathematics and provide the foundation for numeracy. They focus on achievement and application through practical activities and on using and understanding mathematical language.

2.1.4The World around Us

These outcomes focus on development of children's knowledge and understanding of their environment, other people and features of the natural and "human" world. They provide a foundation for historical, geographical, scientific and technological learning.

2.1.5 Physical Development

These outcomes focus on children's development, physical control, mobility, awareness of space and manipulation skills in indoor and outdoor environments. The Children will demonstrate balance and coordination, to learn and practice motor skills.

2.1.6 Health, Hygiene and Safety

These outcomes focus on developing understanding of personal care, environmental safety and security in children. These include establishing positive attitudes towards a healthy and active way of life.

2.1.7 Creative Arts

These outcomes focus on the development of children's imagination and their ability to communicate and to express ideas, feelings, and observations and experiences in creative ways. They include encouraging children to think about new and innovative ideas which can be expressed through varied media.

2.2 Competencies and Expected Learning Outcomes

Children learn at their own individual pace according to their interest and learning styles. At the young age of 3-5 years children should not be forced to learn beyond their capacity because this will impede their learning and cognitive development.

The ECE Curriculum charts out learning outcomes that young children are expected to attain. However, given the diverse learning styles and paces, many children may not achieve all the outcomes in one year of the pre- primary grade. Therefore, the outcomes for the subject pre-primary grade are termed "Expected" and educators and supervisors should not be overly concerned about children completing activities or meeting each and every outcome. It is the process and not the production of the learning that is more important at this stage!

For all the key Learning Areas, and Competencies there is a list of Expected Learning Outcomes, which start with, "By the end of the year, children will begin to ..."It is important to reiterate that in the early years, children learn and achieve the expected outcomes by the end of the year. This is why the outcomes in the National ECE Curriculum are called expected learning outcomes and not student learning outcomes, as are in the curricula for Grade 1-12. As long as the teacher is providing continuous and varied opportunities for hands-on learning and children are engaged enthusiastically, teachers and parents should not be overly concerned.

As the term suggests, these are examples and ideas only, and are not intended as a prescriptive or exhaustive list of activities for teachers to follow.

It is hoped that teachers will use these suggestions as a starting point, and localize the ideas to meet the needs of the children's context and make cross-curricular links for enhanced learning. In case special needs child necessary adaptations will be made to meaningfully engage the child in learning.

Personal, Social and Emotional Development

All the following expected learning outcomes require that teachers start the program in children's Mother Tongue, based on local culture and gradually add Urdu and English (wherever applicable). Children need the confidence that their mother tongue is valued. For all the key Learning Areas there is a list of Expected Learning Outcomes, which children are expected to achieve by the end of the year.

Domain A: Personal, Social and Emotional Development Strand A1: awareness of self **Expected Learning Outcomes Continuum of Learning** # **Approximate Age:** 3-4 Years 4-5 Years [SLO: ECE-Recognize themselves and say their Name their parents and siblings and state their 00-A1-01] name and gender. address. Identify and express themselves verbally; [SLO: ECE-Recognize their emotions (happy, 00-A1-02] scared, angry and sad). when they feel happy, sad, scared, angry and excited. [SLO: ECE-Demonstrate an understanding of their Choose and talk about an activity/work that

Recognize and talk about what they enjoy doing (e.g. tracing, colouring, running,

hygiene.

they enjoy doing the most in class.

Demonstrates the ability to look after own

00-A1-03]

[SLO: ECE-

[SLO: ECE-

00-A1-05]

00-A1-04]

emotions.

jumping, hopping etc.)

Identify and name their belongings.

Domain A: Personal, Social and Emotional Development

Strand 2: Awareness of Others (school, home, neighbourhood & living things)

Expected Learning Outcomes



Continuum of Learning

#	Approximate Age: 3-4 Years	4-5 Years	
[SLO: ECE- 00-A2-01]	Demonstrate an awareness of the feelings of others (empathy).	Demonstrate an awareness and respect for the feelings of others (empathy).	
[SLO: ECE- 00-A2-02]	Recognize and respect similarities and differences in others.	Appreciate and respect similarities and differences in others.	
[SLO: ECE- 00-A2-03]	Recognize and be aware of the needs of the peers, elders, and neighbours who may be differently abled.	Cooperate with and be aware of the needs of peers, elders, and neighbours who may be differently abled.	
[SLO: ECE- 00-A2-04]	Work cooperatively and share materials and ideas amicably in groups.	Work in collaboration, in groups/project work to promote leadership skills.	
		Cooperate with peers and engage in empathetic, caring behaviour and respond to others positively.	
[SLO: ECE- 00-A2-05]	Use courtesy words (good morning, Assalam o Alaikum, thank you, sorry) as per context and language being taught).		
[SLO: ECE- 00-A2-06]	Suggest solutions to everyday problems.	Develop problem solving skills by identifying problems and ways to work collaboratively to resolve conflict.	

Domain A: Personal, Social and Emotional Development

Strand 3: Awareness of their own heritage, culture and religion.

Expected Learning Outcomes



Continuum of Learning

#	Approximate Age: 3-4 years	4-5 years		
[SLO: ECE- 00-A3-01]	Talk about their culture i.e. the language they speak, the food they eat, clothes they wear and family traditions.	Develop understanding about Pakistani culture. (i.e. know about the national game, flag, flower, food, folk dresses, languages etc.).		
[SLO: ECE- 00-A3-02]	Recognise and respect people around them with diverse abilities, backgrounds and languages. Communicate appropriately and socialise with people with diverse abilities, backgrounds and languages.			
[SLO: ECE- 00-A3-03]	Muslim children will: Believe that Allah is the Sole Creator and Prophet Muhammad is His last and most beloved Prophet Recognise Islam stands for peace and harmony. Recite the first Kalma & Recite small dua'as and know why they should be recited.			
[SLO: ECE- 00-A3-04]	Name and identify key pillars of their own religion.			
[SLO: ECE- 00-A3-05]	Demonstrate tolerance for all religions.			

Language and Literacy

	Domain B: Language and Literacy					
Strand 1: Rec	Strand 1: Receptive Language					
Expected Lea	rning Outcomes					
		→				
	Continuum of L	earning				
#	Approximate Age: 3-4 Years	4-5 Years				
[SLO: ECE- Usten to stories and rhymes. Listen and respond to stories, poems, and rhymes.						
[SLO: ECE- 00-B1-02]	Respond appropriately to questions, signs, st	ories and rhymes.				
[SLO: ECE- 00-B1-03]	Respond to verbal and non-verbal gestures, symbols and signs.	Respond to others in a variety of verbal and non-verbal ways for different purposes for example, exchanging ideas, expressing feelings, and a variety of contexts, plan-work-clean-up-review, group work time.				
[SLO: ECE- 00-B1-04] Wait for their turn to speak and listen attentively to others. Wait for their turn to speak and listen to others.						
[SLO: ECE-00-B1-05] Follow instructions that involve familiar experiences and objects. Follow increasingly longer and complex instructions, including sentences with two or more phrases or ideas.						

Domain B: Language and Literacy Strand 2: Expressive Language **Expected Learning Outcomes Continuum of Learning** # **Approximate Age: 3-4 Years** 4-5 Years [SLO: ECE-Communicate ideas and needs for example, Communicate ideas with clarity and talk about I need water, I am hungry or may I go to the 00-B2-01] pictures, stories, objects, events of interest etc. washroom etc. [SLO: ECE-Recall and use new vocabulary (at least 100 Recall and use new vocabulary (at least 150 words) 00-B2-02] new words) in the language being taught. in the language being taught. [SLO: ECE-Describe pictures, events, objects and Retell and respond to stories, songs and rhymes 00-B2-03] people using appropriate vocabulary and using extensive vocabulary. simple sentences. [SLO: ECE-Talk about their experiences and feelings Talk about their experiences and feelings with peers and adults using complete sentences. 00-B2-04] with peers and adults. Raise and answer simple questions from Raise and answer simple questions from [SLO: ECEstories/text read out to them. 00-B2-05] stories/text read by them or to them.

Domain B: Language and Literacy

Strand 3a: Reading

Expected Learning Outcomes



Continuum of Learning

#	Approximate Age: 3-4 Years	4-5 Years
[SLO: ECE- 00-B3a-01]	Explore the physical features of a book	Explore the physical features and components of a book (title, cover and back).
[SLO: ECE- 00-B3a-02]	Hold, open and turn pages of a book with care.	Recognize specific books by their cover and seek out specific pages within familiar books.
[SLO: ECE- 00-B3a-03]	Skim and scan through age-appropriate books.	Skim and scan through age-appropriate books, read/recognise familiar words (sight words).
[SLO: ECE- 00-B3a-04]	Recognise some books and the stories they tell.	Differentiate between books that tell stories and those that give information.
[SLO: ECE- 00-B3a-05]	Retell a favourite story in their own words.	Retell a favourite story in their own words in the correct sequence.
[SLO: ECE- 00-B3a-06]	Demonstrate reading-like behaviour, e.g. hold book right way up, run finger along text in the appropriate direction.	Indicate the direction in which the language being taught is read by running their finger under the text in the correct direction i.e. for Urdu it is from right to left and top to bottom.
[SLO: ECE- 00-B3a-07]		Indicate the direction that English is read by running their finger under the text in the correct direction i.e. from left to right and top to bottom.
[SLO: ECE- 00-B3a-08]	Identify and name the characters in a story.	Identify the main events and characters in a story.
[SLO: ECE- 00-B3a-09]	Link what they read or hear read to their own real life experiences by sharing examples	Link what they read or hear read to their own real life experiences.

Domain B: Language and Literacy Strand 3b: Reading (Phonological Awareness) **Expected Learning Outcomes Continuum of Learning** # **Approximate Age: 3-4** 4-5 [SLO: ECE-Recognize the letters and their sounds. Recognise and name letters of the languages being taught (graphemes) and know the most 00-B3b-01] common sound that each letter represents. [SLO: ECE-Recognize sounds (phonemes) in the Hear and relate a phoneme (in the initial, middle beginning, middle, and end of a word. and end of a word) with the corresponding letter. 00-B3b-02] [SLO: ECE-Identify and recognize the sound of digraphs within words. 00-B3b-03] [SLO: ECE-Read consonant-vowel-consonant (CVC) words Identify objects/words which have the same 00-B3b-04] sound in the beginning, middle and end. using their knowledge of letters and sounds including onset and rime. [SLO: ECE-Recognise and generate rhyming words, alliteration patterns. 00-B3b-05] [SLO: ECE-Make phonetically plausible attempts when Make phonetically plausible attempts when 00-B3b-06] reading. Blend sounds associated with letters reading. when reading CVC words.

	Domain B: Language and Literacy				
Strand 4: Writi	ng				
Expected Learn	ning Outcomes				
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	Continuum of Le	arning			
#	Approximate Age: 3 - 4 Years	4 - 5 Years			
[SLO: ECE- 00-B4-01]	Trace lines and shapes with the first two fingers of the right hand (sand, salt, textured paper, air etc.).	Trace and draw vertical, horizontal and wavy lines and simple patterns made up of lines, circles, semi circles and other simple shapes			
[SLO: ECE- 00-B4-02]	Hold writing tools properly to develop a comfortable and efficient pencil grip and begin to draw horizontal and vertical lines.	with efficient pencil grip.			
[SLO: ECE- 00-B4-03]	Colour a picture keeping within the designated space.	Draw and colour pictures keeping within the designated space.			
[SLO: ECE- 00-B4-04]	Trace letters of the language/s being taught.	Trace, copy and write the letters of the language/s being taught using correct formation.			
[SLO: ECE- 00-B4-05]		Write their full name in the language/s being taught.			
[SLO: ECE- 00-B4-06]	Draw pictures/make marks to communicate meaning.	Write CVC words as per the conventions of the language being taught representing sounds with			
[SLO: ECE- 00-B4-07]		the appropriate letters. (upper and lower case in English).			
[SLO: ECE- 00-B4-08]					

Domain C: Basic Mathematical Concepts					
Strand 1: Nur	mber Sense and Quantity				
Expected Lea	rning Outcomes				
	\	\Longrightarrow			
	Continuum of I	Learning			
#	Approximate Age: 3-4 Years	4-5 Years			
[SLO: ECE- 00-C1-01] Count, identify and trace numbers up to 20. Count, identify and write numbers up to 50.					
[SLO: ECE- 00-C1-02] Order and sequence numbers to 20. Order and sequence numbers 0-50					
[SLO: ECE- 00-C1-03]					
[SLO: ECE- 00-C1-04] Compare less and more quantities and make equal.					
[SLO: ECE- 00-C1-05]	Count backwards from 10-1.	Count backwards from 20-1.			
[SLO: ECE- 00-C1-06]	Identify nothing equates to zero in quantity	Take away objects from a set to represent zero.			
[SLO: ECE- 00-C1-07]	Count and make sets of up to 10 objects.	Count and make sets of 5, 10 and 15 objects.			
[SLO: ECE- 00-C1-08]	Use ordinal numbers '1st', '2nd', and 3 rd to indicate position in a sequence; e.g. I put the blue ball third.	Use ordinal numbers 1 st to 10 th indicating position in a sequence.			

Domain	C:	Basic	Mathematical	Concepts
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Strand 2: Number Relationships and Operations

Expected Learning Outcomes



Continuum of Learning # 4-5 Years **Approximate Age: 3-4** Years [SLO: ECE-Compare two or more sets and identify the Count to compare two sets of objects to determine 00-C2-01] set which has more objects. which set has more or less. [SLO: ECE-Recognise that when two sets combine the Add one or remove one object to change the 00-C2-02] total number increases (more) and when sets number in a group of objects. are taken apart the total decreases (less). Solve addition and subtraction problems with [SLO: ECE-Recognise that an entire set of objects is totals smaller than ten using concrete materials. 00-C2-03] more than its parts. [SLO: ECE-Add and subtract with sets of objects smaller 00-C2-04] than 3. [SLO: ECE-Apply counting to their daily life activities. Identify the numeral which represents the number 00-C2-05] of objects in a set. [SLO: ECE-Count at least ten objects with one-to-one Identify the number that comes before or after a 00-C2-06] given number to 20. correspondence. [SLO: ECE-Identify the number that comes before or Explain the difference between addition and 00-C2-07] after a given number up to ten. subtraction.

		
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Continuum of Learning		
#	Approximate Age: 3-4 Years	4-5 Years
[SLO: ECE- 00-C3-01]	Use words such as 'more', 'less' to indicate differences in quantity.	Compare quantities (e.g. knowing that two is more than one and use appropriate vocabulary to describe quantities e.g. more/less/same as.
[SLO: ECE- 00-C3-02]	Use language to compare the sizes of objects (e.g. 'big', 'little', 'small').	Use comparative language (e.g. 'tall, 'taller', 'tallest' and 'short', 'shorter' and 'shortest').
[SLO: ECE- 00-C3-03]	Explore measuring tools (e.g. cup, glass, ruler etc.) and use nonstandard units of measure for comparison.	Explore measuring tools (e.g. cup, glass, ruler etc.) and use nonstandard units of measure for comparison.
[SLO: ECE- 00-C3-04]	Describe and compare objects using length; weight; height; and temperature (hot & cold) as measurement attributes	
[SLO: ECE- 00-C3-05]	Differentiate between day and night, before and after.	Sequence events in chronological order using language e.g. day and night, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.
[SLO: ECE- 00-C3-06]	Recognise informal time units and know that clocks and calendars mark the passage of time.	
[SLO: ECE- 00-C3-07]	Respond appropriately to and use the comparative and descriptive language of time of their local community e.g. before, now, after, day, night, summer, winter.	Compare, describe and solve practical problems for measuring time e.g. quicker, slower, earlier, later.
[SLO: ECE- 00-C3-08]	Recognise and use language relating to days of the week, months of the year.	

	Domain C: Basic Mathematical Concepts		
Strand 4: Geo	Strand 4: Geometry & Spatial Sense		
Expected Lea	Expected Learning Outcomes		
	←		
Continuum of Learning			
#	Approximate Age: 3-4 Years	4-5 Years	
[SLO: ECE- 00-C4-01]	Identify and name 2-D or familiar shapes e.g. circle, square, triangle, oval, rectangle etc.	Recognise and name 2-D and 3-D shapes and objects such as sphere, cube, cuboid, cylinder and cone using features such as number of faces i.e. flat or curved.	
[SLO: ECE- 00-C4-02]	Compare the shape and size of objects.	Combine and take apart shapes to make other shapes.	
[SLO: ECE- 00-C4-03]	Order shapes from smallest to largest (e.g. orders various circle sizes).		
[SLO: ECE- 00-C4-04]	Use language related to location (prepositions e.g. 'above', below', 'under', 'over' etc.).		
[SLO: ECE- 00-C4-05]	Recognise patterns in the environment.	Create patterns using concrete materials.	

00-D1-121

Domain D: The World Around Us (Science and Social Studies)

Strand 1: Me, My Family and My Community

soft, hard, rough, smooth etc.

Expected Learning Outcomes

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Continuum of Learning # **Approximate Age: 3-4** Years 4-5 Years [SLO: ECE-Identify and name the following parts of the Observes similarities and differences in the 00-D1-01] body: head, nose, tongue, shoulders, ears, physical appearance of family members. eyes, arms, hands, fingers, legs, feet and toes. **[SLO: ECE-**Identify themselves as members of a family or Talk about their family members and classroom and participate as active members everyone's role and importance to the well-00-D1-021 of these communities. being of the family. [SLO: ECE-Identify basic similarities and differences Demonstrate an awareness of and appreciation 00-D1-03] between themselves and others. for family and cultural stories. [SLO: ECE-Adopt the roles of different family members Demonstrate an understanding about other 00-D1-04] during dramatic play. children having different family compositions than their own [SLO: ECE-Identify people by characteristics other than Recognise others' capabilities in specific areas 00-D1-051 (e.g. 'That man is good at fixing cars') etc. name. Identify some types of jobs and some of the [SLO: ECE-Recognise some community workers and increase awareness of their jobs. tools used to perform those jobs. 00-D1-06] [SLO: ECE-Exhibit positive citizenship behaviours i.e. Demonstrate awareness of group rules (e.g. 00-D1-07] sharing, taking turns, following rules and taking waits for turn etc.). responsibility for classroom jobs. **ISLO: ECE-**Exhibit personal responsibility, choice and leadership in context of self-help skills and 00-D1-08] duties/roles that benefit the family or class. [SLO: ECE-Identify and name the Describe different Differentiate between smells; bad, good, strong, 00-D1-091 smells; bad and good. light, fruity, flowery and pungent. [SLO: ECE-Describe different tastes; sweet, salty, sour. Differentiate between different tastes; sweet, 00-D1-10] salty, sour. [SLO: ECE-Differentiate between different sounds; loud, soft, shrill. 00-D1-11] [SLO: ECE-Identify and differentiate between temperatures and surfaces when touched such as hot, cold,

[SLO: ECE- 00-D1-13]	Identify different means of transport.	Identify different modes of transport and the vehicles used for each mode.
[SLO: ECE- 00-D1-14]	Name the various parts of a car, bicycle and boat.	

Domain D: The World Around Us			
Strand 2: Living and non-living things			
Expected Lear	Expected Learning Outcomes		
	←		
Continuum of Learning			
	Approximate Age: 3-4 Years	4-5 Years	
[SLO: ECE- 00-D2-01]	Identify and name a few living and non-living things.	Classify living and non-living things	
[SLO: ECE- 00-D2-02]		Differentiate between living and non-living things.	
[SLO: ECE- 00-D2-03]		Identify living and nonliving things in their surroundings.	
[SLO: ECE- 00-D2-04]	Recognise that all living things have homes.	Recognise that living things have different types of homes. Some live on land, some live in water and some live in nests.	

	Domain D: The World Around Us		
Strand 3: Plan	Strand 3: Plants in their environment		
Expected Lear	Expected Learning Outcomes		
	←		
Continuum of Learning			
	Approximate Age: 3-4 Years	4-5 Years	
[SLO: ECE- 00-D3-01]	Observe plants in their locality and talk about the ones they like and dislike.	Describe and differentiate between plants in their environment.	
[SLO: ECE- 00-D3-02]	Identify and name a few different types of local flowers.	Identify and name a few different types of local flowers and trees.	
[SLO: ECE- 00-D3-03]	<u> </u>		
[SLO: ECE- 00-D3-04]	Recognize that plants are living things and know that plants need sunlight, water and food to live.		
[SLO: ECE- 00-D3-05]	Identify how to take care of plants for example by growing a small seedling in a disposable glass.	Talk about the significance of plants for human beings.	

	Domain D: World Around Us		
Strand 4: Ani	Strand 4: Animals in their environment		
Expected Lea	rning Outcomes		
	←		
	Continuum of Learning		
#	Approximate Age: 3-4 Years	4-5 Years	
[SLO: ECE- 00-D4-01]	Recognize and name pet animals, farm animals and sea creatures.	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	
[SLO: ECE- 00-D4-02]	Recognize and understand that animals are living things.	Recognise that living things have different types of homes. Some live on land, some live in water and some live in nests.	
[SLO: ECE- 00-D4-03]	Recognise the importance of taking care of animals in their environment.	Differentiate between living and non-living things.	

Domain D: The World Around Us Strand 5: Weather and Environment **Expected Learning Outcomes Continuum of Learning Approximate Age:** 3-4 Years 4-5 Years [SLO: ECE-Observe and explore daily weather Describe daily weather conditions. 00-D5-01] conditions. [SLO: ECE-Explore and discuss different seasons, Describe key features of different seasons, based 00-D5-021 based on observations and experiences. on observations and experiences. Explore and discuss how the changing seasons [SLO: ECEaffect our food, clothes and lifestyles. 00-D5-03] Describe and differentiate between various [SLO: ECE-Name various landforms in their locality 00-D5-041 e.g. mountains, deserts, forests, sea, etc. landforms in their locality e.g. mountains, deserts, forests, seas, rivers, lakes etc. [SLO: ECE-Explore and discuss practises that are Examine the causes of air and land pollution and 00-D5-05] harmful to the environment. suggest preventive measures. [SLO: ECE-Identify the uses of water and how to conserve it. 00-D5-06] [SLO: ECE-Identify how to prevent/reduce noise pollution. 00-D5-07] [SLO: ECE-Explore alternate uses of waste material. 00-D5-08] [SLO: ECE-Identify practises that are useful and harmful to 00-D5-09] the environment and suggest alternatives to

harmful practises.

	Domain D: The World Around Us				
Strand 6: Tec	hnology				
Expected Lea	rning Outcomes				
		\Rightarrow			
	Continuum of Learning				
#	Approximate Age: 3-4 Years	4-5 Years			
[SLO: ECE- 00-D6-01]	Name and explore different types of technology like television, computer, mobile phone, tablet etc.				
[SLO: ECE- 00-D6-02]	Use of different types of technology devices safely.				
[SLO: ECE- 00-D6-03]	Identify the advantages and disadvantages of	using technology.			

	Domain E: Health, Hygiene, and Safety				
Strand 1: Hea	lth and hygiene				
Expected Lear	rning Outcomes				
	<u> </u>	→			
	Continuum o	f Learning			
#	Approximate Age: 3 – 4 Years 4 – 5 Years				
[SLO: ECE- 00-E1-01]					
[SLO: ECE- 00-E1-02]					
[SLO: ECE- 00-E1-03]					

Strand 2: Safe	ety				
Expected Learning Outcomes					
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	Continuum o	f Learning			
#	Approximate Age: 3 - 4 Years	4 – 5 Years			
[SLO: ECE- 00-E2-01]	Hold hands with an adult when walking in public places.	Recognise and alert an adult in situations where they feel unsafe (they are injured, hurt, bullied, they dislike something, they are scared)			
[SLO: ECE- 00-E2-02]		Recognize and understand that certain parts of the body are private and only parents, doctors, can be allowed to touch them. ('good touch', 'bad touch')			
[SLO: ECE- 00-E2-03]		Say/shout 'NO' when someone tries to touch them inappropriately			
[SLO: ECE- 00-E2-04]		Recognise basic safety rules. Understand they should not: talk to, go with or take anything from strangers, open the house front door to strangers, go out alone, do not take medicines on their own, crossing a road safely with an adult etc.			
[SLO: ECE- 00-E2-05]	Recognise the danger presented by electricity, sharp and hot objects and take safety precautions when using these.	Recognise the consequences if safety precautions are not followed especially while handling electrical, sharp and hot objects.			
[SLO: ECE- 00-E2-06]	Recognise traffic lights and their meanings.	Cross a road carefully with adult assistance.			
[SLO: ECE- 00-E2-07]	Express needs and feelings (hungry, thirsty	, need to go to the toilet etc.).			

Domain F: Creative Arts

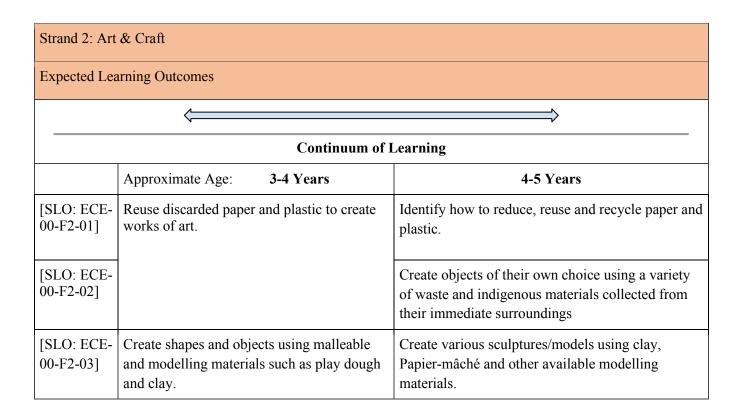
Strand 1: Drawing, Colouring & Collage Work

Expected Learning Outcomes



Continuum of Learning

#	Approximate Age: 3- 4 Years	4-5 Years
[SLO: ECE- 00-F1-01]	Hold drawing tools (crayons, colour, pencils and paintbrush) with a safe and effective grip.	Use various art techniques, such as, drawing, colouring, collage or printing to create their craft work.
[SLO: ECE- 00-F1-02]	Use tools to cut and paste various materials.	Explore a variety of paper art techniques like folding paper to make patterns, collages, printing.
[SLO: ECE- 00-F1-03]	Communicate favourite colours.	Express preferences to different types of art, music, and drama.
[SLO: ECE- 00-F1-04]		
[SLO: ECE- 00-F1-05]	Talk about their own works of art e.g. what the artworks are about etc.	Describe their artistic process and discuss specific elements in their work that hold personal importance.



Strand 3: Mu	Strand 3: Music					
Expected Lear	rning Outcomes					
	\	→				
	Continuum of I	Learning				
	Approximate Age: 3-4 Years	4-5 Years				
[SLO: ECE- 00-F3-01]	Respond with movement or expressions to different poems, songs, rhymes.	Perform songs, rhymes, poems with others using movements, expressions and actions.				
[SLO: ECE- 00-F3-02]	Sing a range of well-known nursery rhymes and songs.	Recite poems, folk songs, national songs in chorus and solo.				
[SLO: ECE- 00-F3-03]	Explore different sounds made by sound producing objects (like musical instruments).	Experiment with and differentiate between different sound producing objects and their sounds.				

Strand 4 : Drama and Theatre						
Expected Lear	rning Outcomes					
	<	───				
	Continuum of	Learning				
	Approximate Age: 3-4 Years	4-5 Years				
[SLO: ECE- 00-F4-01]	Imitate the actions/movements they observe around them (e.g. people, animals, various modes of transport).	Explore and enact a variety of roles around them (in stories, cartoons, & real life).				
[SLO: ECE- 00-F4-02]		Re-enact stories, poems and folk tales individually, and in groups.				

Domain G: Physical Development Strand 1: Gross Motor Skills **Expected Learning Outcomes Continuum of Learning** # Approximate Age: 3-4 Years 4-5 Years [SLO: ECE-Throw a ball overhand. Throw a ball overhand at increasing distances. 00-G1-01] [SLO: ECE-Travel around, under, over, along and through Run, jump and hop to reach the finish line. 00-G1-02] balancing and climbing equipment. [SLO: ECE-Demonstrate holding themselves in fixed positions for a few seconds. 00-G1-03] [SLO: ECE-Walk on line and maintain balance. Walk on a line while carrying one or two objects. 00-G1-04] e.g. flag, glass of water or a bean bag etc. Walk up and down stairs unassisted, using [SLO: ECE-Walk up and down stairs assisted, using 00-G1-05] alternating feet; may jump from bottom step, alternating feet; may jump from bottom step, landing landing on both feet. on both feet confidently. [SLO: ECE-Move around, under, over, along and through Run, jump, climb, throw and hop when participating 00-G1-06] balancing and climbing equipment. in games. [SLO: ECE-Give other children space while playing. 00-G1-07]

Domain G: Physical Development Strand 2: Fine Motor Skills **Expected Learning Outcomes Continuum of Learning** # 3-4 Years 4-5 Years Approximate Age: [SLO: ECE-Use a range of child-appropriate tools with Use a range of child-appropriate tools with 00-G2-01] increasing control. confidence. [SLO: ECE-Handle flexible/malleable materials safely Handle flexible/malleable materials safely with 00-G2-02] with increasing control. confidence. Pick up small objects with fingers and try to Manipulate small objects with ease (string beads, [SLO: ECEmanipulate small objects (fit small objects transferring of material by using tong, spoon and fork 00-G2-03] into a hole etc.). etc.). [SLO: ECE-Tear, fold and paste paper of various sizes Tear, fold and paste paper of various sizes and shapes. 00-G2-04] and shapes.

LONG TERM AND MEDIUM TERM PLANS

	<u>Scheme of Work</u> Long Term Plan - children's age: 3-4					
Theme →	Me, My Family & My Community	Animal Kingdom	Transport	Seaso ns	Neighbourhoods	Plant s
Topic/s → Key Learning Area ↓ Language	My bodyMy family Receptive	 Pet animals Farm animals Sea creatures Receptive Language	 Means of transport Wheels Roads and Rules Receptive Language	4 seasonsWeatherLandforms Receptive Language	ParksSchoolsHospitals Receptive	TreesFlowers Receptive Language
and Literacy	 Listen to stories and rhymes. Respond appropriately 	 Listen to stories and rhymes. Respond appropriately to the story. Expressive Language Describe pictures, events, and people in simple sentences. Raise and answer simple questions from stories/text read out to them. 	 Listen to stories and rhymes. Learn to wait for their turn to speak and listen attentively to others. Respond appropriately to the story. Expressive Language 	 Listen to stories and rhymes. Learn to wait for their turn to speak and listen attentively to others. Respond to verbal and nonverbal gestures, 	Language Listen to stories and rhymes. Learn to wait for their turn to speak and listen attentively to others. Respond to verbal and non- verbal gestures, symbols and signs. Follow instruction s that involve familiar experience	Listen to stories and rhymes. Learn to wait for their turn to speak and listen attentively to others. Respond to verbal and non- verbal gestures, symbols and signs. Follow instructions that involve familiar experiences and objects. Expressive Language Recall and use new vocabulary (at

6 tell. letters and • Recall and use new vocabulary (at least	Recall and use new words) in the vocabulary (at language least 16 being taught.
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Recognize sounds in the beginning of a word.

Writing

- Trace lines and shapes with the first two fingers of the right hand Writing (sand, salt, textured paper, air etc.).
- Colour a picture keeping within the designate d space.

- 16 new words) in the language being taught.
- Recognize 8-12 letters and their sounds.
- Recognize sounds in the beginning of a word.

- Hold writing tools properly to develop a comfortable and efficient pencil grip and begin to draw horizontal and vertical lines.
- Colour a picture keeping within the designated space.
- Colour a picture keeping within the designated space.

- reading-like behaviour, e.g. hold book right way up, run finger along text in the appropriate direction.
- Recognize 12-16 letters and their sounds.
- Identify and the name characters in a story.
- Recognise and generate rhyming words, alliteration patterns.

Writing

- Hold writing tools properly to develop a comfortable and efficient pencil grip and begin to draw horizontal and vertical lines.
- Draw pictures/make marks to communicate meaning.

- Identify and the name characters in a story.
- Recognize 16-20 letters and their sounds.
- Identify obiects/words which have the same sound in the beginning. middle and end.
- Recognise and generate rhyming words, alliteration patterns.

Writing

- Hold writing tools properly to develop a comfortable and efficient pencil grip and begin to draw horizontal and vertical lines.
- Trace letters of the language/s being taught.
- Draw pictures/mak e marks to communicat e meaning.

- new words) in the language being taught.
- Talk about their experiences and feelings with peers and adults.

Reading

- Identify and name the characters in a story.
- Recognize 20-26 letters and their sounds.
- Identify objects/word s which have the same sound in the beginning, middle and end.
- Recognise and generate rhyming words, alliteration patterns.

Make phonetically plausible attempts when reading.

Talk about their experiences and feelings with peers and adults.

Reading

- Recognize all the letters and their sounds.
- Identify objects/words which have the same sound in the beginning. middle and end.
- Link what they read or hear read to their own real life experiences.
- Recognise and generate rhyming words. alliteration patterns.
- Make phonetically plausible attempts when reading.

Writing

	V	Vriting	 Hold writing tools properly to develop a
		 Hold writing tools properly to develop a comfortable and efficient pencil grip and begin to draw horizontal and vertical lines. Trace letters of the language/s being taught. Draw pictures/mak e marks to communicat e meaning. 	comfortable and efficient pencil grip and begin to draw horizontal and vertical lines. Trace letters of the language/s being taught. Draw pictures/mak e marks to communicat e meaning.

Basic Math Concept

Number Sense and Quantity

- Count, identify, trace, numbers up to 3.
- Count backwards from 3-1
- Identify nothing equates to zero in quantity.

Number Relationships and **Operations**

- Apply counting to their daily life activities.
- Count at least ten objects in one-to- one correspondenc e.

Measurement, Comparison and Orderina

Use language to compare the sizes of objects (e.g. 'big', 'little', 'small').

Geometry & Spatial Sense

- Compare the shape and sizes of objects.
- Identify and name 2-D or familiar shapes e.g. circle,

Number Sense and Quantity

- Count, identify, trace numbers up to 6.
- Count backwards from 6-1.
- Differentiate between 'less' and 'more'.
- Count and make sets up to 6 objects.

Number Relationships and Operations

- Count at least ten objects in one-toone correspondence.
- Identify the number that comes before or after a given number • up to ten.

Measurement, Comparison and Ordering

- Explore measuring tools (e.g. cup, glass, ruler etc.) and use nonstandard units of measure for comparison.
- Use words such as 'more'. ' less' to indicate differences in quantity.
- Differentiate between day and night, before and

Number Sense and Quantity

- Count, identify, trace numbers up to 8.
- Count backwards from 8-1.
- Differentiate between 'less' and 'more'.
- Identify nothing equates to zero.
- Count and make sets up to 8 objects.

Number Relationships and Operations

- Identify the number that comes before or after a given number up to ten.
- Compare two or more sets and identify the set which has more objects.

Measurement. Comparison and Ordering

Respond appropriately to and use comparative and descriptive language of time of their local community e.g. before, now, after, day, night, summer, winter.

Geometry & Spatial Sense

Compare the shape and sizes of objects.

Number Sense and Quantity

- Count, identify, trace numbers up to 10.
- Count backwards from 10-1.
- Identify nothing equates to zero.
- Count and make sets up to 10 objects.

Number Relationships and Operations

- Identify the number that comes before or after a given number up to ten.
- Recognise that when two sets combine the total number increases (more) and when sets are taken apart the total decreases (less).
- Recognise that an entire set of objects is more than its parts.

Measurement. Comparison and Ordering

- Recognise informal time units and know th
- at clocks and

Quantity

- Count. identify. trace numbers up to 15.
- Order and sequence numbers to 15.
 - Use ordinal numbers '1st'. '2nd', and 3rd to indicate position in a sequence; e.g. I put the blue ball third.

Number Relationships and **Operations**

- Recognise that when two sets combine the total number increases (more) and when sets are taken apart the total decreases (less).
- Recognise that an entire set of objects is more than its parts.
- Add and subtract with sets of objects smaller than 3.

Measurement, Comparison and Ordering

Number Sense and Number Sense and Quantity

- Count, identify, trace numbers up to 20.
- Order and sequence numbers to 20.
- Use ordinal numbers '1st'. '2nd', and 3rd to indicate position in a sequence: e.g. I put the blue ball third.

Number Relationships and **Operations**

- Recognise that when two sets combine the total number increases (more) and when sets are taken apart the total decreases (less).
- Recognise that an entire set of objects is more than its parts.
- Add and subtract with sets of objects smaller than 3.

Measurement, Comparison and Ordering

	after. Geometry & Spatial Sense	 Order shapes from smallest to largest. 	calendars mark the passage of time. Recognise and use language relating to		
square, triangle, oval, rectangle etc.	 Compare the shape and sizes of objects. Identify and name 2-D or familiar shapes e.g. circle, square, triangle, oval, rectangle etc. 			measurement attributes.	 Describe and compare objects using length; weight; height; and temperature (hot & cold) as measurement attributes. Geometry & Spatial Sense Order shapes from smallest to largest Recognise patterns in the environment.

World	
Around	Us

- Identify and name the following parts of the body: head, shoulders, arms, hands, fingers, legs, feet and toes.
- Identify themselves as members of a family or classroom and participate as active members of these communities.
- Identify basic similarities and differences between themselves and others.
- Adopt the roles of different family members during dramatic play.
- Describe different smells; bad and good.
- Describe different tastes; sweet, salty, sour.
- Differentiate between different sounds; loud, soft, shrill.

- Recognize and name pet animals, farm animals and sea creatures.
- Recognize and understand that animals are living things.
- Recognise the importance of taking care of animals in their environment.
- Identify and name a few living and non-living things.
- Recognise that all living things have homes.

- Identify different means of transport.
- Name the various parts of a car, bicycle and boat.
- Observe and explore daily weather conditions.
- Explore and discuss different seasons, based on observations and experiences.
- Name various landforms in their locality e.g. mountains, deserts, forests, sea, etc.
- Explore and discuss practises that are harmful to the environment.

- Recognise some community workers and increase awareness of their jobs.
- Demonstrate awareness of group rules.
- Identify people by characteristics other than name.

- Observe plants in their locality and talk about the ones they like and dislike.
- Identify and name a few different types of local flowers.
- Observe and record the growth of a plant from a seed.
- Recognize that plants are living things and know that plants need sunlight, water and food to live.
- Identify how to take care of plants for example by growing a small seedling in a disposable glass.

 Identify and differentiat e between temperatures and 			
surfaces when touched such as hot, cold, soft, hard, rough, smooth etc. Name and explore different types of technology like television, computer, mobile phone, tablet etc. Use of different types of technology devices safely. Identify the advantages and disadvantages			
of using technology.			

PSED

Awareness of self

- Recognize themselves and say their name and gender.
- Identify and name their belongings.

Awareness of Others

- Demonstrates awareness of the feelings of others.
- Recognise and be aware of the needs of elders.
- Use courtesy words (good morning, Assalam o Alaikum. thank you, sorry) as per situation.

Heritage, culture and religion

Talk about their culture i.e. the language they speak, the food they eat, clothes they wear, family traditions.

Awareness of Others | Awareness of self

- Use courtesy words (good morning, Assalam o Alaikum, thank you, sorry) as per situation.
- Suggest solutions to everyday problems.

Heritage, culture and religion

- Recognise and respect people around them with diverse abilities. backgrounds and languages.
- Name their own religion and identify key pillars of their own religion.
 - Muslim children will: Believe that Allah is the Sole Creator and Prophet Muhammad is His last and most beloved Prophet

- Recognize their emotions (happy, scared, angry, sad, and bored).
- Demonstrate an understanding of

their emotions. Heritage, culture and reliaion

Muslim children will: Believe that Allah is the Sole Creator and Prophet Muhammad is His last and most

beloved Prophet

حفات محدرسول الله فالفرافية والمنظليفية

Recognise Islam stands for peace and

harmony. Recite the

Awareness of self

- Demonstrate an understanding of their emotions.
- Recognize and talk about what they enjoy doing.

Heritage, culture and Heritage, culture and religion

 Muslim children will: Believe that Allah is the Sole Creator and Prophet Muhammad is His last and most beloved **Prophet**

> Recognise Islam stands for peace and harmony.

Recite the first

Awareness of self

- Recognize their emotions (happy, scared, angry, sad, and bored).
- Demonstrate an understanding of their emotions.

religion

- Recite the first Kalma & small dua'as and know why they should be recited.
- Name and identify kev pillars of their own religion.
- Demonstrate tolerance for all religions.

Awareness of self

- Recognize themselves and say their name and gender.
- Identify and name their belongings.

Awareness of Others

- Demonstrates awareness of the feelings of others.
- Recognise and be aware of the needs of elders.
- Use courtesy words (good morning, Assalam o Alaikum. thank you, sorry) as per situation.

Heritage, culture and religion

Talk about their culture i.e. the language they speak, the food they eat, clothes they wear, family traditions.

	They will learn that Islam stands for peace and harmony. Recite the first Kalma & Recite small dua'as and know why they should be recited.	first Kalma & Recite small dua'as and know why they should be recited.	Kalma & Recite small dua'as and know why they should be recited. Name and identify key pillars of their own religion. Demonstrate tolerance for all religions.		
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Health, Hygiene and Safety	■ Make healthy lifestyle practices independently (healthy foods and unhealthy foods, exercise, clean water etc.) ■ Wash hands at necessary times Safety ■ Hold hands with an adult when walking in public places. ■ Express needs and feelings.	Health and hygiene Identify people who take care of health needs Understand the importance of washing hands at necessary times	Safety Hold hands with an adult when walking in public places Recognise traffic lights and their meanings.	 Practice healthy lifestyle practices independently (healthy foods and unhealthy foods, exercise, clean water etc). 	Health and hygiene • Identify people who take care of health needs	Health and hygiene Practice healthy lifestyle practices independently (healthy foods and unhealthy foods, exercise, clean water etc)
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Drawing, Colouring &	<u> </u>	Drawing, Colouring &	Drawing,	Drawing, Colouring	Drawing, Colouring &
 Hold drawing tools (crayons, colour, pencils and paintbrush) with a safe and effective grip. Communicate favourite colours. Use a variety of lines, colours, shapes and textures to 	 Collage Work Hold drawing tools (crayons, colour, pencils and paintbrush) with a safe and effective grip. Use a variety of lines, colours, shapes and textures to express ideas, thoughts, and feelings. Respond with movement or expressions to different poems, songs, rhymes. 	 Collage Work Hold drawing tools (crayons, colour, pencils and paintbrush) with a safe and effective grip. Use a variety of lines, colours, shapes and textures to express ideas, thoughts, and feelings. Music Respond with movement or expressions to different poems, songs, rhymes. Sing a range of well- 	Colouring & Collage Work Use tools to cut and paste various materials. Use a variety of lines, colours, shapes and textures to express ideas, thoughts, and feelings. Music Respond with movement or expressions to different poems, songs, rhymes. Sing a range of well- known nursery rhymes and songs. Explore different	 Collage Work Use a variety of lines, colours, shapes and textures to express ideas, thoughts, and feelings. Art & Craft Create shapes and objects using malleable and modelling materials such as play dough and clay. Music Respond with movement or expressions to 	 Collage Work Talk about their own works of art e.g. what the artworks are about etc. Art & Craft Reuse discarded paper and plastic to create works of art. Music Respond with movement or expressions to different poems, songs, rhymes. Sing a range of well- known nursery

- expressions to different poems, songs, rhymes.
- Sing a range of well- known nursery rhymes and songs.
- Explore different sounds made by sound producing objects (like musical instruments).

Drama and Theatre

 Imitate the actions/movement s they observe around them (e.g. people, animals, various modes of transport).

- Sing a range of well-known nursery rhymes and songs.
- e Explore
 different
 sounds made
 by sound
 producing
 objects (like
 musical
 instruments).

Drama and Theatre

 Imitate the actions/movement s they observe around them (e.g. people, animals, various modes of transport).

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Drama and Theatre

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- different poems, songs, rhymes.
- Sing a range of well-known nursery rhymes and songs.
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Explore different sounds made by sound producing objects (like musical instruments).

Drama and Theatre

Imitate the actions/movement s they observe around them (e.g. people, animals, various modes of transport).

Physical Development •

Gross Motor Skills

- Throw a ball overhand.
- Travel around, under, over, along and through balancing and climbing equipment.
- Move around, under, over, along and through balancing and climbing equipment.
- Give other children space while playing.

Fine Motor Skills

- Use a range of child- appropriate tools with increasing control.
- Tear, fold and paste paper of various sizes and shapes.

Gross Motor Skills

- Throw a ball overhand.
- Travel around, under, over, along and through balancing and climbing equipment.
- Move around, under, over, along and through balancing and climbing equipment.
- Give other children space while playing.

Fine Motor Skills

- Use a range of childappropriate tools with increasing control.
- Pick up small objects with fingers and try to manipulate small objects (fit small objects into a hole etc.).

Gross Motor Skills

- Throw a ball overhand.
- Travel around, under, over, along and through balancing and climbing equipment.
- Move around, under, over, along and through balancing and climbing equipment.
- Give other children space while playing.

Fine Motor Skills

- Use a range of child- appropriate tools with increasing control.
- Handle flexible/malleable materials safely with increasing control.
- Pick up small objects with fingers and try to manipulate small objects (fit small objects into a hole etc.).
- Tear, fold and paste paper of various sizes and shapes.

Gross Motor Skills

- Demonstrate holding themselves in fixed positions for a few seconds.
- Walk on line and maintain balance.
- Walk up and down stairs assisted, using alternating feet; may jump from bottom step, landing on both feet.

Fine Motor Skills

- Use a range of child- appropriate tools with increasing control.
- Handle flexible/malleable materials safely with increasing control.
- Pick up small objects with fingers and try to manipulate small objects (fit small objects into a hole etc.).
- Tear, fold and paste paper of various sizes and shapes.

Gross Motor Skills

- Demonstrate holding themselves in fixed positions for a few seconds.
- Walk on line and maintain balance.
- Walk up and down stairs assisted, using alternating feet; may jump from bottom step, landing on both feet.

Fine Motor Skills

- Use a range of child- appropriate tools with increasing control.
- Handle flexible/malleabl e materials safely with increasing control.
- Pick up small objects with fingers and try to manipulate small objects (fit small objects into a hole etc.).
- Tear, fold and paste paper of various sizes and shapes.

Gross Motor Skills

- Travel around, under, over, along and through balancing and climbing equipment.
- Demonstrate holding themselves in fixed positions for a few seconds.
- Walk on line and maintain balance.
- Walk up and down stairs assisted, using alternating feet; may jump from bottom step, landing on both feet.
- Move around, under, over, along and through balancing and climbing equipment.

Fine Motor Skills

- Use a range of child- appropriate tools with increasing control.
- Handle flexible/malleable materials safely with increasing control.
- Pick up small objects with fingers and try to manipulate small objects (fit small objects into a hole etc.).
- Tear, fold and paste paper of various sizes and shapes.

Sample Unit/Theme Plan (Curriculum Template) for 3 – 4 Year Old Children

Theme: Me, My Family and My Community								
Topic/s: My Body								
Approximate Duration: 2-3 weel	ks							
Term: 1								
Key Learning Area	Learning Outcomes	Activities	Assessment					
Basic Mathematical Concepts	 Listen to stories, poems, and rhymes with enjoyment. Describe pictures, events, objects and people using appropriate vocabularyand simple sentences. Trace with the first two 	Read and tell children stories that are relevant to the theme i.e. about the body ensure these are age appropriate. Use facial expression, gestures, props and pictures to aid understanding, enhance enjoyment, and promote concentration. Ask children questions about the story and ask them to describe the pictures, props and people in the stories.	Teachers should assess the learning outcomes after sufficient practice has been provided. Assessment should be conducted during the lesson via teacher					
	fingers of the right hand (sand, salt, textured paper, air etc.)	Point to the words in the story as you read them and point to the pictures as you talk about them. Provide sand/salt/textured paper and ask children to draw shapes and lines e.g. circles for a head, square for a body or just simple lines.	observation of student performance. Student performance for each learning outcome					
	 Count numbers up to 3. Apply counting to their daily life activities. Use language to compare the sizes of objects (e.g. 'bigger, smaller'). 	Depending on the language in which you are teaching, show them the first digit in the number system. In English this is the number 1 and say the number e.g. One. In Urdu this is 'aik' and the digit for 'aik' is '. Show the children one object/finger and say one/aik, ask the children to show you one/aik object/finger. Repeat the same by introducing one number each week and revising the previous number learned. Continue to three/theen. Count three fingers and ask children to count after you.	should be recorded using a checklist or in anecdotal form in the observation record form/diary/register/word document etc.					
		Ask the children to stand up and form pairs, in pairs they should stand side to side (shoulder against shoulder) and if possible look in a mirror and say who is taller and who is shorter. Encourage them to practice the use of the vocabulary.						
		Show the children two jackets/shirts and ask them to compare and identify which is bigger and which is smaller. Repeat this with other items of clothing and encourage them to use the appropriate vocabulary						

		to describe the size.	
World Around Us	 Identify themselves as members of a family or classroom. Learn to identify people by characteristics other than name, when asked. 	Show the children a photograph of you and your family, share names and relationships in your family with the children. Ask them to bring photographs of their family and to share names and relationships. Ask the children questions about their family e.g. How many people? How many sisters/brothers? Who is the youngest? Who is the oldest? What are their names? What do they look like? If possible make a family collage on a soft board/wall. Ask the children to draw and colour their family.	Teachers should assess the learning outcomes after sufficient practice has been provided. Assessment should be conducted during the lesson via teacher observation of student performance. Student performance for each learning outcome should be recorded using a checklist or in anecdotal form in the observation record form/diary/register/word document etc.
PSED	 Recognize themselves and say their name. Use courtesy words (good morning, Assalam o Alaikum, thank you, sorry) as per situation. 	As per the language you are teaching in, ask one child at a time to introduce themselves to the class by saying their name. Courtesy words should be used by the teacher throughout the day and children should be encouraged to follow the example of their teacher. In order to practice these words the teacher can set up a role play situation and ask children to say the appropriate words.	Teachers should assess the learning outcomes after sufficient practice has been provided. Assessment should be conducted during the lesson via teacher

Health, Hygiene and Safety	 Make healthy lifestyle choices independently (healthy foods and unhealthy foods, exercise, clean water etc.) Wash handsat necessary times. 	Make up a story about a child who made unhealthy choices and how this child would often catch a cold and fall ill. Explain that the unhealthy choices made resulted in the child not being able to enjoy school or to run around like his/her friends. Ensure to cover healthy food examples, exercise and clean water and hand washing in the story.	observation of student performance. Student performance for each learning outcome should be recorded using a checklist or in anecdotal form in the observation record form/diary/register/word document etc.
Creative Arts	 Hold drawing tools (crayons, colour, pencils, and paint brush) with a safe and effective grip. Communicate favourite colours. 	Provide children with suitable/available drawing/writing tools and paper. Ask the children to draw a picture of themselves in their favourite outfit and favourite colour. Ask each child to share their drawing with the rest of the children and to explain what they have drawn and the colours they have chosen. Encourage each child to give as detailed an explanation as possible.	
Physical Development	 Travel around, under, over, along and through balancing and climbing equipment. Walk on linemaintaining balance. Move around, under, over, along and through balancing and climbing equipment. 	Play the game 'Simon Says' in which the children have to follow instructions and do only what Simon says. The catch is that sometimes Simon does not give the instruction and therefore the children have to ignore the instruction that was not from Simon. For example the teacher says "Simon says touch your toes" here the children follow the instruction because it came from Simon. Then the teacher says "touch your head" here the children are to ignore the instruction because it did not come from Simon. Using the Simon Says game teach children the names of the body parts and actions that each body part can perform e.g. shaking their head, wiggling their fingers, walking on a line, carrying a basket from point A to point B.	Teachers should assess the learning outcomes after sufficient practice has been provided. Assessment should be conducted during the lesson via teacher observation of student performance. Student performance for each learning outcome should be recorded using a checklist or in anecdotal form in the observation record form/diary/register/word document etc.

		Su	ggested Scheme of Wo age: 4 - 5	rk - children's		
Theme →	My Healthy Body	Homes and Habitats		Clothes and Materials	Professions	Plants and their Uses
Topic/s → Key Learning Area ↓	FoodExerciseSleep	 Animal habitats Homes Living and nonliving things Technolog y around us 	 Road safety Safety at home Safety at school Stranger danger 	 Weather and Environmen t Seasonal clothes Materials Measurements/size 	 Jobs people do: doctors nurses teachers firemen 	 Plants as food Plants for healing Plants and the environment
Language and Literacy	Listen and respond to stories, poems, and rhymes. Respond appropriately to questions, signs, stories and rhymes. Wait for their turn to speak and listen attentively to others. Expressive Language Communicate ideas with clarity and talk about pictures, stories, objects, events of interest etc. Recall and	Listen and respond to stories, poems, and rhymes. Respond to others in a variety of verbal and non-verbal ways for different purposes. Wait for their turn to speak and listen attentively to others. Expressive Language Retell and respond to stories, songs and rhymes using extensive vocabulary. Recall and use	Listen and respond to stories, poems, and rhymes. Respond to others in a variety of verbal and non- verbal ways for different purposes. Follow increasingly longer and complex instructions, including sentences with two or more phrases or ideas. Expressive Language Communicate ideas with clarity and talk about pictures, stories, objects, events of interest etc. Talk about their experiences and feelings with peers and adults using complete sentences. Recall and use new vocabulary (at least 25 new words) in the language	Listen and respond to stories, poems, and rhymes. Respond to others in a variety of verbal and non- verbal ways for different purposes. Follow increasingly longer and complex instructions, including sentences with two or more phrases or ideas. Expressive Language Recall and use new vocabulary (at least 25 new words) in the language being taught. Raise and answer simple	Listen and respond to stories, poems, and rhymes. Respond to others in a variety of verbal and nonverbal ways for different purposes. Follow increasingly longer and complex instructions, including sentences with two or more phrases or ideas. Expressive Language Recall and use new vocabulary (at least 25 new words) in the language being taught. Talk about their experiences and feelings with	longer and complex instructions, including sentences with two or more phrases or ideas. Expressive Language Recall and use new vocabulary (at least 25 new words) in the language being taught.

use new vocabulary			questions from stories/text	peers	and
(at least 25 new words) in the language being taught. Reading Explore the physical features and components of a book (title, cover and back) Know that English is read from left to right and top to bottom. Know that Urdu is read from right to left and top to bottom. Identify the main events and characters in a story. Skim and scan through age-appropriate books, read/recognis e familiar words (sight words). Recognise and name letters of the languages being taught (graphemes) and know the	new vocabulary (at least 25 new words) in the language being taught. Reading Recognize specific books by their cover and seek out specific pages within familiar books. Differentiate between books that tell stories and those that give information. Skim/scan through age- appropriate books and read/recognis e familiar words (sight words). Identify the main events and characters in a story. Retell a favourite story in their own words in the correct sequence. Hear and	 Differentiate between books that tell stories and those that give information. Skim/scan through age- appropriate books, read/recognise familiar words. Recognize specific books by their cover and seek out specific pages within familiar books. Identify the main events and characters in a story. Retell a favourite story in their own words in the correct sequence. Read CVC words using their knowledge of letters and sounds including onset and rime. Writing Trace and draw vertical, horizontal, wavy lines with efficient pencil grip. Draw and colour pictures keeping within the designated space. Trace, copy and write the letters of the 	read by them or to them. Reading Differentiate between books that tell stories and those that give information. Recognize specific books by their cover and seek out specific pages within familiar books. Identify the main events and characters in a story. Link what they read or hear read to their own real life experiences. Identify and recognize sound of digraphs within words.	 Link what they read or hear read to their own real life experiences. Identify the main events and characters in a story. Make phonetically plausible attempts when reading. Blend sounds associated with letters when reading CVC words. Writing Write their full name correctly, in the language being taught. Write CVC words as per the conventions of the language being taught representing sounds with the appropriate letters. (upper and lower 	feelings with peers and adults using complete sentences. Raise and answer simple questions from stories/text read by them or to them. Reading Link what they read or hear read to their own real life experiences. Make phonetically plausible attempts when reading. Blend sounds associated with letters when reading CVC words. Writing Write their full name correctly, in the language being taught. Write CVC words as per the conventions of the language being taught representing sounds with the appropriate letters. (upper and lower case in English).

				I
	common relate a			
sound	•			
each l				
repres				
	word with the			
Writing	corresponding			
• Trace	and letter.			
draw	vertical, • Read CVC			
horizo	ontal, words using			
wavy				
	fficient knowledge of			
penci				
Draw				
colou		t		
pictur				
keepi				
within	9			
desig	l l			
space				
	, copy wavy lines with			
	rite the efficient pencil			
langu	9			
	taught colour pictures			
_	correct keeping within			
forma	<u> </u>	1		
	space.			
	Trace, copy			
	and write the			
	letters of the			
	language/s			
	being taught			
	using correct			
	formation.			

Basic Mathematica		 Count objects saying the number names in the standard order, pairing each object with one and only one number name. Count, identify and write numbers up to 	 Count objects saying the number names in the standard order, pairing each object with one and 	Number Sense and Quantity Count, identify and write numbers up to 40. Compare less and more quantities and make them equal. Count backwards from 20-1.	Number Sense and Quantity Count, identify and write numbers up to 50. Take away objects from a set to represent zero. Count and make sets of 5, 10 and objects. Count	Number Sense and Quantity Count, identify and write numbers up to 50. Take away objects from a set to represent zero. Count and make sets of 5, 10 and 15 objects.
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10. Order and sequence numbers to 10.

Number Relationships and Operations

- Count to compare two sets of objects to determine which set has more or less.
- Identify the numeral which represents the number of objects in a set.

Measurement, Comparison and Ordering

Compare quantities
 (e.g. knowing that two is more than one or choosing a larger/bigger bag over the smaller one).

Geometry & Spatial Sense

 Recognise and name 2-D shape i.e. circle.

- 20.
- Order and sequence numbers to 20.

Number Relationships and Operations

- Add one or remove one object to change the number in a group of objects.
- Identify the numeral which represents the number of objects in a set.

Measurement, Comparison and Ordering

- Learn to use comparative language (e.g. 'tall, 'taller', 'tallest' and 'short', 'shorter' and 'shortest')
- Recognise and use language relating to days of the week, months and years.

Geometry & Spatial Sense

Number Relationships and Operations

- Identify the number that comes before or after a given number to 20.
- Use toys as tools to solve addition and subtraction problems with totals smaller than ten.
- Use math
 m
 anipulatives manipulatives
 , games and toys in daily
 activities.

Measurement, Comparison and Ordering

- Explore measuring tools (e.g. cup, glass, ruler etc) and use nonstandard units of measure for comparison.
- Describe and compare objects using length; weight; height; and temperature (hot & cold) as measurement attributes.
- Recognise and use language relating to days of the week, months and years.

Geometry & Spatial Sense

 Recognise and name 2-D and 3-D shapes and objects such as sphere, cube, cuboid, cylinder and cone using features such as number of faces i.e. flat or curved.

Number Relationships and Operations

- Order and sequence numbers 0-50
- Tell what number comes before or after a given number to 20.
- Use toys as tools to solve addition and subtraction problems with totals smaller than ten.
- Use math manipulatives, games, toys and coins in daily activities.

Measurement, Comparison and Ordering

 Describe and compare objects using length; weight; height; and temperature (hot & cold) as measurement attributes.

Geometry & Spatial Sense

Recognise and name 2-D and 3-D shapes and objects such as sphere, cube, cuboid, cylinder and cone using features such as number of faces i.e. flat or curved. backwards from 20-1.

Number Relationships and Operations

- Order and sequence numbers 0-50
- Use math manipulatives, games, toys and coins in daily activities.
- Practice what number comes before or after a given number to 20.
- Explain the difference between addition and subtraction
- Use toys as tools to solve addition and subtraction problems with totals smaller than ten.

Measurement, Comparison and Ordering

 Understand informal time units and know that clocks and calendars mark the passage of

Number Relationships and Operations

- Use math manipulatives, games, toys and coins in daily activities.
- Explain the difference between addition and subtraction.
- Use toys as tools to solve addition and subtraction problems with totals smaller than ten.

Measurement, Comparison and Ordering

- Sequence events in chronological order using language e.g. day and night, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.
 - Compare, describe and solve practical problems for measuring time e.g. quicker, slower, earlier, later.

Geometry & Spatial Sense

 Learn to understand and use basic

 Learn to order shapes from 	● Learn to order	time. • Use language relating to days of the week,	language related to locations (e.g. 'above', below', 'under',
smallest to largest (e.g. orders various circle sizes). Recognise and name 2-D shapes triangle and square.	shapes from smallest to largest (e.g. orders various circle sizes).	months and years Geometry & Spatial Sense Learn to understand and use basic language related to locations (e.g. 'above', below', 'under', 'over' etc).	ʻover' etc).

World Around Us	 Learn to talk about their family members and everyone's role and importance to the well-being of the family. Demonstrat e an awareness of and appreciation for family and cultural stories. Demonstrate an understandin g about other children having different 	 Classify living and non-living things. Understand and express the difference between living and non-living things. Label at least five living and nonliving things in their surroundings. Know that living things have different types of homes. Some live on land, some live in water and some live in nests. Differentiate different sounds in the 	 Talk about their family members and everyone's role and importance to the well-being of the family. Learn to exhibit personal responsibility, choice and leadership in the context of self- help skills and duties/roles that benefit the family or class. Differentiate between temperatures and surfaces when touched such as hot, cold, warm, 	 Describe daily weather conditions. Describe key features of different seasons, based on observations and experiences Explore and discuss how the changing seasons affect our food, clothes and lifestyles. Name and talk about various landscapes like mountains, deserts, forests, sea, etc. Understand how to prevent air 	 Recognise others' capabilities in specific areas (e.g. 'That man is good at fixing cars') etc Identify some types of jobs and some of the tools used to perform those jobs. Demonstrate an understanding about other children having different family compositions than their own (Working mothers). 	 Identify plants and name some of their basic features Recognize that plants are living things and know that plants need sunlight, water and food to live. Understand that there are different types of plants. Some are indoor and some are outdoor. Some can be grown in pots while some are grown outdoors such as big trees. Know that plants produce flowers
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family	environment.	rough, smooth,	and land	and fruits.
compositions	Name and	hard, soft etc.	pollution.	Talk about the
than their	explore different	Understand the	Identify the	significance of
own (single	types of	advantages and	uses of water.	plants for
parents/joint	technology like	disadvantages	Differentiate	human beings.
family	television,	of using	different	
system)	computer,	technology(onlin	sounds in the	
Learn to	mobile phone, i-	e safety)	environment.	
exhibit	pad, iron,		Identify how	
positive	blender,		to	
citizenship	washing		prevent/reduce	
behaviours	machine etc.		noise	
by sharing,	 Learn basic use 		pollution.	
taking turns,	of different		Identify various	
following	types of		ways of	
rules and	technology		recycling	
taking	devices		Identify	
responsibilit	 Understand 		practices that	
y for	the		are useful and	
classroom	advantages		harmful to the	
jobs.	and		environment	
 Differentiat 	disadvantages		and suggest	
e between	of using		alternatives to	
smells; bad,	technology		harmful	
good,	3,		practices.	
strong, light,			Differentiate	
fruity,			between	
flowery,			temperatures	
and			and surfaces	
pungent.			when touched	
 Differentiate 			such as hot,	
between			cold, warm,	
different			rough, smooth,	
tastes;			hard, soft etc.	
sweet, bitter,				
salty, sour,				
and spicy.				
Identify				
ways in				
which				
humans are				
Humans are				

similar to			
each other			
and ways			
they are			
different			
e.g. we all			
have hair but			
some have			
straight hair			
and some			
have curly			
hair.			

DOED			5 15			In
PSED		Awareness of self		Awareness of self		Awareness of self
	Able to	Able to	 Identify and 	Demonstrate	 Choose and 	Demonstrate
	express their	express their	express	a sense of	talk about an	a sense of
	likes and	likes and	themselves on	ownership	activity/work	ownership
	dislikes.	dislikes.	different	and taking	that they	and taking
	 Choose and 	 Demonstrate 	occasions; when	care of his/her	enjoy doing	care of his/her
	talk about an	a sense of	they feel happy,	own self and	the most in	own self and
	activity/work	ownership	sad, scared,	share	class.	share
	that they	and taking	loved, angry,	belongings	 Demonstrate 	belongings
	enjoy doing	care of his/her	excited and		and	
	the most.	own self and	bored.	Heritage, culture and	differentiate	Awareness of Others
	 Demonstrate 	share	 Choose and 	religion	how they are	(school, home,
	and	belongings	talk about an	Express	good at	neighborhood & living
	differentiate		activity/work	understanding	certain	things)
	what they are	Awareness of Others	that they enjoy	about Pakistani	activities.	
	good at	(school, home,	doing the most	culture. (i.e.	 Demonstrate 	Show an
	certain	neighborhood & living	in class.	know about the	a sense of	understandin
	activities.	things)	 Demonstrate a 	national game,	ownership	g and respect
	 Demonstrate 		sense of	flag, flower,	and taking	for the
	a sense of	 Appreciate 	ownership and	food, folk	care of his/her	feelings of
	ownership	and respect	taking care of	dresses,	own self and	their peers
	and taking	similarities	his/her own self	languages etc.)	share	and others.
	care of his/her	and	and share	through	belongings	 Cooperate with
	own self and	differences in	belongings	different		and be aware
	share	others.		mediums and	Awareness of Others	of the needs of
	belongings,	Work in	Awareness of Others	events like	(school, home,	peers, elders,
		collaboration,	(school, home,	national day	neighborhood & living	and neighbors
	heritage, culture and	in	neighborhood & living	celebrations	things)	etc.
	religion.	groups/project	things)	and quiz	Show an	Work in
	 Develop 	work to		competitions.	understanding	collaboration, in
	understanding	promote	Show an		Ū	
		leadership skills.				

about	 Cooperates 	understanding	 Know how to 	and respect	groups/project
Pakistani	with peers and	and respect for	communicate	for the	work to promote
culture. (i.e.	engages in	the feelings of	appropriately	feelings of	leadership skills.
know about	empathetic,	their peers and	and socialize	their peers	 Cooperates
the national	caring	others.	with people with	and others.	with peers and
game, flag,	behaviour and	 Cooperate with 	diverse abilities,	 Appreciate 	engages in
flower, food,	responds to	and be aware of	backgrounds	and respect	empathetic,
folk dresses,	others	the needs of	and languages	similarities	caring
languages	positively.	peers, elders,		and	behaviour and
etc.)	Heritage, culture and	and neighbors		differences in	responds to
·	religion	Work in		others.	others
	Develop	collaboration,		 Cooperate 	positively.
	understanding	in		with and be	Heritage, culture and
	about Pakistani	groups/project			religion
	culture. (i.e.	work to		needs of	Express
	know about the	promote		peers, elders,	understanding
	national game,	leadership		and neighbors	about Pakistani
	flag, flower,	skills.		who may be	culture. (i.e.
	food, folk	 Cooperates with 		differently	know about the
	dresses.	peers and		abled.	national game,
	languages etc.)	engages in		Work in	flag, flower,
	Know how to	empathetic,		collaboration,	food, folk
	communicate	caring behavior		in	dresses,
	appropriately	and responds to		groups/project	•
	and socialize	others positively.		work to	through different
	with people with	others positively.		promote	mediums and
	diverse abilities,			leadership	events like
	•			skills.	national day
	backgrounds			Use facial	celebrations and
	and languages				quiz
	Muslim children			expression	•
	will: Believe that			and body	competitions.
	Allah is the Sole			language	
	Creator and			according to	
	Prophet			the basic	
	Muhammad is			courtesy	
	His last and			words	
	most beloved			Heritage, culture and	
	Prophet, they			religion	
	will learn that			 Express 	
	Islam stands for			understanding	
	peace and			about	

harmony, Recite Pakistani	
culture. (i.e.	
know about	
the	
national	
game,	
the first Kalma flag, flower,	
and recite small food, folk	
dua'as and dresses,	
know why they languages	
should be etc.) through	
recited. different	
All children will mediums and	
learn and events like	
practice their national day	
own religion, celebrations	
respect other and quiz	
religions and competitions.	
have tolerance • Know how to	
for other communicat	
religions.	
appropriatel	
y and	
socialize	
with people	
with diverse	
abilities,	
backgrounds	
and	
languages	
• Muslim	
children will:	
Believe that	
Allah is the	
Sole Creator	
and Prophet	
Muhammad is	
His last and	
most beloved	
Prophet, they	
will learn that	

		Islam stands for peace and harmony, Recite the first Kalma and recite small dua's and know
		why they should be recited. • All children will learn and practice their own religion, respect other religions and have tolerance for other religions.

F	T	The same of the sa	la a	Te	L	T
	Health and hygiene	Health and hygiene:	Safety	Health and hygiene:		Health and hygiene:
Hygiene and	Practice	Practice	Recognise and	Practice	Show	 Identify people
Safety	healthy	healthy lifestyle	alert an adult in	hygienic	awareness	who take care
	lifestyle	practices	situations where	practices	about the	of health
	practices	independently	they feel unsafe	independently	importance of	needs.
	independently		(they are injured,	(brushing teeth,	independently	
	(healthy foods		hurt, incidents of	washing hands	(brushing	• Show
	and unhealthy		bullying, they	at necessary	teeth, washing	
	foods,	exercise, clean	dislike	times, taking a	hands at	understanding
	exercise,	water etc).	something, they	bath, proper	necessary	of the
	clean water	Safety	are scared)	usage of the	times, taking a	
	etc).	Develop an	Recognize an	toilet, etc.)	bath, proper	safety
	Safety	understanding of the	understanding		usage of the	precautions are
	Recognise	consequences if safety	that certain parts		toilet, etc.)	not followed.
	and alert an adult in	precautions are not	of the body are		Identify people	
		followed.	private and only		who take care	
	situations		parents, doctors, can be allowed to		of health	
	where they feel unsafe		touch them.		needs.	
	(they are		('good touch',		Safety ● Show	
	injured, hurt,		'bad touch')		_	
	incidents of		 Understand they 		awareness of understanding	
	bullying, they		must shout 'NO'		the	
	dislike		when someone		consequence	
	something,		tries to touch		s if safety	
	they are		them		precautions	
	scared)		inappropriately		are not	
	Develop an		Recognise basic		followed.	
	understanding		safety rules.		Tollowcu.	
	of the		Understand they			
	consequence		should not: talk			
	s if safety		to, go with or			
	precautions		take anything			
	are not		from strangers,			
	followed		open the house			
			front door to			
			strangers, go out			
			alone, do not			
			take medicines			
			on their own,			
			crossing a			

	road safely with an adult etc.		
	Learn to cross a road carefully with adult assistance		

Creative Arts	Drawing, Colouring	Art & Craft Projects	Drawing, Colouring	Drawing, Colouring	Drawing, Colouring	Drawing, Colouring
	 Use various 	Develop an	Explore a variety	• Express	Describe their	Create various
	art		of			
	techniques,	understanding of	paper art	preferences to	artistic	sculptures/model
	such as,	reusing waste	techniques like	different types	process and	s using clay,
	drawing,	(old	folding paper to	of art, music,	discuss	Papier- mâché
	colouring,	newspapers,	make patterns,	and drama.	specific	and other
	collage or	paper, plastic	collages, printing.		elements in	available
	printing to	bottles, boxes,			their work that	modelling
	create their	wrappers) for			hold personal	materials.
	craft work.	problem solving			importance.	 Describe their
	 Use a variety 	and creating				artistic process
	of lines,	various				and discuss
	colours,	objects/projects.				specific
	shapes and	 Learn to create 				elements in
	textures to	objects of their				their work that
	express ideas					hold personal
	and thoughts.	using a variety				importance.
		of waste and				
		indigenous				
		materials				
		collected from				
		their immediate				
		surroundings				
		Create various				
		sculptures/model				
		s using clay,				
		Papier- mâché				
		and other				
		available				
		modelling				
		materials				

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Physical		Gross Motor Skills	Gross Motor Skills	Gross Motor Skills	Gross Motor Skills	Gross Motor Skills
Development	• Show	• Show	Show respect	Show respect	Show respect	Show respect
	respect for	respect for	for other	for other	for other	for other
	other	other	children's	children's	children's	children's
	children's	children's	personal space	personal space	personal space	
	personal	personal	while playing.	while playing	while playing.	while playing.
	space while	space while	Hand-eye	Balance,	 Walks up and 	Throws a
	playing.	playing.	coordination	Coordination	down stairs	ball
		Hand-eye	 Handle 	 Develop control 	unassisted,	overhand at
		coordination	flexible/malleabl	of muscular	using	increasing
	 Develop 	 Use a range 	e materials	action	alternating	distances.
	control of	of child-	safely with	particularly of	feet; may jump	 Catches a large
	muscular	appropriate	confidence.	the hand, light	from bottom	bouncing ball
	action	tools with	 Able to 	as well as	step, landing	with both arms
	particularly of	confidence.	manipulate	energetic.	on both feet	extended.
	the hand, light		small objects	Remembering	confidently	 Enjoys vigorous
	as well as		with ease	the order and	Enjoys	running, jumping,
	energetic.		(string beads,	sequence of	vigorous	climbing,
	Remembering		transferring of	actions lead to	running,	throwing,
	the order and		material by	the development	jumping,	hopping etc.
	sequence of		using tong,	of concentration.	climbing,	
	actions lead		spoon and fork	e.g. tying shoe	throwing,	
	to the		etc.),	laces, throwing	hopping etc.	
	development			and catching a		
	of			ball, gardening		
	concentration.			and weeding		
	e.g. tying			etc.		
	shoe laces,			Move in a		
	throwing and			number of ways,		
	catching a			such as running,		
	ball,			jumping,		
	gardening			skipping, sliding		
	and weeding			and hopping.		
	etc			 Walk on a line 		
	 Refine their 			while carrying		
	movements			one or two		
	as they			objects.		
	repeat			e.g. flag, glass		
	actions.			of water or a		
	 Demonstrate 			bean bag etc.		
	holding			3		
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themselves			
in fixed			
positions for			
a couple of			
minutes.			

Sample Medium Term Plan (Curriculum Template) for 4 - 5 Year Old Children

Theme: My Healthy Body							
Topic/s: Food, Exerc	Topic/s: Food, Exercise and Sleep						
Approximate Duration: 3-4 weeks							
Term: 1							
Key Learning Area	Learning Outcomes	Activities	Assessment				
Language and Literacy	 Listen to stories, poems, and rhymes with enjoyment. Listen attentively and respond to nonverbal gestures, symbols and signs. Express their ideas with clarity and talk about pictures, stories, objects, events of interest etc. Explore the physical features and components of a book (title, cover and back) Recognise and name all upper- and lower-case letters (graphemes) and know the most common sound that each letter represents. Trace and draw vertical, horizontal and wavy lines and simple patterns made up of lines, circles, semi circles and other simple shapes with efficient pencil grip. 	Select an age appropriate book related to the theme and covering the topics above. Show the children the book and refer to the cover, title and ask them to guess what the book is about. Read out the author's name and explain that this is the name of the person who wrote the book. Read out the name of the illustrator and explain that this person made all the pictures. Read using facial expressions, gestures, props and pictures to aid understanding, enhance enjoyment, and promote concentration. Point to the words in the story as you read them and point to the pictures as you talk about them. Ask the children to identify letters in the text that have been taught and the sound that each letter represents (as per the sequence decided by the school). As the teacher reads s/he should vocalise the sound of letters that have been taught and demonstrate how sounds are blended to read words. Ask children questions about the story and ask them to describe the pictures, props, people and events in the story. Ask the children to draw and colour their favourite food. Give the children plenty of practice using the tripod grip to hold a drawing/writing tool. Ensure plenty of mark making practice is built into each day.	Teachers should assess the learning outcomes after sufficient practice has been provided. Assessment should be conducted during the lesson via teacher observation of student performance. Student performance for each learning outcome should be recorded using a checklist or in anecdotal form in the observation record form/diary/register/word document etc.				

Basic Mathematical Concepts	Verbally count, identify and trace numbers up to 5. Compare quantities (e.g. knowing that two is more than one and use appropriate vocabulary to describe quantities e.g. more/less/same as. Sequence events in chronological order using language e.g. day and night, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.	Bring some of the fresh fruit or vegetables available in the market as per the season. If possible bring in 5 fruits or 5 vegetables if not use 5 pictures instead. Ask the children to describe the fruit/vegetables and talk about their likes and dislikes when it comes to food. Teachers should explain the benefits of eating fresh fruit and cooking seasonal vegetables on the health of each member of the family. Ask the children to count the number of fruits/vegetables/pictures and ensure that they have enough experience counting concrete items (in this case fruit/vegetables). On a table line up 5 fruits or 5 vegetables and label each i.e. 1, 2, 3, 4, 5. count each one by one and say there are 5 fruits/vegetables on the table (cardinality). Collect the number labels and ask the children to label the fruits/vegetables in sequence. Ensure you provide plenty of practice and that children can associate a number with the appropriate digit. Tracing worksheets should be provided and children asked to trace over the numbers from 1 -5. Talk about time in relation to mealtimes, bedtimes, school time etc. Ask the children what is the first thing they do in the morning and what do they do in the afternoon and in the evening before bedtime. Talk about hygiene and how hand washing before mealtimes is important and how taking a bath or shower after school is important in staying clean and healthy.	
World Around Us	 Identify ways in which humans are similar to each other and ways they are different e.g. we all have hair but some have straight hair and some have curly hair. Differentiate between smells; bad, good, strong, light, fruity, flowery, and pungent. 	Ask the children to name the body parts in whichever language you are teaching in. e.g. head, hair, nose, eyes, arms, legs, feet etc. Sing a body part related rhyme in whichever language you are teaching. In English the rhyme 'Head, shoulders, knees and toes' is suitable. Talk to the children about the 5 senses and gradually bring the conversation to the sense of smell. If possible provide concrete experiences for the sense of smell by having the following items available to smell: 1. a rose 2. garlic 3. half a lemon	

	sour.	4. vinegar 5. fruit juice Present each item for children to smell one at a time and ask them to describe the smell. Bring the conversation to the sense of taste and if possible have the following items for children to taste: 1. sugar 2. lemon juice 3. salty chips Present each item for children to taste one at a time and describe the taste	
		as being either sweet/sour/salty. You can wrap up this activity by asking children to draw and colour the items they tasted and smelt today.	
PSED	about what they are good at (abilities like tracing, colouring, running, jumping, hopping etc.) • Identify and express themselves verbally; when they feel happy, sad, scared, angry and excited.	Show the children a visual timetable for the day i.e. one that has pictures representing each activity planned for the day. Ask them what they enjoy doing, why they enjoy it and how it makes them feel. Show the children pictures of happy, sad, scared, angry and excited e.g. Ask them to name the feeling shown in each picture and to imitate the expression themselves. Ask them to draw and colour the expression they have when they do something they are good at.	
Health, Hygiene and Safety	practices independently (healthy foods and unhealthy foods, exercise, clean water etc)	Remind them of an earlier activity (make connections between activities as much as possible) where they had talked about eating fresh fruit and seasonal vegetables. Ask them to recall and remind you of them. Ask the children if they know the difference between healthy and unhealthy. Talk about unhealthy in terms of fried food and sugary food and healthy in terms of fresh or slightly cooked i.e. baked, steamed, boiled (in Pakistan corn on the cob is often enjoyed baked, sweet potatoes are baked, nuts are baked, eggs are boiled). Explain how these foods provide energy and keep their bodies strong. Ask the children to draw/colour pictures of healthy food options.	

Creative Arts	Use a variety of lines, colours, shapes and textures to express ideas and thoughts.	Children will be engaged in a variety of drawing and colouring activities throughout the theme. They will draw and colour healthy food options, draw and colour different expressions, draw and colour different food items tasted.	
	Recite poems, folk songs, national songs in chorus and solo. Experiment with and differentiate between different sound producing	Songs, rhymes and poems will be embedded throughout the theme, however the experience could be expanded upon in Music classes where children are encouraged to sing in chorus and solo.	
	objects and their sounds	If possible provide children with musical instruments such as flutes, drum (duf) etc. if these are not available tapping on a table/using a pencil on a tin can/clapping/clicking fingers to produce sounds may be viable options. Encourage children to explore sounds that can be used to accompany songs and rhymes.	
Physical Development	Move in a number of ways, such as running, jumping, and hopping.	Recap the parts of the body and sing the rhyme/song related to the parts of the body. Ask the children to count jumps, skips and hops to 10. Conduct running/hopping/jumping races and include a countdown to recap counting.	

A Thematic Curriculum

A thematic approach to curriculum organisation "helps students make increasingly sophisticated sense of their worlds. Exploring themes gives teachers and students a framework for understanding interrelationships among different levels of ideas and abstractions e.g. from specific to abstract (Freeman, 1995)". In a thematic curriculum learning is arranged around themes that children can connect with and find relevant and meaningful to their lives. This cross curricular approach allows concepts and language to be revisited and reinforced and connections to be made from across subjects. Through this approach teachers are able to build and extend learning whilst minimizing unnecessary repetition and compartmentalization of subjects. Each theme is descriptive but not prescriptive and may diverge and develop as per the children's interests. A number of variations of how themes are organised and represented exist, we have illustrated two such methods i.e. in table format and in web format "often teachers are urged to develop thematic units by identifying a topic, developing a visual representation (most often a web or concept map) of ideas and facts related to the topic, and then identifying materials and designing curriculum activities (Pigdon, 1993)".

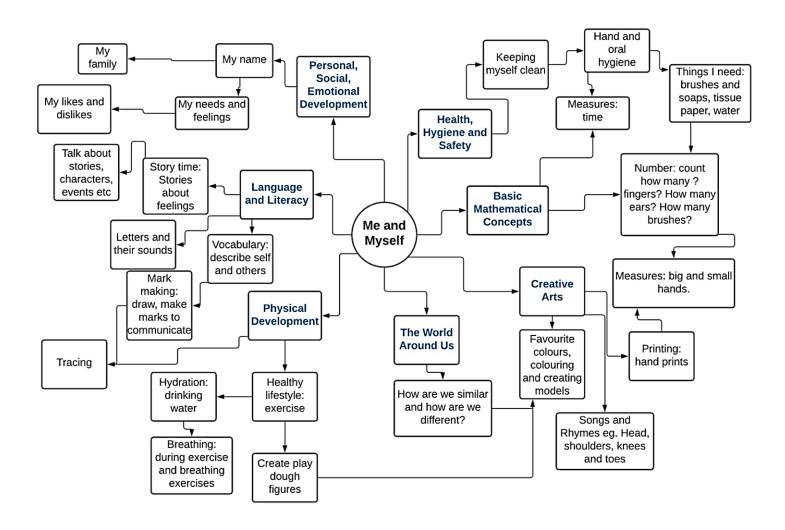
A thematic curriculum is designed considering:

- 1. The interests of children
- 2. The language of instruction
- 3. Assessment of student learning and progress

There are six themes per class, namely:

3 – 4 Year Olds		4 – 5 Year Olds	
#	Theme	#	Theme
	Me & Myself		My Healthy Body
	Animal Kingdom		Homes and Habitats
	Transport		Staying Safe
	Seasons		Clothes & Materials
	Neighborhoods		Professions
	Plants		Plants and their Uses

Sample Web Diagramme 1



Sample Web Diagramme 2

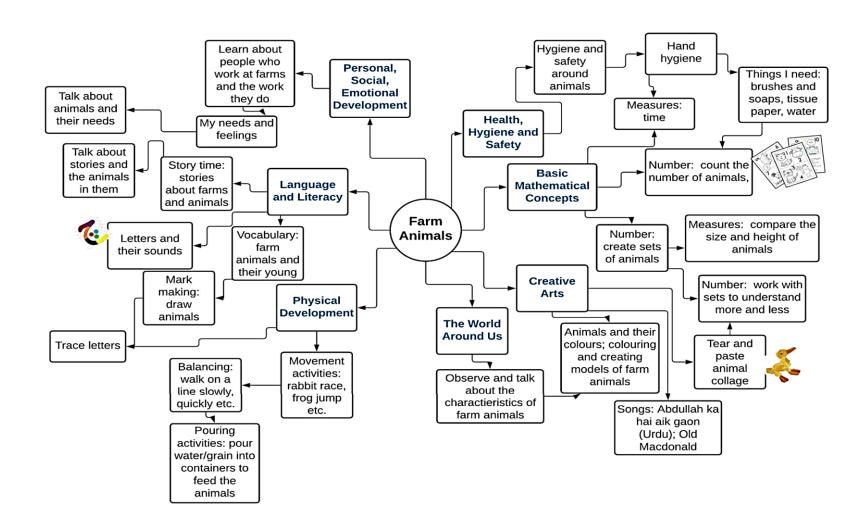
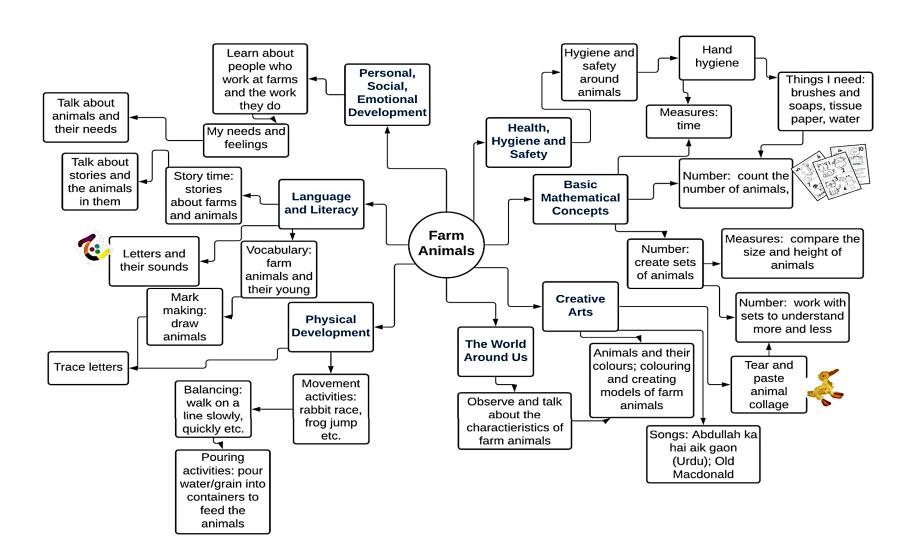


Diagramme 2



CHAPTER



CREATING A POSITIVE AND CONDUCIVE ENVIRONMENT FOR ECE CLASSROOM

CHAPTER

CREATING A POSITIVE AND CONDUCIVE ENVIRONMENT FOR ECE CLASSROOM

3.1 GUIDELINES FOR ESTABLISHING A CONDUCIVE LEARNING ENVIRONMENT FOR ECE

Young children learn by interacting with their environment, with other children, and with adults. Learning is an active and creative process in which children are working on making sense of the world around them. We need to give them the opportunity to engage in this process purposefully and actively, by using all five senses and their imagination. A wide range of experiences and activities provide children with the opportunity to develop their knowledge, skills and attitudes in a meaningful way.

An ECE environment is a whole formed by physical, psychological and social elements. It includes the built facilities, the immediate neighbourhood, and psychological and social setting and also the materials and equipment. A 'rich' and flexible environment is conducive to learning, and attracts interest and curiosity in children and encourages them to experiment, act and therefore, extremely important for teachers to provide a stimulating, pleasant environment for the children.

Conventional furniture, such as desks, is inappropriate for young children. If resources allow, then small, child-sized furniture items can be purchased or else a darri (rug) will suffice. A central place will be required, where the children can come together for Greeting Circle, Group Work, Planning/Review Time and Story Time.

3.1.1 Creating Learning Corners (GOSHAY)

Young children look for causal links in their experiences. For example; what happens when they pile up 20 blocks on top of each other, or what happens when they drop a pencil into a tub of water or what happens when they move a pencil or crayon on a flat surface, such as a wall, slate or paper? They need opportunities to explore these situations and come to their own conclusions. Their conclusions, however, may differ from an adult's as they are based on limited experience. Having designated areas or learning corners for specific activities and storage of classroom equipment is an efficient and effective way of organizing, and optimizing children's learning experiences. Learning corners encourage children to learn in ways that are natural to them; they allow children to work independently, in small groups or one-on-one with the teacher. Learning Corners provide for a wide range of abilities and interests where children can progress at their own rate and repeat an activity for pleasure or reinforcement. Learning corners encourage children to be independent, make decisions and solve problems. They foster experimentation, curiosity and creativity.

These corners are ideal work spaces for children where they can learn in simulated real-life situations. Working in different corners helps develop children's ability to:

- Take initiative; make choices and decisions about what they are going to do (i.e. plan) and how they are going to do it.
- Complete self-chosen tasks and review their plans.

- Question, experiment, discover and make sense of the world around them.
- Work, share and cooperate with other children, thereby developing their social skills.
- Work independently towards mastery of different skills.
- Conform and adhere to classroom rules.
- Reason and express themselves in a wide range of naturally occurring situations, thereby building their self- confidence.

Learning corners need to be separated from each other. They also need space, such as low shelves or boxes/cartons to store the materials, books and toys for the various corners. Three or more of the following learning corners can be set up at any given time:

- Language Corner: This corner should be equipped with material related to increasing vocabulary and learning reading skills.
- Library Corner: This corner should be set up with age appropriate big and small colourful books to promote the reading habit and to learn how to care for and value books.
- Art Corner: This corner provides children with opportunities for creative expression.
- Math Corner: Appropriate material for the Math corner includes objects that will help children grasp basic math concepts of size, shape, width, classification and number through direct experimentation.
- Science Corner: This corner should provide children with opportunities for observation and experimentation in order to understand the world around them.
- Home Corner: The home corner should reflect the cultural background of the children where various kitchen utensils, clothes, small furniture and dolls can be provided. From a kitchen it can be later transformed into a shop, office or a doctor's clinic.

The Learning Corners should be organized in the context of the Key Learning Areas and Expected Learning Outcomes, so that children have the opportunity to experiment with concepts and skills that have been introduced by the teacher.

3.1.2 The Daily Routine of an ECE Classroom

Young children need the comfort and security of a daily routine. They need to know what to expect during the school day. A daily routine provides a consistent, predictable sequence of events that gives them a sense of control over what they will be doing during the day. To make optimal use of the valuable time young children spend in school, a schedule needs to be made. The teacher's tasks become more focused and relatively easier to follow if a consistent routine is established, and children also get used to working in an organized and methodical way. A daily routine is important because it:

- Makes children feel secure when they know what to expect.
- Creates an organized environment that is conducive to the learning process.
- Helps children learn about sequencing.
- Helps children understand the concept of the passage of time.
- Helps teachers organize themselves.
- Helps children realise that an activity has to be completed within a set time-frame.

A sample daily routine and explanation is given below. It can be varied depending on the school's hours and needs. The daily routine should be displayed using symbols/pictures for each activity, so that children, who

are not yet reading can understand it.

S no.	Activity	Suggested Duration
01	Dua/National Anthem	15 minutes
02	Greeting Circle	15 minutes
03	Group Work Time	40 minutes
04	Outside Time	30 minutes
05	Snack Time	30 minutes
06	Plan-Work-Clean up Review Planning Time Work/Gosha Time Clean-Up Time Review Time	90 minutes 15 minutes 45 minutes 10 minutes 20 minutes
07	Story and Rhyme Time	20 minutes

- Dua/National Anthem: All the children get together to say a small
 prayer and sing the National Anthem. This can be done along with the rest of the school or a
 separate assembly can be held for the 4-5 year olds. It is essential to consider alternatives or
 inclusive prayers for children of minority religions.
- 2. **Greeting Circle**: This is the time of day when the teacher gathers all the children together and greets them with a warm welcome by saying 'Assalam-u-Alaikum', 'Good morning', how are you? I am glad to see you here. Then the teacher will initiate general discussion that will include date, day, weather of the day, sharing what they did at home the previous day. The teacher can utilise this time to inculcate moral values among children for example being truthful, respectful, patient, tolerant, fair, just and polite. The teacher can also help children develop democratic and problem-solving skills by putting issues in front of the kids and seeking their suggestions to resolve it.
- 3. **Group Work Time**: During this segment of the daily routine, the teacher discusses concepts from the different Key Learning Areas, with all the children. Once the concept has been discussed, the teacher forms small groups and gives children activities to work on. The activities done at this time are planned and initiated and facilitated by the teacher.
- 4. **Outside Time**: This is the time for physical education exercises. The teacher can plan a series of bending, stretching, jumping and balancing activities for children's physical development. Equipment, such as large balls for catching and throwing, old tyres for walking in and out of, and

medium-sized boxes for jumping over can also be used. Children will play on swings and slides, merry-go-round, and games like see-saw under the supervision of the teacher. This is also a time to discuss safety rules, such as making queues, avoiding pushing and taking turns.

5. **Snack Time**: A lot of valuable learning can take place if children have their snacks indoors in an organised way, under the teacher's guidance. Children will be asked to wash their hands before snack time. They can learn to spread the darri/dastarkhawn/mat and sit around it, giving each other space without pushing. They can say "Bismillah" or as per thier religion together and share their snack if someone has not brought

their own. This is a good time to reinforce the importance of clean, boiled water and healthy food brought from home. The children can talk about the different kinds of food, healthy eating, learn to pour water without spilling, and clean up when everyone has finished.

Plan - Work - Clean up - Review Time

- **I. Planning Time:** Planning should be done in the central space on the darri/mat. This is the time of day when children have the opportunity to initiate the activity and take responsibility for their own learning. During planning time, children plan which Learning Corners they would like to work in, and what they hope to accomplish there. It is important to allow children to choose the learning corner/gosha themselves, and to encourage them to make their own decisions about what they will do there.
- II. Work/Gosha Time: During this time, children carry out their plans in the learning corners. In consultation and through discussion with the children, teachers should set some ground rules at the beginning of the year and discuss these frequently with them. For example: sharing and taking turns with the material; sharing materials and being considerate; talking very softly in all the corners, especially in the reading corner; listening and responding to the set signal when the time for learning corner /gosha work is finished; and tidying up and returning material to the designated place at the sound of the signal.
- **III.** Clean-up Time: When the pre-determined clean-up signal is given by the teacher, children must tidy up and return the material they were using to their designated places.
- **IV.Review Time:** Children come back to the central space on the mat/darri and talk about their learning corner/goshas work and whether they accomplished their plans for the day. Reviewing is a very important part of children's planning and working. There will be some children who may not have implemented their plans. They should be supported to identify reasons for this, by asking open-ended questions and letting them arrive at the answers. Where there are too many children in a class, this will undoubtedly be difficult; the teacher should ensure that each child gets the opportunity to review her/his work at least twice a week.
- V. Story and Rhyme Time: This time is set aside for storytelling and for songs and poems with actions. The children or the teacher can choose a book from the reading corner for story time. Children should be encouraged to tell stories that they have heard at home or in school or make their own stories.

3.2 Guidelines for Developing Criterion of Assessment

Research indicates that formal tests and examinations are not at all accurate when measuring young children's abilities. Many children do not perform well in situations where they have to answer specific questions or complete specific tasks because they may not be familiar with the testing language, they may be shy or frightened in a new situation, or they may be tired, bored, upset or unwell on the day of the test. When a child does not do well on a test for any of these reasons, a teacher may attach a negative, inaccurate label (she/he is weak, lazy, dull) to that child which is then difficult to replace and can be harmful for the child's development.

Tests usually suggest that we compare one child's score with another's, which is inappropriate for children – particularly, young children. This comparison is meaningless because children develop at their own individual and unique pace. This scoring and comparison may be harmful to children whose score is low, because they may be made to feel like 'failures' when, in fact, their development is normal and will soon catch up with the others.

Children's progress should be measured by the teacher's on-going observations during the entire year. Their progress should be compared to their own previous level of development and not to that of other children. The results of evaluating a child's progress should be used to plan the future learning programme for the ECE classroom.

3.3 Child Assessment and Record Keeping

Throughout the day, ECE teachers will have to observe children as they participate in different activities. Sometimes they can stand back to observe, but more often they will be involved in the activities with the children.

This is a skill that teachers have to develop, to be actively involved, picking up cues from the children and at the same time observing each individual child. What is the teacher supposed to look for? The teacher observes and assesses the different areas of learning and development.

The following methods of assessment and record keeping are strongly recommended:

Checklist of Children's Progress

For each child, teachers should maintain a checklist of the Expected Learning Outcomes which are given in the section on Key Learning Areas. Any special comments and anecdotes the teacher may have about a child must be recorded there.

Portfolio of Children's Work

Teachers should also maintain each child's art work, literacy and numeracy related worksheets in their individual folders. Each sheet will have the child's name, and date the work was done, written clearly on it. The portfolio will aid the teacher in assessing the progress children have made in their art work, writing, and understanding of numeracy related concepts.

Progress Report for Parents

The teacher should meet parents in school to discuss the child's progress in class or send the progress

report home. This report will be based on the Expected Learning Outcomes. The teacher should fill in the progress report, twice a year, using the portfolio and monthly checklist as a base, to support her/his evaluations. From their observations, monthly checklists and portfolios, teachers can assess each child's progress. When progress is recorded regularly and efficiently, the teacher builds up a comprehensive picture of each child. The process of recording helps the teacher to be aware of all areas of the child's learning and development.

4.1 Essentials for Developing Teachers' Guide

ECE teachers need to have certain essential attributes such as gentleness, thoughtfulness, effective interpersonal skills (patience, tolerance, and effective communication) and a generally positive and caring attitude. They need to possess or develop specialized skills to engage with very young children effectively. A teacher's guide can help teachers to understand their task and accomplish it professionally.

Format and Suggested Content

It is crucial that the developers of the Teachers' Guide are familiar with the Single National Curriculum for ECE and that this document is attached as an appendix to the Teachers' Guide. All ECE teachers must be well versed in the contents of the NCECE.

It would be most effective to have the Teacher's Guide in Urdu. This is necessary as these concepts will be new to most teachers, so it is important that the ECE teachers understand the content and the concepts contained in the Teacher's Guide.

SECTION I: KEY COMPETENCIES FOR ECE TEACHERS

This section will describe the key competencies that are essential for ECE teachers. ECE teachers need to have specific knowledge, skills and attitudes for the effective implementation of the SNC ECE. It is important for them to know what these basic competencies are, also that they can reflect and assess themselves and then work on their own professional growth. Some basic competencies are given below; these should be further elaborated on, in the ECE Teachers Guide. (In line with Minimum Learning Standards for Quality Education in Pakistan, 2009)

Knowledge: Teachers need to possess comprehensive knowledge and understanding about the following:

- Knowledge and understanding of child development from zero to eight.
- Theories of learning and methods of teaching.
- Family Structures and the role of parents, families and communities in shaping children's development.
- Knowledge and understanding of active learning and the value of play.
- Services available within the community to get support for the development of children.
- Knowledge and understanding of pro-social behaviour.
- The Single National Curriculum for ECE.
- Knowledge of catering differently-abled children.

Skills: Teachers need to have the following skills to function effectively as early childhood teachers:

- Pedagogical skills to facilitate the learning process of young children such as, engaging them in group work, organizing discussions, and a variety of play activities, asking meaningful questions, handling children's responses, and facilitating them during outdoor play.
- Skills for developing and organizing learning resources including displays, manipulative material, worksheets, charts, and posters.
- Skills for observing children and documenting the observations, maintaining children's progress record and developing progress reports.
- Communication and presentation skills to effectively engage with children, parents, families, communities and other services related to early childhood development.
- Counselling skills to work with parents and children regarding their learning.
- Independent learning skills for engaging self in an on-going process of learning.
- Develop Conflict management skills among children and colleagues and handle behavioural issues.
- Possess skills to dealing with differently able children.

Attitudes: Teachers must realise the importance of relationships for holistic development in early childhood,

and the attitudes required for developing a warm, caring and trusting relationship with children and their families. Teachers need to ensure that their interaction with children and their families demonstrates the following aspects:

- Respect for children's abilities and the wealth of knowledge, skills and individual potential they possess.
- Care and consideration for all children.
- Patience while interacting with children/parents/families and responding to their questions, requests and concerns.
- Unbiased and non-judgmental dealing with all children and their parents.
- Appreciation and acknowledgment of diversity.
- Pro-activity in identifying, exploring and accessing services available in the community for children.
- Willingness to reach out to parents and families to build relationships with them for the effective learning and development of children.
- Willingness to engage self in a continuous process of learning in a variety of ways.
- Acceptance for children with different abilities.

SECTION II: EARLY CHILDHOOD DEVELOPMENT

This section will help teachers to understand the basic concepts of early childhood development under two key themes;

- 1) Holistic Child Development, and
- 2) Early Childhood Development and Relationship Building.

Holistic Child Development

This theme will help teachers to understand the key aspects of early childhood development. The following points need to be incorporated and elaborated on, in the text:

- Developmental milestones of children aged 0-8. All the developmental domains, such as, physical, cognitive/intellectual, emotional, social and moral development must be included.
- Brain development in the early years and its importance and implications for designing early learning experiences.
- The role of schools, parents and communities in children's development

Early Childhood Development and Relationship Building

This theme will elaborate on the importance of relationship building and ways of building positive relationships in the early years. It is recommended that the text of this theme should incorporate some basic and simple research findings. Key points around which this theme will be developed are:

- The importance of bonding and healthy relationships for optimal development in early childhood.
- Building healthy, positive relationships with children.
- The importance of nurturing pro-social behaviour among siblings and peers.
- Understanding the underlying causes of problem behaviour.
- Understanding the reasons for social conflict in the classroom and learning conflict resolution strategies.

SECTION III: KNOWLEDGE AND UNDERSTANDING OF THE NATIONAL CURRICULUM FOR ECE

This section will help teachers to understand the key features of the National Curriculum

for ECE Key features of the ECE National Curriculum

- The philosophy and objectives.
- The importance of play in children's learning.
- Key Learning Areas and their importance.
- Expected Learning Outcomes (ELOs) and their importance.
- Using the ELOs as guideposts for designing classroom activities.
- Teaching and learning approaches.
- Organization of the learning environment and the daily routine.
- The assessment framework.

SECTION IV: UNDERSTANDING LEARNING AND THE LEARNING ENVIRONMENT

This section will help teachers to build their understanding about the overall teaching and learning approach, and the learning environment proposed for ECE classes. This section will be organized under three themes:

- 1) Learning and teaching for the early years
- 2) Learning activities
- 3) The learning environment. Ideas will be presented in detail using text, graphics and pictures to aid understating.

Learning and Teaching for the Early Years

This theme will highlight the following important points:

- Learning in the early years; explaining the key points about natural learning processes.
- An Active Learning Approach: Understanding active learning, its importance and how it is different from traditional approaches to learning in schools. Ways of involving children in an active learning process, with examples. Understanding the 'plan work clean review' cycle, its importance and implementation. Involving children in free play and exploration activities and organizing hands-on experiences for children in all learning areas. Involving children in discussion, role-play, creative thinking, questioning and problem solving.
- Dealing with diversity in the class; concepts of learning styles learning differences and multiple intelligences. Explaining that each child is unique in terms of his/her social and cultural background, developmental milestones, experiences and learning potential.
- Ways of creating an inclusive ECE class. The attitude and skills required by an ECE teacher to engage with individual children as per their needs.

Learning Activities

It is suggested that under this theme various learning activities may be added for classroom use:

 Examples of learning activities should be arranged according to the learning areas, so that teachers can use them easily to link with various Expected Learning Outcomes. The ideas presented here will be useful

for planning their lessons and to design their own activities.

• Besides suggesting activities under various learning areas, teachers should be given an understanding of how to design integrated lessons. Examples need to clearly demonstrate how one learning activity can contribute towards the achievement of number of different ELOs.

Learning Environment

This theme will provide detailed guidelines to teachers for setting up their classroom in terms of space and time according to the principles of quality ECE practice. It is recommended that this section should be supported with many good quality photographs of a variety of creative classroom arrangements in different contexts with different resource constraints. These visuals will help teachers to understand the possibilities of different types of classroom floor plans and will offer them options to choose for their own classrooms. The theme will explain the following essential aspects of the learning environment.

- The term 'Learning Environment' and what constitutes the learning environment in an ECE classroom, including the physical, social and emotional environments.
- Key features of an ECE classroom and its physical features, such as, cleanliness, light, ventilation, seating (age appropriate and child friendly furniture), kinds of material needed, placement of materials, accessibility of materials by children and safety aspects in the classroom. This part will also present different ideas for arranging the classroom.

- Creating Learning Corners (Goshay): This theme will help teachers understand the basic ideas about learning corners, the objectives behind setting up learning corners, their importance and the materials required for each corner and how to use them effectively.
- Classroom display: This part will help teachers understand the importance of classroom displays in ECE classes, and give them ideas on how to involve children in classroom displays. Some creative and attractive displays regarding different concepts such as photographs, children's art work, key messages, letter of the day are recommended for different learning areas
- Classroom Management Techniques: Classroom norms and responsibility chart should be developed with children's consent and reviewed regularly and displayed in the room. Message of the day or a week should be practiced regularly and to be displayed in the classroom.
- Daily Routine: To make optimal use of the valuable time young children spend in school, teachers will be familiarized with the importance of a consistent daily routine and shown some examples of daily routine scheduling. An explanation of routines and the importance of flexibility to meet children's spontaneous needs will be stressed.
- Classroom Management Checklist: This part will provide a handy sample checklist to teachers to assess their own classroom environment and its appropriateness for quality ECE practice.

SECTION V: ASSESSMENT AND EVALUATION

In order to change classroom practice, it is essential to bring about changes in understanding of assessment as part of the teaching process. This section is recommended to help the teachers to understand the following:

- Focus of assessment: This part will explain the purpose of assessment in an early years' classroom.
- Observation as a tool for assessment: This part will highlight the importance of observation as an effective tool for assessment and provide teachers with guidance about when, how and what to record during observations.
- Use of checklist for assessment: This section will help teachers to understand checklist, and how to create, administer and analyse checklists.
- Portfolio of children's work: This section will
- introduce the concept of portfolios to teachers and will explain its importance for assessment in the early years. It will also guide teachers on how to maintain a portfolio.
- Progress report for parents:
- This part will help teachers to know the importance of progress reports, creative and appropriate
 formats, ideas and important points for writing comments and effective ways to share the reports
 with parents.

SECTION VI: THE IMPORTANCE OF PLANNING

This section will explain the following points:

- The importance of planning before a lesson:
- Planning schedules: yearly, quarterly, monthly, weekly, daily
- Characteristics of a good planning process and planning document
- Planning a day for young learners
- Elements of flexibility and adaptation in the plan to cater to the needs, interest and moods of children

3.4 GUIDELINES FOR IMPLEMENTATION OF THE TEACHERS' GUIDE

A) PLANNING

- 1. Forming a team by identifying people with good writing skills. The team of writers must include people with the relevant experience (practitioners) of working at the ECE/Primary level. They should also have a deep understanding of teacher education and adult learning.
- 2. Reading and understanding the National ECE Curriculum and this section on the development of the Teachers' Guide.
- 3. Meeting with the curriculum development team to understand the philosophy and principles on which the National ECE curriculum is based, and to clarify the aspects of the curriculum which are unclear to the writers.
- 4. Understanding and reviewing the suggested format for the guidebook, and finalizing the format and procedures for writing.
- 5. Deciding the roles and responsibilities of each team member, dividing the work and setting deadlines.
- 6. Forming a review team.

B) DEVELOPING

- 1. Producing initial, individual drafts as per decisions taken at the planning level.
- 2. Reviewing the drafts and existing relevant documents.
- 3. Soliciting feedback from the review team.
- 4. Incorporating the feedback and revising the initial drafts.

C) PILOTING

- 1. Sharing the complete draft with teachers in public and private schools and in teacher training colleges.
- 2. Sharing key areas with them in which feedback is required, such as language of the guidebook, format of the book, missing content and clarity of ideas presented in the guidebook.
- 3. Meeting with the people piloting the guidebook, and collecting data on their experiences.
- 4. Asking them to share the areas which they found difficult or ambiguous or needing greater emphasis.
- 5. Reviewing and revising the guidebook in light of feedback from piloting, to develop the final version of the guidebook.

D) EDITING

- 1. Getting the services of editors to ensure the accuracy of language and formatting.
- 2. Revising the draft further to incorporate the editors' recommendations.

E) PUBLISHING

- 1. Finalizing the details of the layout and graphics.
- 2. Composing the book.
- 3. Proofreading the composed draft.

4. Printing of required number of books.

F) DISSEMINATION

1. Ensure the timely distribution of the documents to the teachers, head teachers, principals and education officers.

3.5 GUIDELINES FOR DEVELOPING A TEACHER EDUCATORS'/SCHOOL ADMINISTRATORS' GUIDE

Young children need very skilful and caring facilitation from adults in order to explore their environment and build understanding of it. An adult, who understands children's potential and possesses an ability to develop trustful relationships with them, can create an environment conducive to nurturing children's innate potential. At schools, teachers need to have an understanding of the ECE curriculum besides having a loving and caring attitude. In order to ensure that teachers have the required understanding, skills and attitude to work with young children, they need to be engaged in an on-going process of learning and professional development. The role of teacher educators is to design and implement programmes to facilitate teachers to learn about the basic concepts of Early Childhood Education and Development and build the required skills to work effectively with children. Furthermore, they are responsible for providing adequate support and learning material for ECE.

3.5.1 Format and Suggested Content

It is crucial that the developers of the Teacher Educators' Guide carefully read and understand:

- 1. The National Curriculum for Early Childhood Education
- 2. The Teachers' Guide Book
- 3. Sections II-VI of the chapter titled, Essentials for Developing a Teachers' Guide, in this document

The Teacher Educators' Guide will be divided into sections which will elaborate aspects that are essential for ECE teachers to know and understand. These sections will help teacher educators to understand the need, content and design aspects of a professional development programme for ECE teachers. The following sections are recommended as components of the Teacher Educators' Guide.

3.5.2 Key Competencies for Teacher Educators/School Administrators

This section will describe the key competencies essential for teacher educators. It is essential for all teacher educators to understand the competencies given below, so that they can assess themselves, as well as design professional development programme, in line with the competencies required by the teachers.

Teacher Educators assume the important and sensitive responsibility of facilitating teachers to learn and improve their understanding and skills. In order to accomplish their task effectively, they also need to possess a certain level of competence in terms of knowledge, attitudes and skills. These are the key competencies essential for a teacher educator:

KNOWLEDGE

Teacher educators need to possess comprehensive knowledge and understanding about the following:

- Theories of Child Development from zero eight.
- Brain development research.
- Theories and methods of child learning and development.
- Theories and methods of adult learning, support and development.
- The National curriculum for Early Childhood Education, and ECE Teachers' Guides.
- The Role of parents, care-givers, families and communities in nurturing children.
- Services and support mechanism available within the community for the development of children.

ASSESSMENT OF TEACHER LEARNING SKILLS

- Andragogic skills to facilitate the learning process of adults.
- Providing positive reinforcement.
- Skills for designing, conducting and assessing workshops/seminar/courses for ECE teachers.
- Skills for developing resources to support teachers' learning.
- Observation skills to assess teachers during workshops/courses and in the classroom.
- Documentation skills to record observations and maintain records of teachers' participation and performance.
- Communication and presentation skills to effectively communicate with teachers.
- Communication skills to provide constructive feedback to teachers about their performance.
- Counselling skills to work with teachers and head teachers on a one to one basis for school development.
- Independent learning skills for engaging self in an ongoing process of learning.

ATTITUDES

Teacher educators must realise the importance of building rapport, i.e; a close and harmonious relationship with teachers and groups of teachers, and show concern and understanding of their background and current needs. They need to ensure that their interaction with teachers demonstrates:

• Respect for the knowledge, skills, experience and individual potential possessed by each teacher.

- Consideration, respect and empathy towards all teachers.
- Patience while interacting with teachers and responding to their questions, requests, concerns, ideas, and feedback.
- Unbiased and non-judgmental behaviour in dealing with teachers.
- Pro-active approach in identifying, exploring and accessing the services available for the support of teachers in the community.
- Willingness to engage self in a continuous process of learning.

EXPERIENCE

It is important for ECE teacher educators to have the following experiences:

- Teaching experience at ECE or primary level classes.
- Mentoring experience with ECE or primary level teachers to support their learning.

3.6 GUIDELINES FOR PLANNING CONTINUOUS PROFESSIONAL DEVELOPMENT PROGRAMME (CPD) FOR ECE TEACHERS

This section will facilitate teacher educators, school administrators, training departments in understanding the important steps they need to undertake in order to design a professional development programme for ECE teachers:

- Analysing the needs: Assessing the needs of teachers and understanding their current competencies.
- Reading the Teachers' Guide thoroughly: Before designing a professional development programme for ECE, it is essential that teacher and educator read the Teachers' Guides thoroughly, to understand the scope, nature of work and expectations of an ECE teacher.
- **Forming a team:** Relevant Education Department needs to form a team of teacher educators to design and conduct the programme. The team may include other teacher educators or competent ECE teachers/head teachers.
- **Developing a detailed plan:** The training team should design a detailed plan for implementation by identifying content, strategies and activities; resources required; and assessment techniques. The Guidebook should contain some sample templates for planning.
- Collecting/developing resources: before the programme commences, the team needs to develop and collect all the required resources for the implementation of the programme.
- **Setting-up the room:** The space where the programme will be run needs to be properly organized. The implementing team needs to ensure that the space is:
 - o Neat and clean.
 - o Well-lit and ventilated.
 - o Organised with appropriate and comfortable seating arrangements, drinking water and with clean washroom facilities nearby.
 - o Provision of internet connection, multimedia and relevant material that include reference books.
 - o Attractive with relevant displays and all other teaching-learning resources at hand.

3.7 GUIDELINES FOR DEVELOPING CONTENT OF ECE CONTINUOUS PROFESSIONAL DEVELOPMENT PROGRAMME

Most of the content for a professional development programme will be derived from the key competencies described above and will facilitate the teachers to enhance their overall competence level.

This section will elaborate on the concepts that

have been given in **Sections II – VI** of the chapter titled Essentials for Developing a Teachers' Guide in this document:

- **Section II** Early Childhood development: Child Development and Early Childhood Development and Relationship Building.
- Section III knowledge and Understanding of the National Curriculum for ECE
- **Section IV** Understanding Learning and the Learning Environment: Learning and Teaching for the Early Year, Learning Activities and Learning Environment.
- Section V Assessment and Evaluation.
- Section VI Importance of Planning and Reflection.

3.7.1 Designing a Teacher Education Programme

This section will provide guidelines to teacher educators for the actual design of the programme. A few ideas are presented here which can be further elaborated on, and more ideas added to the guide. Teacher educators can design pre-service or in-service courses/workshops/seminars for teachers, depending on the findings of the need analysis, available time and other context-specific circumstances. Below are the three key approaches which can be used to design a professional development programme. A mix of all three approaches would be greatly beneficial for teachers.

A) ORGANIZING LEARNING SESSIONS

Learning sessions are a key component of any professional development programme. These sessions can be in the form of workshops, seminars, and discussion forums. The main purpose of these sessions is to provide an opportunity to teachers to get together, share ideas and experience and learn about various aspects of their work under the guidance and facilitation of an experienced facilitator. It is recommended to hold cluster wise meeting and assign responsibility to a district education officer to ensure these meetings.

There could be a series of learning sessions at the beginning of any programme related to the basic ideas and then the remainder of the sessions could be spread over a period of time. Weekly sessions and fortnightly seminars can also be organized. In these sessions, teacher educators can engage teachers in a variety of activities related to the components of the programme. Teacher educators need to ensure that their learning sessions demonstrate the following key features:

- Use of an active learning approach in which teachers are engaged in a variety of activities to explore and understand the various aspects of teaching and learning and an ECE curriculum. Teachers should not be merely lectured on various topics but they need to be involved in reading, discussions, presentations, simulations, role-play, and debates. They need to be practically engaged in most of the learning approaches or techniques which they are supposed to use in the classroom. This will help them to experience such processes and their impact on learning.
- Provision of practical, hands-on experiences to teachers during learning sessions in order to help them to develop the skills they will need, such as developing material of ECE classes, developing plans, demonstrating lessons.
- A collegial and respectful environment in the sessions so that teachers of varied experiences,

qualification and personalities feel comfortable, and can concentrate on their own learning, and can also support others to learn.

B) FIELD BASED SUPPORT

This approach is used to ensure that the newly trained ECE teachers get enough support and guidance for the implementation of new ideas in the classroom. The new ECE

teachers are mentored/coached by the teacher educators or by experienced and skilled teachers already present in the school. Such support may include providing the new ECE teachers help in planning lessons, observing ECE class and helping teacher to reflect on the lesson, help teachers in the class to demonstrate and practice specific skills. It may also be used to assist new ECE teachers in accessing or developing resources. This support is essential as it actually helps the new ECE teachers to reflect on the issues, identify solutions and move ahead with new ideas. It also makes such teachers enthusiastic and accountable for the implementation of new ideas.

Teacher educators can visit and work with the new teachers in the school on particular days. They can also introduce the following strategies to initiate an on-going process of learning and support within the school:

- Identifying senior and competent teachers in the school and getting their support for helping new teachers in the field. These teachers can help the new teachers by planning together, observing each other's classes, reviewing the work of new teachers and organizing small learning sessions within the school for new teachers.
- Peer Coaching or encouraging teachers of the same level to work together and to support each
 other in learning. They can observe each other's classes, review each other's material, and do
 joint planning.
- Taking help from supervisors in public schools, and guiding them to provide needs-based support to teachers when they visit the schools.

C) ARRANGING & PARTICIPATING IN ON-GOING REVIEWS AND REFLECTION SESSIONS

These sessions provide a platform to the teacher to get together and share their successes and challenges with each other. They can learn from each other's experiences and provide necessary support to each other. These sessions provide teacher educators with a valuable opportunity to understand the common issues of all teachers enabling them to improve the design of further learning sessions. These sessions can be facilitated by teacher educators, or the head of a school, or supervisors in public schools.

D) ARRANGING ORIENTATION SESSIONS FOR HEAD TEACHERS AND PRINCIPALS

- The orientation sessions should cover all the key areas of the training attended by the teachers.
- Head teachers and principals should know what the trainee teacher is expected to do in the school.
- Head teachers and principals should facilitate and provide support to the trainee teachers.

3.8 GUIDELINES FOR DEVELOPING ASSESSMENT OF ECE TEACHERS' TRAINING, LEARNING AND CPD PROGRAMMES

It is important for teacher educators to use specific methods to assess the relevance and delivery of their programme, as well as its impact on teachers' learning and classroom practice. Given below are guidelines to teacher educators to develop tools and processes for the assessment of teacher learning sessions. It is recommended that detailed guidelines for the following key areas be provided in the guidebook:

- Purpose of assessing learning session and fields-based support.
- Purpose of assessing teachers' competence levels.
- Methods of assessing learning sessions and field-based support.
- Taking participants' feedback at the end of the programme through questionnaire, checklist or rating scale. Some sample tools can be included in the appendices.
- Asking participants to talk about the session/field-based support provided, in terms of what value was added to their learning, what did not work and what needs to improve.
- Inviting experienced individuals to provide feedback to teacher educators to improve the sessions.
- Reflecting daily on the sessions/field-based work by teacher educators themselves, in order to identity the strengths and weaknesses of their programmes and then taking action to improve.
- Techniques to assess teachers' competence and professional growth.
- Observing teachers in action in the school and classroom and assessing their competence in all areas.
- Discussing their work with teachers and asking for a self-analysis on their learning.
- Studying and analysing teachers' work such as, plans developed by them for their classes, learning material produced by them.
- Discussing teachers' performance with the head of the school.
- Strategies to accommodate the children with special needs by adapting/modifying the instructional/assessment activities.

3.9 GUIDELINES FOR ECE LEARNING MATERIAL DEVELOPERS

3.9.1 Key Considerations for Material Development

- Goals and Objectives: The first step towards developing learning material is to account for its utility and impact on children's learning. It is critical to identify specific learning areas and key competencies for which the learning materials will be used, and this information should be included in the packaging/literature. Consequently, focused materials development and effectiveness of pre-testing will be ensured. If this information is provided to teachers, parents and educators, it will facilitate the effective utilization of the learning materials.
- **Interactivity of Materials**: Children at the ECE stage of development need hands-on, concrete activities to make sense of the world around them.
- Quality and Relevance of Content: A key aspect is to look at the content for its quality. Depth, range, comprehensiveness and accuracy of information shared, defines the quality of the materials. For example, depicting a whale as fish is inaccurate. Checking the learning content for relevance with respect to the age, context and key competencies is essential for producing quality learning material. It is also entirely possible that correct information can be irrelevant. For example, describing the internal parts of a computer at the ECE level is irrelevant and unnecessary, even though the information may be accurate. Material must be assessed for both quality and relevance.

- Language and Text: Developers should ensure that words used in the material are appropriate to the learner's as well as the teacher's literacy level. Complex sentence structures and archaic words should be avoided. For ECE materials, language must be simple and creative. Care should be taken to ensure that language and text used for materials do not violate the principles of inclusiveness and diversity mentioned below. All learning materials should be free from stereotyping and should respect the social diversity of the context. Stereotypes may be understood as ideas about people that are widely held and accepted, though they may not necessarily be true, such as, only men as breadwinners, and women as housewives only. The title of the material, especially in the case of booklets, guides and displays should be engaging and meaningful.
- **Visuals**: Visuals and illustrations at the ECE level play a key role in stimulating children's thinking and developing their meta-cognitive skills. The illustrations and graphics used in the material should be accurate, attractive, bright, colourful, and engaging. However, they should not be too busy or cluttered,
 - thereby making it difficult for children to focus on the main points. Visual content should be free from all types of stereotyping whilst retaining relevance and respect for social contexts. For instance, check the illustrations and see if the dominant characters are mainly from one cultural group or are all men. Who is doing what? Are children with disabilities passive onlookers, or are they actively involved? Do they look enthusiastic? Is the imagery in any way promoting violence? Responding to such questions will ensure that illustrations are not perpetuating the taboos and misconstrued notions widely held in society.
- Incisiveness of Teaching Materials: It is of utmost importance that the teaching and learning materials are incisive in nature. As charted out by UNESCO, learning materials become incisive when they:
- Include all children, including those with diverse backgrounds and abilities.
- Are relevant to the children's learning needs and abilities, as well as their way of life.
- Are appropriate to the culture and value social diversity, for example, socio-economic diversity: poor families can be very good families for children; they can come up with creative solutions for problems, and they could be depicted as inventive.
- Are useful for their future life.
- Include males and females in a variety of roles.
- Use appropriate language that includes all of these aspects of equity.

Checking the story line is also critical for making the material incisive and respectful. Consider how problems are presented, conceived, and resolved in the story. Does the story line encourage passive acceptance or active resistance by "minority" characters, such as persons with different abilities? Are the successes of girls and women based on their own initiative and intelligence, or are they due to their good looks? Could the same story be told if the action or roles given to men and women in the story were reversed? It often goes without any realization but most commonly told tales like Cinderella, present gender biased and stereotypical roles.

• Safety of Materials: Learning resources related to the Key Learning Area should be produced as far as possible with natural materials. The concept of safety is broader than ensuring that materials do not have sharp edges. For instance, many toys and learning materials are made of poor quality plastic which is detrimental to health and is carcinogenic. Where possible,

3.10 A SUGGESTED LIST OF MATERIALS FOR THE ECE CLASSROOM

Given below is a list of learning materials which teachers can place in the Learning Corners/Goshay and use during Group Work Time as well. It is highly recommended that the materials are from the local context to begin with. Not all materials have to be purchased; families and community members will certainly be willing to share old/used (but clean) objects which can be very useful to build up a conducive and equipped ECE learning environment. However, there is no limit to quality and if resources permit an ECE classroom must be the best equipped classroom in any school. Materials which can be recycled and reused are strongly recommended. Teachers must check for breakage, safety and cleanliness on a daily basis.

For Creative Art Work

• Materials for mixing and painting

- Paint/powder paint
- · Crayon shavings, Pencil shavings, Wood shaving
- Plastic bottles
- · Plastic jars
- Paint brushes of different sizes
- Saucers, dishes for paint
- Sponges
- Aprons, T- shirts
- Toothbrushes
- Clothes pegs,
- Small pieces of cloths

• Materials for representation

- Pencils, crayons, markers, chalk
- Magazines, newspapers, catalogues
- Paper of different sizes and textures
- Wax paper, tissue paper
- Scraps of paper, paper plates
- Invitation/greeting cards
- small/large empty boxes
- Clay, slime, plasticine
- Large Buttons, straws, small empty cartons
- Empty thread spools/reels
- Cardboard tubes, paper bags
- Cloth, felt, vinyl scraps, fallen leaves
- Recyclable/indigenous materials

• Materials for holding things together and for taking them apart

- · White glue,
- Masking tape,
- Yarn

- Staplers (for teachers' use only)
- String
- paper clips (for teachers' use only)
- Rubber bands
- Round tip scissors
- · Cellophane tape
- paper knives

• For Music and Movement

- Tape recorders/CD players and tapes/CDs of a variety of music,
- Musical instruments (homemade or purchased)
- Bottles of different sizes and textures, metal spoons, wooden sticks

• For Pretend Play/Role Play (all toys)

- Old telephones, old clocks, (toy) tool box, soft chair, dust brush and dustpan
- · Small tables and chairs
- Props for pretending clothes, hats, shoes, mirror
- Dolls, stuffed animals, doll beds, baby rattles, bibs, bottles
- Cushions, small blankets, matters
- Toy utensil sets
- Teapots, kettles (toy)
- Cutlery, doi, (ladle)
- Mixing bowls, measuring spoons/cups, sifter
- Potholders, aprons, towels, sponges, napkins, place mats
- Empty dry food boxes, cartons, jars, bags
- · Doctors' sets
- · Gardening tools set
- · Construction tools set
- Carpenter tools set

• For Building and Pretend Play

- A variety of blocks: hollow, unit small stacking,
- Blocks made from boxes
- Large and small boxes, small pieces of wood with round edges
- Small cars and trucks, small animals, insects, birds

• For Experimentation and Discovery

- Seeds, fallen leaves and twigs
- Magnifying glass
- Puzzles, boxes and bottle with lids in different sizes
- Large nuts and bolts (toy)
- Cloth Pegs
- · Stacking rings
- Magnets, scales and balances
- Beads, stringing materials
- Large Buttons, small stones, sea shells

- Sets of matching picture cards
- Sand and water, sifters and strainers
- Materials that will float/sink
- Measuring cups, funnels
- Material for bubbles making
- · Maps of Pakistan and World

• For Reading and Writing

- Pencils, crayons, markers
- Old Computer keyboards, typewriters
- Rubber stamps, paper clips, tape, rulers
- Different types of paper: with and without lines
- Envelopes
- Assorted books (big books, small books, picture books with and without text)
- Child-made books
- Photograph books from field trips
- Cosy chair or pillows
- Puppets
- Slate & chalks
- · Takhti, qalam & dawat
- Rubbers
- Foot rulers
- Sharpeners

CHAPTER

THEORETICAL PERSPECTIVES ON EARLY CHILDHOOD EDUCATION (ECE)

4.1 DEVELOPMENTAL THEORIES:

4.1.1 Brain Development in the Early Years

At birth, the brain of a baby is only 25 percent of the weight of an adult's brain, which is 1.5 kg. By the age of 3, it is 90 per cent of the adult weight and by the age of six, it is almost as large as it will ever be. However, some parts of the brain continue to grow even in adulthood. The fast growth of the brain in the first few years of a child's life is a critical indicator of how important the early years are.

The brain is made of tiny building blocks known as cells which are also present in rest of the body. These cells are so tiny that they cannot be seen without the help of a strong microscope. When a baby is born, it has all the brain cells it will ever need. There are a hundred billion brain cells present at birth. Brain cells are also called neurons. Neurons are able to send and receive messages from other neurons. In fact, they are only useful when they connect with each other.

To better understand this, think of your brain as an office where the neurons are the office workers. Now imagine that none of the workers are allowed to talk or work with one another. How do you think that office will functions? Obviously, an office can only operate when the workers are allowed to talk and work with each other. Similarly, our brain can only work usefully when the neurons connect with each other.

When one neuron connects with another it forms a connection called a synapse. When we talk about brain development we are actually talking about the creation of synapses in a brain. One neuron can form synapses with many other neurons and so the number of synapses grows very rapidly. There are trillions of such connections in our brain making a kind of complicated web.

As shown in the figure, a young child of 02 years has twice as many synapses as that of an adult brain. As the neuron web grows, child's abilities such as, memory, language skills, problem solving and intellectual capacity also grow. However, the neurons and synapses which are not being used eventually stop working and die. For example, vision (or eyesight) develops slowly during the first six months of life. If the 'web' of synapses that is responsible for vision is not stimulated correctly during these months, eye sight may not develop properly. As a result, if the baby's eyes never see any light in the first six months, no synaptic connections would form and the baby would not have any vision.

The ability and rate, at which synaptic connections are formed, reduce significantly by the time adulthood is reached and only those connections stay put that have been strengthened during the early

years. The simple mechanics of brain functioning portrayed in the figure, not only highlight the criticality of the early years, but also the significance of an enabling and nurturing environment for the holistic development of children. Although learning is a continuous, life long process, the extent to which we can realize our potential and what we become as adults, is largely determined by what we experience in our childhood. Scientific findings about brain development confirm what most of us already know warm and loving attachments between infants

and mothers/caregivers, and positive stimulation right from birth make a significant difference in children's development. In the early years' classroom, a warm, trusting, comfortable relationship is crucial for positive, holistic development.

So now the question therefore is "how do we best help children achieve the full potential of development of the brain?" There are several ways to achieve as theorised by ECE philosophies and practices. Most of them define an enriched environment as one that includes a steady source of environmental support, nutritious diet, stimulates all senses, atmosphere free from stress, enjoyable, challenging, allows social interaction, promotes development, and gives the child a chance to assess the results of their actions, all in all allows the child to be an active participant rather than a passive observer (Diamond and Hopson, 1998).

This idea is reflected in what an ECE classroom is perceived to be as a prepared environment. The prepared environment allows the link for a child to reach into his world. ECE related educational philosophies define a prepared environment to consider the specific needs of the children with concerns to their age of development, it provides the children what they need in order to live such as, physical and emotional security. It should be aesthetically pleasing and inviting, this includes hygiene and appropriate furniture, and it has to have order. These are few of the main ideas but it is vital to mentions that the environment has to allow freedom of choice, it allows the children to act independently, and allow them to learn to take responsibility for their actions.

4.1.2 Piaget's Theory of Cognitive Development

Jean Piaget (1896-1980) a Swiss psychologist, who studied the intellectual and logical abilities of children, theorized that cognitive development proceeds in four stages that follow the same sequential order. His Cognitive Development Theory is hugely influential in the fields of education and psychology. He proposed that the thinking process develops through each of the stages, until a child can think logically. Understanding cognitive development helps us organize appropriate learning environments and plan developmentally appropriate learning activities. The following are Piaget's four developmental stages:

A) THE SENSORIMOTOR STAGE (BIRTH – MONTHS/2 YEARS)

Even though Piaget was opposed to applying age norms to the stages, most researchers consider approximately the first two years of life to be the Sensorimotor Stage. Infants mainly make use of senses and motor capabilities to experience the environment. For instance, if infants cannot see or touch an object, they stop trying to find it. Once infants develop the capability to recognise that a hidden object still continues to exist, they start searching for it. The characteristic limitation of this

stage is 'thinking only by doing'. The sensorimotor infant's main concern is developing motor control, and coordination with information from the senses.

B) PREOPERATIONAL STAGE (2 – 7 YEARS)

The second stage in Piaget's theory of development coincides with the preschool years. At this stage, children develop the ability to think symbolically and use language to express their thoughts, needs, feelings and observations. However, the preoperational child still learns from concrete material, while adults can learn in an abstract way. The preoperational child is also unaware of another person's perspective. They exhibit egocentric thought and language.

Here are some limitations of preoperational thought. To begin with, the preoperational child lacks the concept of conservation. For example, a child is presented with two rows of apples that contain the same number of apples. When one row is lengthened without any change in the number of apples, the preoperational child states that the rows are not equal. The appearance of the objects gives the wrong impression about them. Children's decisions are dominated by their perceptions.

Conservation does not happen simultaneously in all subject areas. Children can understand conservation of numbers around age 5-6, and understand conservation of substance, or mass at around age 7-8. Additionally, the preoperational child is likely to centre on only one dimension of an event and ignore other important details. Also, children concentrate more on the static features of an event, than on the transformations from one state to another. Children in the preoperational period, at times will see some relationships between particular cases while in actuality there is none. For instance, a child might say, "If an apple is red, then a green fruit is not an apple."

C) CONCRETE OPERATIONAL STAGE (7 – 11 YEARS)

The next stage generally represents the elementary grade years. The concrete operational child begins to think logically. Operations are associated with personal experience. Concrete operations allow children to classify several classes into a bigger group or to combine a number of classes in any order. Although objects are moved or reordered, no change takes place in their perception of the objects; they are able to conserve. Concrete operations also allow children to order objects in terms of more than one dimension and they can solve conservation tasks. The operational thought is reversible; the concrete operation child can operate an action, and then go back to the original condition. For instance, 3+2=5 and 5-2=3.

D) FORMAL OPERATIONAL STAGE (11 YEARS AND BEYOND)

After roughly 11 years, students have the ability to consider many possibilities for a given condition. They are able to deal with propositions that explain concrete facts. They have the ability to use planning to think ahead. Most importantly, students at Piaget's final stage of cognitive development increase their ability to think abstractly. They can solve complex and hypothetical problems involving abstract operations.

Formal operational thinkers can recognise and identify a problem. They can state several alternative hypotheses, execute procedure to collect information about the problems to be studied, and test the hypotheses.

4.1.3 Vygotsky's Theory of Sociocultural Development

Lev Semyonovich Vygotsky, a Russian psychologist who lived during the Russian Revolution, developed a theory of development known as the Sociocultural Theory of Development during the first quarter of the twentieth century.

As a proponent of the sociocultural perspective to development, Vygotsky's outlook gained worldwide recognition and began to exert influence when his work was finally translated into English in 1962 and the importance of both sociocultural contexts of development and cross-cultural research was recognised.

Vygotsky's main assertion was that children are entrenched in different sociocultural contexts through which their cognitive development is advanced through social interaction with more skilled individuals. His theory is mainly concerned with the more complex cognitive activities of children which are governed and influenced by several principles. Believing that children construct knowledge actively, Vygotsky's theory is also one of those responsible for laying the groundwork for constructivism.

A) ZONE OF PROXIMAL DEVELOPMENT

Vygotsky is most recognised for his concept of Zone of Proximal Development or ZPD pertaining to the learning of children. Children who are in the zone of proximal development for a specific task are almost able to perform the task independently, but not quite. With an appropriate amount and level of assistance, however, children are able to successfully accomplish the task.

The lower limit of a child's zone of proximal development is the level of analysis and problem-solving reached by a child without any help. The upper limit, on the other hand, is the level of additional responsibility that a child can receive with the support of a skilled instructor.

As children are verbally given instructions or shown how to perform certain tasks, they organize the new information received in their existing mental schemas in order to assist them in the ultimate goal of performing the task independently. This emphasis on the concept of Zone of Proximal Development made by Vygotsky underscores his conviction that social influences, particularly instruction, are of immense importance on the cognitive development of children.

B) MORE KNOWLEDGEABLE OTHER

The child is entrenched in a sociocultural backdrop, usually the home, in which social interaction with significant adults, i.e. the parents, is the crucial factor that affects the child's learning. Adults need to direct and organize the learning experiences of a child to ensure that a child can master and internalize the learning.

Any person who possesses a higher skill level than the learner with regard to a particular task or concept is called a More Knowledgeable Other or MKO. This person may be a teacher, parent, an older adult, a coach or even a peer.

C) SCAFFOLDING

The concept of scaffolding is closely related to the concept of the zone of proximal development. Scaffolding refers to the temporary support given to the child by More Knowledgeable Others, usually parents or teachers that enable the child to perform the task until such time that the child can already perform the task independently.

Scaffolding entails changing the quality and quantity of support provided to a child in the course of a teaching session. The more-skilled instructor adjusts the level of guidance needed in order to fit the student's current level of performance. For novel tasks, the instructor may utilize direct instruction. As the child gains more familiarity with the task and becomes more skilled at it, the instructor may then provide less guidance.

Children who experience more difficulty in task performance are in need of greater assistance and guidance from an adult. When the child has learned to complete the task independently, the scaffolds are removed by the adult, as they are no longer needed.

A major contribution of Vygotsky's theory is the acknowledgement of the social component in both cognitive and psychosocial development. Due to his proffered ideas, research attention has been shifted from the individual onto larger interactional units such as parent and child, teacher and child, or brother and sister.

Vygotsky likewise called attention to the variability of cultural realities, stating that the development of children who are in one culture or subculture, such as middleclass Asian Americans, may be totally different from children who hail from other societies or subcultures. It would not be fitting, therefore, to utilize the developmental experiences of children from one culture as a norm for children from other cultures.

The theory has significant ramifications in education and cognitive testing. Vygotsky was a strong advocate of non-standard assessment procedures for the assessment of what and how much a child has learned and in the formulation of approaches that could enhance the child's learning. His ideas have effected changes in educational systems through the increased importance given to the active role of students in their own learning process and the encouragement of teacher-student collaboration in a reciprocal learning experience.

4.1.4 Bronfenbrenner's Ecological Systems Theory of Child Development

American psychologist, Urie Bronfenbrenner, formulated the Ecological Systems Theory to explain how the inherent qualities of a child and the characteristics of the external environment which the child finds himself in interact to influence how the child will grow and develop. Through his theory, Bronfenbrenner stressed the importance of studying a child in the context of his/her multiple environments, also known as ecological systems in the attempt to understand his/her individual development.

A child finds himself simultaneously enmeshed in different ecosystems, from the most intimate home ecological system moving outward to the larger school system and the most expansive system which is society and culture. Each of these systems inevitably interacts with and influences each other and every aspect of the child's life.

The Ecological Systems Approach organizes contexts of development into five levels of external influence which interlock. The levels are categorized from the most intimate level to the broadest, with the most intimate being the microsystem.

A) MICROSYSTEM

The microsystem is the smallest and most immediate environment in which the child lives. As such, the microsystem comprises the daily home, school or day-care, peer group or community environment of the child. Interactions within the microsystem typically involve personal relationships with family members, classmates, teachers and caregivers, in which influences go back and forth. How these groups or individuals interact with the child will affect how the child grows. Similarly, how the child reacts to people in his microsystem will also influence how they treat the child in return. More nurturing and more supportive interactions and relationships will understandably foster the child's improved development.

Given two siblings experiencing the same microsystem, however, it is not impossible for the development of the two siblings to progress in different manners. Each child's particular personality traits, such as temperament, which is influenced by unique genetic and biological factors, ultimately have a hand in how he is treated by others. One of the most significant findings that Bronfenbrenner unearthed in his study of ecological systems is that it is possible for siblings who find themselves within the same ecological system to still experience very different environments.

B) MESOSYSTEM

The mesosystem encompasses the interaction of the different microsystems which the developing child finds himself/herself in. It is, in essence, a system of microsystems and as such, involves linkages between home and school, between peer group and family, or between family and church. If a child's parents are actively involved in the friendships of their child, invite friends over to their house and spend time with them, then the child's development is affected positively through harmony and like-mindedness. However, if the child's parents dislike their child's peers and openly criticize them, then the child experiences disequilibrium and conflicting emotions, probably affecting his development negatively.

C) EXOSYSTEM

The exosystem, on the other hand, pertains to the linkages that may exist between two or more settings, one of which may not contain the developing child but affects him/her indirectly, nonetheless. Other people and places which the child may not directly interact with but may still have an effect on the child, comprise the exosystem. Such places and people may include the parents' workplaces, the larger neighbourhood, and extended family members. For example, a father who is continually passed up for promotion by an indifferent boss at the workplace may take it out on his children and mistreat them at home.

D) MACROSYSTEM

The macrosystem is the largest and most distant collection of people and places to the child that still exercises significant influence on the child. It is composed of the child's cultural patterns and values, specifically the child's dominant beliefs and ideas, as well as political and economic systems. Children in war-torn areas, for example, will experience a different kind of development than children in communities where peace reigns.

E) CHRONOSYSTEM

The chronosystem adds the useful dimension of time, which demonstrates the influence of both change and constancy in the child's environment. The chronosystem may thus include a change in family structure, address, parent's employment status, in addition to immense society changes such as economic cycles and wars.

By studying the different systems that simultaneously influence a child, the ecological systems theory is able to demonstrate the diversity of interrelated influences on the child's development. Awareness of contexts can sensitize us to variations in the way a child may act in different settings. For example, a child who frequently bullies smaller children at school may portray the role of a terrified victim at home. Due to these variations, adults concerned with the care of a particular child should pay close attention to behaviour in different settings or contexts and to the quality and type of connections that exist between these contexts.

4.1.5 Erik Erikson's Theory of Social Emotional Development

Every person has his or her own unique identity. This identity is composed of the different personality traits that can be considered positive or negative. These personality traits can also be innate or acquired, and they vary from one person to another based on the degree of influence the environment has on the individual.

The bottom line is that as human beings, we possess many characteristics that are honed in many different aspects that eventually define who we are.

Erik Erikson's Theory of Psychosocial Development emphasizes the sociocultural determinants of development and presents them as eight stages of psychosocial conflicts (often known as Erikson's psychosocial stages) that all individuals must overcome or resolve successfully in order to adjust well to the environment.

Erik Erikson's Theory of Psychosocial Development

KEY CONCEPTS

Erikson's psychosocial theory of development considers the impact of external factors, parents and society on personality development from childhood to adulthood. According to Erikson's theory, every person must pass through a series of eight interrelated stages over the entire life cycle.

1. INFANCY: BIRTH-18 MONTHS OLD

Basic Trust vs. Mistrust - Hope

During the first or second year of life, the major emphasis is on the mother and father's nurturing ability and care for a child, especially in terms of visual contact and touch. The child will develop

optimism, trust, confidence, and security if properly cared for and handled. If a child does not experience trust, he or she may develop insecurity, worthlessness, and general mistrust to the world.

2. TODDLER / EARLY CHILDHOOD YEARS: 18 MONTHS TO 3 YEARS

Autonomy vs. Shame - Will

The second stage occurs between 18 months and 3 years. At this point, the child has an opportunity to build self-esteem and autonomy as he or she learns new skills and right from wrong. The well-cared for child is sure of himself, carrying himself or herself with pride rather than shame. During this time of the "terrible twos", defiance, temper tantrums, and stubbornness can also appear. Children tend to be vulnerable during this stage, sometimes feeling ashamed and low self-esteem during an inability to learn certain skills.

3. PRESCHOOLER: 3 TO 5 YEARS

Initiative vs. Guilt – Purpose

During this period, we experience a desire to copy the adults around us and take initiative in creating play situations. We make up stories with Barbie's and Ken's, toy phones and miniature cars, playing out roles in a trial universe, experimenting with the blueprint for what we believe it means to be an adult. We also begin to use that wonderful word for exploring the world—"WHY?"

While Erikson was influenced by Freud, he downplays biological sexuality in favor of the psychosocial features of conflict between child and parents. Nevertheless, he said that at this stage we usually become involved in the classic "Oedipal struggle" and resolve this struggle through "social role identification." If we're frustrated over natural desires and goals, we may easily experience guilt. The most significant relationship is with the basic family.

4. SCHOOL AGE CHILD: 6 TO 12 YEARS

Industry vs. Inferiority – Competence

During this stage, often called the Latency, we are capable of learning, creating and accomplishing numerous new skills and knowledge, thus developing a sense of industry. This is also a very social stage of development and if we experience unresolved feelings of inadequacy and inferiority among our peers, we can have serious problems in terms of competence and self-esteem.

As the world expands a bit, our most significant relationship is with the school and neighbourhood. Parents are no longer the complete authorities they once were, although they are still important.

5. ADOLESCENT: 12 TO 18 YEARS

Identity vs. Role Confusion – Fidelity

Up until this fifth stage, development depends on what is done to a person. At this point, development now depends primarily upon what a person does. An adolescent must struggle to discover and find his or her own identity, while negotiating and struggling with social interactions and "fitting in", and developing a sense of morality and right from wrong.

Some attempt to delay entrance to adulthood and withdraw from responsibilities (moratorium). Those unsuccessful with this stage tend to experience role confusion and upheaval. Adolescents

begin to develop a strong affiliation and devotion to ideals, causes, and friends.

6. YOUNG ADULT: 18 TO 35 YEARS

Intimacy and Solidarity vs. Isolation - Love

At the young adult stage, people tend to seek companionship and love. Some also begin to "settle down" and start families, although seems to have been pushed back farther in recent years.

Young adults seek deep intimacy and satisfying relationships, but if unsuccessful, isolation may occur. Significant relationships at this stage are with marital partners and friends.

7. MIDDLE-AGED ADULT: 35 TO 55 OR 65 YEARS

Generativity vs. Self-Absorption or Stagnation - Care

Career and work are the most important things at this stage, along with family. Middle adulthood is also the time when people can take on greater responsibilities and control. For this stage, working to establish stability and Erikson's idea of generativity – attempting to produce something that makes a difference to society. Inactivity and meaninglessness are common fears during this stage.

Major life shifts can occur during this stage. For example, children leave the household; careers can change, and so on. Some may struggle with finding purpose. Significant relationships are those within the family, workplace, local church and other communities.

8. LATE ADULT: 55 OR 65 TO DEATH

Integrity vs. Despair - Wisdom

Erikson believed that much of life is preparing for the middle adulthood stage and the last stage involves much reflection. As older adults, some can look back with a feeling of integrity — that is, contentment and fulfilment, having led a meaningful life and valuable contribution to society. Others may have a sense of despair during this stage, reflecting upon their experiences and failures. They may fear death as they struggle to find a purpose to their lives, wondering "What was the point of life? Was it worth it?"

4.2 Learning Theories

Learning theories provide the theoretical framework to understand and analyse how knowledge is absorbed, processed, and retained as a part of learning. Cognitive, emotional, and environmental influences, as well as prior experience, all play a part in how understanding, or a world view, is acquired or changed and knowledge and skills are retained. For ECE teachers/stakeholders knowledge of established learning theories is vital to enable them in their role of helping children develop in a positive and healthy environment. For reference purposes the following two learning theories are included here to provide a baseline for teachers to probe further.

4.2.1 Howard Gardner's Theory of Multiple Intelligences-an Innovative Approach Towards Understanding Child's Potential

Many educators have had the experience of not being able to reach some students until presenting

the information in a completely different way or providing new options for student expression. Perhaps it was a student who struggled with writing until the teacher provided the option to create a graphic story, which blossomed into a beautiful and complex narrative. Or maybe it was a student who just couldn't seem to grasp fractions, until he created them by separating oranges into slices.

Because of these kinds of experiences, the theory of multiple intelligences resonates with many educators. It supports what we all know to be true: A one-size-fits-all approach to education will invariably leave some students behind. However, the theory is also often misunderstood, which can lead to it being used interchangeably with learning styles or applying it in ways that can limit student potential. While the theory of multiple intelligences is a powerful way to think about learning, it's also important to understand the research that supports it.

Howard Gardner's Nine Intelligences

The theory of multiple intelligences challenges the idea of a single IQ, where human beings have one central "computer" where intelligence is housed. Howard Gardner, the Harvard professor who originally proposed the theory, says that there are multiple types of human intelligence, each representing different ways of processing information:

1. NATURALIST INTELLIGENCE ("NATURE SMART")

This intelligence designates the human ability to discriminate among living things (plants, animals) as well as sensitivity to other features of the natural world (clouds, rock configurations). This ability was clearly of value in our evolutionary past as hunters, gatherers, and farmers; it continues to be central in such roles as botanist or chef. It is also speculated that much of our consumer society exploits the naturalist intelligences, which can be mobilized in the discrimination among cars, sneakers, kinds of makeup, and the like.

2. MUSICAL INTELLIGENCE ("MUSICAL SMART")

Musical intelligence is the capacity to discern pitch, rhythm, timbre, and tone. This intelligence enables us to recognise, create, reproduce, and reflect on music, as demonstrated by composers, conductors, musicians, vocalist, and sensitive listeners. Interestingly, there is often an affective connection between music and the emotions; and mathematical and musical intelligences may share common thinking processes. Young adults with this kind of intelligence are usually singing or drumming to themselves. They are usually quite aware of sounds others may miss.

3. LOGICAL-MATHEMATICAL INTELLIGENCE ("NUMBER/REASONING SMART")

Logical-mathematical intelligence is the ability to calculate, quantify, consider propositions and hypotheses, and carry out complete mathematical operations. It enables us to perceive relationships and connections and to use abstract, symbolic thought; sequential reasoning skills; and inductive and deductive thinking patterns. Logical intelligence is usually well developed in mathematicians, scientists, and detectives. Young adults with lots of logical intelligence are interested in patterns, categories, and relationships. They are drawn to arithmetic problems, strategy games and experiments.

4. EXISTENTIAL INTELLIGENCE

Sensitivity and capacity to tackle deep questions about human existence, such as the meaning of life,

why do we die, and how did we get here.

5. INTERPERSONAL INTELLIGENCE ("PEOPLE SMART")

Interpersonal intelligence is the ability to understand and interact effectively with others. It involves effective verbal and nonverbal communication, the ability to note distinctions among others, sensitivity to the moods and temperaments of others, and the ability to entertain multiple perspectives. Teachers, social workers, actors/public figures and politicians exhibit interpersonal intelligence. Young adults with this kind of intelligence are leaders amongst their peers, are good at communicating, and seem to understand others' feelings and motives.

6. BODILY-KINAESTHETIC INTELLIGENCE ("BODY SMART")

Bodily kinaesthetic intelligence is the capacity to manipulate objects and use a variety of physical skills. This intelligence also involves a sense of timing and the perfection of skills through mind—body union. Athletes, dancers, surgeons, and craftspeople exhibit well-developed bodily kinaesthetic intelligence.

7. LINGUISTIC INTELLIGENCE ("WORD SMART")

Linguistic intelligence is the ability to think in words and to use language to express and appreciate complex meanings. Linguistic intelligence allows us to understand the order and meaning of words and to apply meta- linguistic skills to reflect on our use of language. Linguistic intelligence is the most widely shared human competence and is evident in poets, novelists, journalists, and effective public speakers. Young adults with this kind of intelligence enjoy writing, reading, telling stories or doing crossword puzzles.

8. INTRA-PERSONAL INTELLIGENCE ("SELF SMART")

Intra-personal intelligence is the capacity to understand oneself and one's thoughts and feelings, and to use such knowledge in planning and giving direction to one's life. Intra-personal intelligence involves not only an appreciation of the self, but also of the human condition. It is evident in psychologist, spiritual leaders, and philosophers. These young adults may be shy. They are very aware of their own feelings and are self- motivated.

9. SPATIAL INTELLIGENCE ("PICTURE SMART")

Spatial intelligence is the ability to think in three dimensions. Core capacities include mental imagery, spatial reasoning, image manipulation, graphic and artistic skills, and an active imagination. Sailors, pilots, sculptors, painters, and architects all exhibit spatial intelligence. Young adults with this kind of intelligence may be fascinated with mazes or jigsaw puzzles, or spend free time drawing or daydreaming.

HOW CAN THE MULTIPLE INTELLIGENCES THEORY GUIDE ECE TEACHERS?

While additional research is still needed to determine the best measures for assessing and supporting a range

of intelligences in schools, the theory has provided opportunities to broaden definitions of intelligence. As an ECE educator, it is useful to think about the different ways that information can be presented. However, it is critical to not classify students as being specific types of learners nor as having an innate or fixed type of intelligence.

For example, teachers can develop small quizzes with the help of online Multiple Intelligences Quiz maps aligned to Howard Gardner's multiple intelligences. This is a fun way to learn about how some of our tastes and interests can influence how we take in information. However, its results are not intended as a way to label people as naturalistic learners, musical learners, etc. Labelling creates limits, and when it comes to learning, we want to avoid restricting how we define student potential. People have much different intelligence and strength in one area does not predict weakness in another.

4.2.2 Learning Styles

Among the recently renowned learning theories and themes one of the most talked about and relevant is "learning styles". The term "learning styles" speaks to the understanding that every student learns differently. Technically, an individual's learning style refers to the preferential way in which the student absorbs processes, comprehends and retains information. For example, when learning how to build a clock, some students understand the process by following verbal instructions, while others have to physically manipulate the clock themselves. This notion of individualized learning styles has gained widespread recognition in education theory and classroom management strategy. Individual learning styles depend on cognitive, emotional and environmental factors, as well as one's prior experience. In other words: everyone's different. It is important for educators and vital for ECE teachers to understand the differences in their students' learning styles, so that they can implement the best practices strategies into their daily activities, curriculum and assessments.

NEIL FLEMING'S VARK MODEL

The most relevant and appropriate learning styles model is by Neil Fleming who has proposed VARK model expanded upon notions of sensory modalities of Visual, Auditory, Reading/Writing and Kinaesthetic.

The VARK model acknowledges that students have different approaches to how they process information, referred to as "preferred learning modes."

- Students' preferred learning modes have significant influence on their behaviour and learning
- Students' preferred learning modes should be matched with appropriate learning strategies.
- Information that is accessed through students' use of their modality preferences shows an increase in their levels of comprehension, motivation, and metacognition.

Identifying students as visual, auditory, reading/writing or kinaesthetic learners, and aligning the overall curriculum with these learning styles, will prove to be beneficial for overall classroom management, allowing students to access information in ways they are comfortable with will increase their academic confidence.

Visual: Information presented as maps, spider diagrams, charts, graphs, flow charts, labeled diagrams, and all the symbolic arrows, circles, hierarchies, and other devices that people use to represent what could have been presented in words.

Reading/Writing: Information displayed as words, text-based input and output. This includes all forms but especially manuals, reports, essays, and assignments.

Auditory/Aural: A preference for information that is heard or spoken such as lectures, group discussion, radio, email, mobile phones, speaking, web-chat, and talking things through.

Kinesthetic: A preference for gathering information through experience and practice, simulated or real, either through concrete personal experiences, examples, practice or simulation. It also includes demonstrations, simulations, videos, and movies, as well as

4.2.3 High Scope Approach

The High Scope Educational Research Foundation studies methods of early childhood education based on the methodology of the 1962 Perry Preschool study. It was founded in 1970 by psychologist David Weikart.

The Perry Preschool study has been noted for its "large effects on educational attainment, income, criminal activity, and other important life outcomes, sustained well into adulthood".

The philosophy behind High Scope is based on child development theory and research, originally drawing on the work of Jean Piaget and John Dewey. The curriculum was further developed to incorporate Lev Vygotsky's zone of proximal development and Jerome Bruner's related strategy of adult scaffolding. This method emphasizes the role of adults to support each child at their current developmental level and help them build upon it, under a model of "shared control" where activities are both child-initiated and adult-guided. The adults working with the children see themselves more as facilitators or partners than as managers or supervisors.

How to Teach

In a High Scope preschool program, teachers ignite children's interest in learning by creating an environment that encourages them to explore learning materials and interact with adults and peers. The focus is on supporting early learners as they make decisions, build academic skills, develop socially and emotionally, and become part of a classroom community.

Active learning is at the centre of the High Scope Curriculum. It's the foundation of young children gaining knowledge through their natural play and interactions with the environment, events, and other people.

Adult-Child Interaction

Teachers act as partners, working alongside children and communicating with them both verbally and nonverbally to encourage learning. Key strategies for adult-child interactions are sharing control with children, communicating as a partner with children, scaffolding children's play, using

encouragement instead of praise, and taking a problem-solving approach to supporting children in resolving conflicts.

Learning Environment

To create a predictable and active learning environment, teachers arrange and equip the classroom with diverse, open-ended materials that reflect children's home, culture, and language. The room is organized and labelled to promote independence and encourage children to carry out their intentions.

Daily Routine

A consistent framework for the day provides a balanced variety of experiences and learning opportunities. Children engage in both individual and social play, participate in small and large-group activities, assist with clean up, socialize during meals, develop self-care skills, and exercise their small and large muscles. The most important segment of the daily routine is the plan-do-review sequence, in which children make decisions about what they will do, carry out their ideas, and reflect upon their activities with adults and other children. These higher-level thinking skills are linked to the development of executive functions, which are needed to be successful in school and life.

Assessment

Ongoing child assessment is also an underlying component of the High Scope Curriculum. Objective anecdotal observations of children collected throughout children's natural play allow teachers to assess child progress and plan meaningful learning experiences.

4.2.4 Blooms Taxonomy

Bloom's taxonomy is a set of three hierarchical models used to classify educational learning objectives into levels of complexity and specificity. The three lists cover the learning objectives in cognitive, affective and psychomotor domains. The cognitive domain list has been the primary focus of most traditional education and is frequently used to structure curriculum learning objectives, assessments and activities.

The models were named after Benjamin Bloom, who chaired the committee of educators that devised the taxonomy.

a) The Cognitive Domain (knowledge-based)

In the original version of the taxonomy, the cognitive domain is broken into the following six levels of objectives. In the 2001 revised edition of Bloom's taxonomy, the levels are slightly different: Remember, Understand, Apply, Analyze, Evaluate, Create (rather than Synthesize).

Knowledge

Knowledge involves recognizing or remembering facts, terms, basic concepts, or answers without necessarily understanding what they mean. Its characteristics may include:

- Knowledge of specifics—terminology, specific facts
- Knowledge of ways and means of dealing with specifics—conventions, trends and sequences, classifications and categories, criteria, methodology

 Knowledge of the universals and abstractions in a field—principles and generalizations, theories and structures

Example: Name three common varieties of apple.

Comprehension

Comprehension involves demonstrating an understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating the main ideas.

Example: Compare the identifying characteristics of a Golden Delicious apple with a Granny Smith apple.

Application

Application involves using acquired knowledge—solving problems in new situations by applying acquired knowledge, facts, techniques and rules. Learners should be able to use prior knowledge to solve problems, identify connections and relationships and how they apply in new situations.

Example: Would apples prevent scurvy, a disease caused by a deficiency in vitamin C?

Analysis

Analysis involves examining and breaking information into component parts, determining how the parts relate to one another, identifying motives or causes, making inferences, and finding evidence to support generalizations. Its characteristics include:

- Analysis of elements
- Analysis of relationships
- Analysis of organization

Example: List four ways of serving foods made with apples and explain which ones have the highest health benefits. Provide references to support your statements.

Synthesis

Synthesis involves building a structure or pattern from diverse elements; it also refers to the act of putting parts together to form a whole. Its characteristics include:

- Production of a unique communication
- Production of a plan, or proposed set of operations
- Derivation of a set of abstract relations

Example: Convert an "unhealthy" recipe for apple pie to a "healthy" recipe by replacing your choice of ingredients. Explain the health benefits of using the ingredients you chose vs. the original ones.

Evaluation

Evaluation involves presenting and defending opinions by making judgments about information, the validity of ideas, or quality of work based on a set of criteria. Its characteristics include:

- Judgments in terms of internal evidence
- Judgments in terms of external criteria

Example: Which kinds of apples are best for baking a pie, and why?

b) The Affective Domain (emotional-based)

Skills in the affective domain describe the way people react emotionally and their ability to feel other living things' pain or joy. Affective objectives typically target the awareness and growth in attitudes, emotions and feelings.

There are five levels in the affective domain moving through the lowest-order processes to the highest.

Receiving

The lowest level; the student passively pays attention. Without this level, no learning can occur. Receiving is about the student's memory and recognition as well.

Responding

The student actively participates in the learning process, not only attends to a stimulus; the student also reacts in some way.

Valuing

The student attaches a value to an object, phenomenon, or piece of information. The student associates a value or some values to the knowledge they acquired. Organizing the student can put together different values, information, and ideas, and can accommodate them within his/her own schema; the student is comparing, relating and elaborating on what has been learned.

Characterizing

The student at this level tries to build abstract knowledge.

c) The Psychomotor Domain (action-based)

Skills in the psychomotor domain describe the ability to physically manipulate a tool or instrument like a hand or a hammer. Psychomotor objectives usually focus on change and/or development in behavior and/or skills.

Bloom and his colleagues never created subcategories for skills in the psychomotor domain, but since then other educators have created their own psychomotor taxonomies. Simpson (1972) proposed the following levels:

Perception

The ability to use sensory cues to guide motor activity: This ranges from sensory stimulation, through cue selection, to translation.

Examples: Detects non-verbal communication cues. Estimate where a ball will land after it is thrown and then moving to the correct location to catch the ball. Adjusts heat of the stove to correct temperature by smell and taste of food. Adjusts the height of the forks on a forklift by comparing where the forks are in relation to the pallet.

Key words: chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects.

Set

Readiness to act: It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person's response to different situations (sometimes called mindsets). This subdivision of psychomotor is closely related with the "responding to phenomena" subdivision of the affective domain.

Examples: Knows and acts upon a sequence of steps in a manufacturing process. Recognizes his or her abilities and limitations. Shows desire to learn a new process (motivation).

Keywords: begins, displays, explains, moves, proceeds, reacts, shows, states, volunteers.

Guided response

The early stages of learning a complex skill that includes imitation and trial and error: Adequacy of performance is achieved by practicing.

Examples: Performs a mathematical equation as demonstrated. Follows instructions to build a model. Responds to hand-signals of the instructor while learning to operate a forklift. Keywords: copies, traces, follows, reacts, reproduces, responds.

Mechanism

The intermediate stage in learning a complex skill: Learned responses have become habitual and the movements can be performed with some confidence and proficiency.

Examples: Use a personal computer. Repair a leaking tap. Drive a car.

Key words: assembles, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches.

Complex overt response

The skilful performance of motor acts that involve complex movement patterns: Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy. This category includes performing without hesitation and automatic performance. For example, players will often utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a football because they can tell by the feel of the act what the result will produce.

Examples: Manoeuvres a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano.

Key words: assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. (Note: The key words are the same as in mechanism, but will have adverbs or adjectives that indicate that the performance is quicker, better, more accurate, etc.)

Adaptation

Skills are well developed and the individual can modify movement patterns to fit special requirements.

Examples: Responds effectively to unexpected experiences. Modifies instruction to meet the needs of the learners. Performs a task with a machine that was not originally intended for that purpose (the machine is not damaged and there is no danger in performing the new task).

Key words: adapts, alters, changes, rearranges, reorganizes, revises, varies.

Origination

Creating new movement patterns to fit a particular situation or specific problem: Learning outcomes

emphasize creativity based upon highly developed skills.

Examples: Constructs a new set or pattern of movements organized around a novel concept or theory. Develops a new and comprehensive training program. Creates a new gymnastic routine.

Key words: arranges, builds, combines, composes, constructs, creates, designs, initiates, makes, originates.

GLOSSARY

- 1. Andragogy: Theory of adult learning.
- 2. Assessment: The term "assessment" refers to any process of obtaining information that is used to make educational decisions about students, to give feedback to the student about his or her progress, strengths and weakness, to judge teaching effectiveness and curriculum adequacy and to inform policy.
- 3. Adapted Assessment: A process of modifying testing task and/or other testing conditions in order to cater for individual needs of child with disabilities/ special needs.
- 4. Curriculum: A plan of instruction that details what students are to know, how they are to learn it, what the teacher's role is, and the context in which learning and teaching will take place.
- 5. Curriculum Accommodation In curriculum accommodation the child is facilitated to engage in learning without changing the learning outcomes. Such accommodation may include changing mode of communication, time to complete a task or physical conditions that may hinder his participation in learning.
- 6. Diversity: The state of being diverse, having variety. Individual are differences of people, including, but not limited to differences in: intelligence, learning styles, academic and/or social ability, culture, ethnicity, socio-economic status, gender, religion, sexual orientation, value systems.
- 7. Facilitator: A role for classroom teachers that allows students to take a more active role in learning. Teachers assist students in making connections between classroom instruction and students' own knowledge and experiences by encouraging students to create new solutions, by challenging their assumptions, and by asking probing questions.
- 8. Fine Motor skills: Fine motor skills can be defined as small muscle movements, those that occur in the finger, in coordination with the eyes. Teaching fine motor skills is similar is similar to teaching other skills because the instructor must always try to be patient and understanding. Fine motor skills do not develop over night, but with time and practice.
- 9. Formative Assessment: The term "formative assessment" refers to frequent or on-going evaluation during courses, programmes, or learning experiences that gives an early indication of what students are learning, as well as their strengths and weaknesses. Formative assessment is often used as a diagnostic tool for students and faculty, providing information with which to make real-time improvements in instructional methods, materials, activities, techniques, and approaches. Approaches to formative assessment might include daily, weekly, or midterm projects; portfolios; journals; observations of the learning process and learning outcomes; discussion groups; performances; self-assessments; or examinations that occur during courses, when students and faculty can benefit from the information and improve.

- 10. Gross Motor skills: Gross Motor skills involve the larger muscles in the arms, legs and torso. Gross motor activities include walking, running, throwing, lifting, kicking, etc. These skills also relate to body awareness, reaction speed, balance and strength. Group's motor development gives a child the ability to move in a variety of ways, the ability to control his/her body and helps promote self- esteem.
- 11. Imagination: Thoughts or fantasies.
- 12. Inclusive Education: A system of education in which all students attend and are welcomed by their neighbourhood schools in age-appropriate, regular classes and are supported to learn, contribute and participate in all aspects of the life of the school.
- 13. Kindergarten: Friedrich Froebel (1782-1852) known as the 'father of the Kindergarten," coined the term, which literarily means a "garden of children," He believed that children learn about themselves and their environment primarily through play. Now commonly used to mean a school or class that prepares children for first grade.
- 14. Learning Styles: Learning styles are students' approaches to learning, problem solving, and processing information.
- 15. Lifestyle: A way of living, conduct, behaviour, customs, culture, habits.
- 16. Manipulative Material: Any physical object (for example, clay, blocks, string, coins) that can be handled and used to represent or model a problem situation or develop a logical concept.
- 17. Metacognition: Awareness and understanding of one's own thought processes. A child's ability to consciously and intentionally control own behaviour.
- 18. Multiple Intelligences: Traditional measurements of 'intelligence' were limited to a single quotient on the basis of performance in a broad range of test elements. On the basis of developments in cognitive psychology and neurological science, Howard Gardner (1983) redefined intelligence as the ability to create something which is valued by any culture, in nine intellectual areas which are independent and interdependent. For examples, a person can be good with language use and thinking through this mode; similarly, another person can be musically more intelligent. The implication for learning and teaching is that learning activities should cater for the whole range of intelligences or be tailored to the intelligences of specific learners.
- 19. Mystery Bag: A bag full of many small objects with different textures for students to feel the objects without looking at them, identify and name them. It acts as a great resource for sensory development and memory build up.
- 20. Open-ended, questions: Questions that have more than one right answer, or ones that can be answered in more than one way. This way of asking questions stimulates more language use, acknowledges that there can be many solutions to one problem, affirms children's ideas and

- encourages creative thinking.
- 21. Paper Mache: A malleable mixture of paper and glue, or paper, flour, and water that becomes hard when dry.
- 22. Pedagogy: The art or science of being a teacher of children. Generally refers to strategies or style of instruction.
- 23. Portfolio: A collection of various samples of a student's work throughout the school year that can include writing samples, examples of math problems, and results of science experiments.
- 24. Portfolio Assessment: An assessment process that is based on the collection of student's work, such as written assignments, drafts, artwork, and presentations, that represent competencies, exemplary work, or the student's developmental progress.
- 25. Pro-action: Creating or controlling a situation by causing something to happen rather than responding to it after it has happened.
- 26. Special Education: Special instruction provided for students with educational or physical disabilities, tailored to each student's needs and learning style.
- 27. Syllabus: A document with an outline and summary of topics to be covered in a class/grade. It is often either set out by school management or an exam board. Content covered in textbook is often taken as syllabus.
- 28. Synapses: When one neuron connects with another, it forms a connection called a synapse. When we talk about brain development, we are actually talking about the creation of synapses in a brain.
- 29. Summative Assessment: The term "summative" refers to longitudinal analysis of the learning and performance of students. Summative assessments tend to be formal and comprehensive. Such assessments may be conducted at the end of the academic year and could be compared to the results of pre-testing to determine gains and to clarify the causal connections between educational practices and student learning. They may be used for purposes of determining final grades, placement, and promotion.

ACRONYMS

ACRONYMS	
NCECE	National Curriculum for Early Childhood Education
ESR	Education Sector Reforms
ECE	Early Childhood Education
E-9	"E" stands for education and the "9" represents the following nine countries: Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan,
EFA	Education for All
SDG-4	Sustainable Development Goal For Education
ESPs	Education Sector Plans
IPEMC	Inter-Provincial Education Ministers' Conference
ELOs	Expected Learning Outcomes
CPD	Continuous Professional Development
MKO	More Knowledgeable Other

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