

**National Curriculum for
EARLY CHILDHOOD EDUCATION
2007**



**GOVERNMENT OF PAKISAN
MINISTRY OF EDUCATION
ISLAMABAD**

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Preface

The Ministry of Education (MoE), Government of Pakistan, made a commitment in the Education Sector Reforms, Action Plan (2001-2004) to initiate and gradually formalise a pre-primary, Early Childhood Education (ECE) class, in urban and rural government schools in Pakistan. This commitment is a first step towards meeting the needs of the so far neglected, "*Katchi/undakhil*" age group, who often accompany their older siblings to school.

In March 2002, the Federal MoE, Curriculum Wing, published the National ECE Curriculum to meet the challenge of providing an appropriate learning environment for young learners. Consultations with teachers, parents, heads, supervisors and education department officers, were an integral part of the development process. Modifications were made based on children's responses, and feedback from parents, teachers, heads and a wider level of stakeholders as the curriculum was successfully piloted (1998-2002) in government primary schools in Karachi and Shikarpur, Sindh.

Historically, in Pakistan, children at the pre-primary age have come to school with their older siblings, to learn the Alphabet and numbers, *surahs* and *duas* from the Quran and a few poems and rhymes. In most cases, the methodology has been, and still is, rote learning. In many private sector schools across Pakistan, the focus is still on formal learning: reading, writing and 'general knowledge'.

The National Curriculum for ECE is based on developmentally appropriate practice. It aims to foster children's overall well-being and to ensure the best possible conditions for growth and development in a natural, child-friendly environment where they can experience joy and freedom of action in an unhurried and safe atmosphere and where they can learn through play, experimentation and discovery. This curriculum promotes collaborative processes where children do not have to compete with their peers; they learn pro-social behaviours, which enable them to cooperate, share and care for others, work amicably in groups and not feel threatened by the debilitating effects of constant competition.

The National ECE Curriculum has been influenced by the High/Scope Curriculum, which is a developmentally appropriate model, based on Jean Piaget's theory of cognitive development. Great care has been taken to ensure that the active learning model in this curriculum is culturally relevant, and is firmly grounded in the Pakistani context and the needs of our society.

Since 2002, this curriculum has been implemented only in those areas of Pakistan where there was awareness of the importance of early years education and where teacher training was made available.

A thorough review of curricula from Grade K-XII has now (2006-07) been undertaken by the MoE, and as part of this process, the ECE Curriculum has been revised. The MoE is planning an implementation strategy which will hopefully benefit young children (4-5 year olds) across Pakistan.

This curriculum framework is a reference document for all ECE stakeholders, particularly teachers and has been developed to provide a national tool for guiding the implementation of early childhood education and care.

In the first section and in the appendices, it provides information on the significance of ECE, the philosophy and principles on which ECE practices are based, the meaning of holistic development, a brief introduction to Piaget's theory of cognitive development and groundbreaking research on brain development in the early years.

The second section walks the reader through the curriculum content, the Key Learning Areas and the Expected Learning Outcomes for children aged 4-5.

The third and fourth sections provide an overview to the organisation of the learning environment, the establishment of the daily routine and the assessment system. This overview will be elaborated on, in Teacher Guides, which will be written after the finalisation of this document. The learning environment, daily routine and assessment methodology are an important and integral part of the ECE Curriculum and the philosophy on which it is based.

Section Five gives guidelines to writers who will be responsible for writing the Teachers' Guide, the Teacher Educators' Guide and for those who will develop teaching-learning resources for the early years.

Young children who come to school for the first time, need an extra caring, supportive environment which has a sense of familiarity, to make the transition from home to school as 'painless' as possible. It is therefore, highly recommended that the setting and learning resources are contextualized and localized as far as possible. This will also give the children a sense of self and identity and affirmation of their traditions and culture. Nevertheless, children should also be given the opportunity to explore materials or ideas that are not from their local environment so that their imagination, sense of wonder/awe and creativity are nurtured.

Education is linked to culture and constant change in society. This factor should be taken into account in the continuous assessment of the implementation of ECE and also in the process of goal setting and achievement of the expected learning outcomes.

In this document, *she* and *he* have been used interchangeably, and in each case, refer to all children, both girls and boys.

For wider outreach and understanding, the National Curriculum for ECE will be translated into Urdu.

1. Introduction to the National ECE Curriculum

The Significance of Early Childhood Education (ECE)

It is now widely acknowledged that the effects of what happens during the pre-natal period and during the earliest months and years of a child's life can last a lifetime. This is because the kind of early care a child receives from parents, pre-school teachers and caregivers determines how a child learns and relates to school and life in general. It is during early care that a child develops all the key elements of emotional intelligence, namely confidence, curiosity, purposefulness, self-control, connectedness, the capacity to communicate and co-operativeness.

Emotional Intelligence is now considered crucial for educational success. Students who have higher levels of emotional intelligence are more likely to remain in education, whereas, those with emotional difficulties tend to drop out.

The early years are also critical for the acquisition of the concepts, skills and attitudes that lay the foundation for lifelong learning. These include the acquisition of language, perception-motor skills required for learning to read and write and basic numeracy concepts and skills.

Intervening in the earliest years helps to reduce the social and economic disparities and race and gender inequalities that divide our society. It is especially the children of our under privileged rural and urban communities who are most likely to benefit from and who most urgently need investment in early childhood development. It is through initiatives such as this, that we can begin to put an end to inter-generational cycles of poverty, disease, violence and discrimination.

By the time children reach the age of two, their brains contain as many synapses and use up as much energy as the brain of the average adult. The complexity of this development is described by scientists as a magical "dance" which lies at the very heart of every human being and his or her learning process, beginning at birth, and even before. This relatively new understanding of brain development has critical implications for society, and particularly, for educators and the way children are taught.

It is evident that it is within the crucial early years, when experience is moulding the brain, that the foundations of learning are also set. A person's ability to learn and his or her attitudes towards learning stem from their early years. A stimulating and receptive context can set a young child on the path of discovery, openness to the outside world and the capacity to integrate information. The brain is never as elastic again as it is in childhood, in terms of receptivity and vulnerability. Adults are capable of assimilating new knowledge, but can never rival the child's brain in its mastering of new skills and its discovery of learning. Early childhood experiences are the building blocks of this development and the child is architect of his or her own brain, piecing together the puzzle and reacting to the outside world.

Philosophy and Values in ECE

Every child should have the opportunity to grow up in a setting that values children, that provides conditions for 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 recognized and supported.

Children must receive appropriate nurture and education within and outside their families from birth onward if they are to develop optimally. Attention to the health, nutrition, education, and psychosocial development of children during their early years is essential for the future well-being of nations and the global community. Knowledge about human development is more substantial now than it has ever been at any time 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 values 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 four following overall principles:

- Non-discrimination
- The child's best interest
- The child's right to life and full development
- The child's views given due weight

EFA: A National Commitment

Advancing research on education and human development highlights the crucial nature of the early years and its implication for a healthy and peaceful life at later stages. The world recognized the importance and need for ECE (Early Childhood Education) by endorsing 'expansion and improvement of comprehensive early childhood care and 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 in to the main policy discourse of more than 180 countries. As a signatory to the framework, Pakistan has also made a commitment to support ECE programmes in the country.

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 (1996)

Understanding Education for All (EFA)

Education for All (EFA) is an international commitment which was launched at the World Education Conference held in Jomtien, Thailand in 1990, to bring the benefits of education to “every citizen in every society.” Partners comprised a broad coalition of national governments, civil society groups, and development agencies such as UNESCO and the World Bank. In response to the slow progress over the decade, the commitment was reaffirmed in Dakar, Senegal in April 2000 and then again in September 2000, when 189 countries and their partners adopted the EFA goals.

The six EFA goals are:

1. Expand and improve comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.
2. Ensure that by 2015 all children, particularly girls, in difficult circumstances and those belonging to ethnic minorities, have access to and complete, free and compulsory primary education of good quality.
3. Ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.
4. Achieve a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.
5. Eliminate gender disparities in primary and secondary education by 2005, and achieve gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.
6. Improve all aspects of the quality of education and ensure excellence of all, so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

To honour its commitment to the Dakar Framework for Action, Pakistan developed its own EFA National Plan of Action (NPA) in 2001. The basis for the goals stated in the National Plan of Action (2001–2015) are the six EFA goals.

One of the three main priorities of the NPA is ECE. Though some achievements have been made since the introduction of the NPA, such as, the recognition of *Katchi* as a formal class and curriculum development for ECE, a lot remains to be done for ensuring quality ECE across Pakistan.

Principles Underlying a Quality ECE Programme

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.
- 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 with an established daily routine and is not compartmentalised.

Holistic Development through Early Learning

One of the guiding principles of holistic childhood development is that it is the unfolding and the process of learning that is more important than the product. It is the approach to, and process of learning that stimulates a willingness to learn rather than the simple ingesting 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 later development and 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 school at age four, are given a quality early childhood learning environment. It is important to have a fair level of understanding about the different domains of development, so that developmentally appropriate provision 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 divided into the following major 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, drawing, cleaning rice and working with small objects. Exposure 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 in themselves.

- **Social and Moral Development:** refers to those processes where children develop relationships with their culture, with people around them and with 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. A quality ECE environment provides opportunities for children to form positive relationships with other children and with elders, and to engage in conversations about social norms and ethical issues.
- **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 having positive experiences in a quality environment is essential at this stage. Feeling important, actively taking responsibility, being listened to and cared for, are the essentials for creating a positive self-concept in children.
- **Language Development:** 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, a quality learning environment is essential to help them develop optimally. Learning to read and write the Alphabet 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.
- **Cognitive Development:** 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, 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 all the basic thinking and processing skills that they have learnt as part of growing up. Sound cognitive development enhances critical thinking and creativity in human beings. A quality 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 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 a just civil society that respects diversity of views, beliefs and faiths."

(Ministry of Education, Government of Pakistan/2006)

A Statement of Beliefs

The principles given below carry important implications for practice:

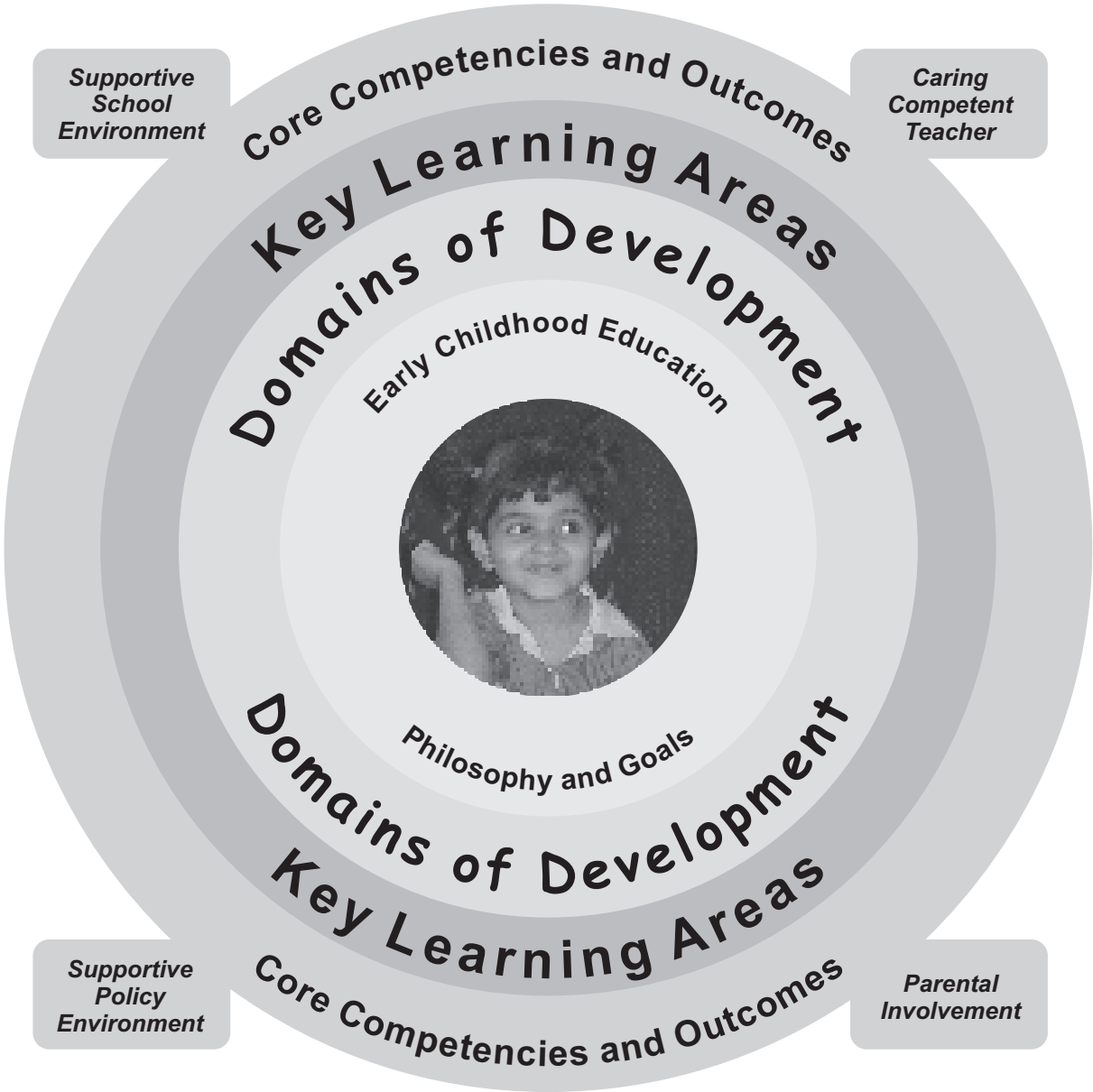
- The whole child is important; social, emotional, physical, cognitive and moral development are interrelated.
- Learning is holistic and for the young child is not compartmentalised under subject headings.
- Intrinsic motivation is valuable because it results in child-initiated learning.
- The child's sense of dignity, autonomy and self-discipline are of critical importance.
- In the early years, children learn best through active learning that is learning by doing.
- What children can do, not what they cannot do, is the starting point in children's education.
- There is potential 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.

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.
- Develop critical thinking skills.
- Nurture tolerance and respect for diversity.
- Nurture in children, a sense of identity and pride in being Pakistani.
- Provide knowledge and understanding of Islam and Islamic society.
- Develop an understanding and respect for the beliefs and practices of all other religions.
- 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.

**Key Elements of the National Curriculum for ECE
& Support for Implementation**



Summary of Key Learning Areas and Competencies

Key Learning Areas	Competencies
Personal & Social Development	<p>Competency 1: Children will develop an understanding of their likes, dislikes, strengths and emotions.</p> <p>Competency 2: Children will be willing to share and work in collaboration with their peers, teachers, family and neighbours.</p> <p>Competency 3: Children will develop an appreciation for the diversity of people around them.</p> <p>Competency 4: Children will be aware of their own religion and basic religious values and practices.</p> <p>Competency 5: Children will demonstrate a sense of responsibility for self and others in class, school, home and neighbourhoods.</p> <p>Competency 6: Children will learn about and appreciate heritage and culture of their own family, their peers and neighbours.</p>
Language and Literacy	<p>Competency 1: Children will engage in conversation with others and talk confidently about matters of immediate and personal interest.</p> <p>Competency 2: Children will describe objects, events and their plans for the day.</p> <p>Competency 3: Children will enjoy listening to stories and poems and make up their own stories and rhymes.</p> <p>Competency 4: Children will enjoy books and handle them carefully.</p> <p>Competency 5: Children will understand how books are organized.</p> <p>Competency 6: Children will recognise familiar words in simple texts.</p> <p>Competency 7: Children will use pictures, symbols and familiar letters and words to communicate meaning, showing awareness of some of the different purposes of writing.</p>
Basic Mathematical Concepts	<p>Competency 1: Children will demonstrate an understanding of the different attributes of objects, such as, colour, size, weight and texture, and match, sequence and classify objects based on one/two attributes. They will also engage in pattern seeking and pattern making using different attributes of objects.</p> <p>Competency 2: Children will develop a basic understanding of quantity, counting from 0 - 9 and of simple number operations.</p> <p>Competency 3: Children will recognize basic geometrical shapes and the position of objects in relation with each other.</p> <p>Competency 4: Children will develop an understanding of measurement.</p>

The World Around Us	<p>Competency 1: Children will develop an understanding of how families are important.</p> <p>Competency 2: Children will develop an understanding of the people and places around them.</p> <p>Competency 3: Children will recognize plants and animals in their surrounding area and explore their basic features and habitat.</p> <p>Competency 4: Children will observe the weather and develop an understanding of the seasons and their significance to people.</p> <p>Competency 5: Children will develop a caring attitude towards the environment.</p>
Health Hygiene and Safety	<p>Competency 1: Children will develop a sense of balance, agility and coordination.</p> <p>Competency 2: Children will have increased hand-eye coordination and the ability to handle tools and materials effectively.</p> <p>Competency 3: Children will develop an understanding of the importance of safe, hygienic practices.</p>
Creative Arts	<p>Competency 1: Children will express themselves through the use of drawing and colours.</p> <p>Competency 2: Children will work with a variety of low cost and waste material to create craft projects of their choice.</p> <p>Competency 3: Children will experiment with a variety of materials to depict their observations and imagination in the form of models/sculptures.</p> <p>Competency 4: Children will learn the skills for collage work and printing and use these in a variety of ways to create their own art pieces and patterns.</p> <p>Competency 5: Children will observe, practice and explore various techniques of folding, cutting, tearing and weaving paper to make objects and patterns.</p> <p>Competency 6: Children will listen to, identify and appreciate a variety of sound patterns, rhythms and rhymes as a form of expression.</p> <p>Competency 7: Children will participate with increasing confidence in a variety of dramatic play activities to express themselves.</p>

2. Key Learning Areas, Competencies and Expected Learning Outcomes for ECE

An Introduction to the Key Learning Areas and Competencies

The Key Learning Areas outlined in this curriculum contain competencies, or learning goals which have been outlined for children at the pre-primary stage 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 continued support for achieving all or some of the outcomes after entering Grade 1. Care has been taken to ensure that there is an overlap of Learning Outcomes between the ECE and Grade 1 levels, so that children get opportunities for revision and reinforcement. *Children with special educational needs will continue to need varied kinds of support throughout school.*

This curriculum for the early years has been divided into the following Key Learning Areas. Each Key Learning Area has between three to seven competencies or learning goals. A summary of Key Learning Areas and competencies is given on pages 10-11.

Personal and Social Development

These outcomes focus on children learning how to work, play, co-operate with others and function in a group beyond the family. They cover important aspects of personal, social, moral and spiritual development, including the development of personal values and an understanding of self and of others. They should be interpreted in the context of the values agreed to by the adults, including the parents.

Language and Literacy

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

Basic Mathematical Concepts

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

The World Around us

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

Health Hygiene and Safety

These outcomes focus on children's developing physical control, mobility, awareness of space and manipulative skills in indoor and outdoor environments. They include establishing positive attitudes towards a healthy and active way of life.

Creative Arts

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

Expected Learning Outcomes for ECE

Children learn at their own individual pace according to their interest levels and learning styles. At the young age of 4-5 years, children should not be forced to learn because this will impede their learning and cognitive development.

The National 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 the one year that they are in the Nursery/katchi grade. Therefore, the outcomes for the pre-primary/Nursery/katchi 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 product of 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 develop the attitudes, knowledge and skills to ... ” It is important to reiterate that in the early years, children learn and develop at their own pace. It is very likely that many children may not achieve *all* the learning 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 Grades 1-12. As long as the teacher is providing continuous and varied opportunities for hands-on learning and children are engaging enthusiastically, teachers, supervisors and parents should not be overly concerned.

Examples and Ideas for Implementation

An additional column containing examples and ideas for implementation, has been added to this curriculum to provide some suggestions for implementation, to teachers, writers of Teachers’ Guides and to those who will develop teaching-learning resources for this age group.

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 localise the ideas to meet the needs of the children’s context.

Personal and Social Development

<p>Competency 1: Children will develop an understanding of their likes, dislikes, strengths and emotions.</p>	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Share what they like about themselves and what they like about a friend. Identify different occasions when they feel happy, sad, loved, angry, excited. Choose an activity/work that they enjoy doing the most in class. Express their likes and dislikes and talk about their strengths/what they are good at doing. 	<p><i>This competency focuses on developing children's self confidence and an understanding of their own lifestyles and preferences.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Ask “why” questions so that children can think about their responses. For example, if a child says I want to be a pilot, teachers should also ask her why she wants to become a pilot – what does she like about pilots? Be patient with children so that they have adequate time to think and then respond. They should never be rushed into answering.
<p>Competency 2: Children will be willing to share and work in collaboration with their peers, teachers, family and neighbours.</p>	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Show an understanding for the feelings of their peers. Cooperate with peers, teachers and community members. Work and share materials amicably in groups. 	<p><i>This competency focuses on developing children's relationship with the people they interact with on a daily basis.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Encourage children to help each other in carrying out small tasks, like handling and using class materials such as, books, blocks and beads. Help children to work and play amicably by being friendly and respectful towards each other.

	<ul style="list-style-type: none"> • Help children take turns during classroom discussions, and be attentive when peers or teachers are sharing their views and experiences. • Be available to support children resolve conflicts, using a problem solving approach.
Competency 3: Children will develop an appreciation for the diversity of people around them.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <p>a. Cooperate with and be sensitive to, peers, elders, and neighbours who may have learning or physical disabilities.</p> <p>b. Respect the feelings and views of others.</p>	<p><i>This competency focuses on making children pluralistic in their attitudes and thinking i.e. they consider everyone as equal and not discriminate against anyone on the basis of their identity.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Tell/read stories, recite poems or sing songs about people from various countries and cultures and about people with disabilities. Discuss similarities and differences between themselves and people in their environment and talk about everyone’s strengths and unique qualities. • Encourage children to interact openly and sensitively, with all their peers and listen to what others are saying respectfully, without interrupting them.
Competency 4: Children will be aware of their own religion and basic religious values and practices.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <p>a. Know that religion of most people of Pakistan is Islam</p> <p>b. Know that other religions exist and people belonging to other religions also live in Pakistan</p>	<p><i>This competency focuses on developing children’s concept of religion and respect for all religions.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Promote the values of tolerance and respect for everyone. Young children should be made confident that God loves them. He has

<p>c. Name their own religion.</p> <p>d. Know that love, care, peace and respect for others are common values across religions.</p> <p>e. Muslim children will:</p> <ul style="list-style-type: none"> • Know Allah is the Sole Creator and Prophet Muhammad (SAWS) is His last and most beloved Prophet. • Know that Islam stands for peace and harmony. • Recite the first Kalma. • Recite small duas and know why they should be recited. <p>f. Children belonging to other religions learn about and practice their own religion.</p>	<p>created them with love and wants them to love their fellow-beings. Notions of ‘fear’ or ‘punishment’ should not be inculcated at this young age.</p> <ul style="list-style-type: none"> • Recite small <i>duas</i> so that Muslim children are introduced to the ethics of Islamic living. Help children understand the significance of <i>duas</i>. For example, why we should recite prayers before eating or sleeping – what do they mean and how they communicate our gratefulness to Allah. • Encourage children belonging to other religions to recite their own prayers and share their beliefs.
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Competency 5: Children will demonstrate a sense of responsibility for self and others in class, school, home and neighbourhoods.

Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <p>a. Manage small tasks leading to self reliance.</p> <p>b. Take care of their own belongings and put classroom materials back in the right place after use.</p> <p>c. Identify and implement small tasks leading to a sense of responsibility for school and public property.</p> <p>d. Recognise that water, food, electricity and paper are very important, useful resources, that have to be used responsibly.</p>	<p><i>This competency focuses on developing children’s confidence and self-reliance, and on developing an understanding and appreciation for the responsible use of scarce resources.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Encourage a sense of care and responsibility in children. For example, turning pages of books with care; helping in setting the snacks carefully; returning materials to the designated place after use. • Stand back and let them resolve little problems independently, until they ask for help. Encourage them to help other children and adults in the classroom and neighbourhood.

	<ul style="list-style-type: none"> • Discuss respect for others' property and give them responsibility for: <ul style="list-style-type: none"> • cleaning up after snack time. • using materials with care, keeping tables, shelves and walls clean. • using waste bins for throwing litter and wrappers, after checking for 'junk' that can be recycled. • taking pride in a clean, green environment. • returning things that do not belong to them, to an adult. • switching off fans and lights when leaving the room. • Talk about the importance of water, food, electricity and paper. Discuss in simple terms where they come from; how we need these in our daily lives and how these can be depleted and 'hurt' the earth if we don't use them carefully.
<p>Competency 6: Children will learn about and appreciate heritage and culture of their own family, their peers and neighbours.</p>	
<p>Expected Learning Outcomes</p>	<p>Examples and Ideas for Implementation</p>
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Talk about the cultural aspects of their lives, such as, clothing, lifestyle, food, traditions and customs. b. Talk about the spaces in their culture for sharing family and community gatherings. c. Narrate stories heard from elders. d. Play local games. e. Develop basic knowledge about Pakistani culture. (i.e. know about the national game, flower, folk dances, etc.) 	<p><i>This competency focuses on developing children's understanding of life, cultures and history. This competency aims to develop children's appreciation of culture that is part of their daily lives.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Initiate discussions about cultural events which the children experience directly. • Talk about their cultural spaces, such as, <i>autaq, katcheri, jirgah, majlis</i> depending on the local culture. Discuss how some spaces are used to solve problems and to meet with neighbours. Help them observe and identify the beautiful and unique patterns in old buildings and cultural spaces. • Encourage them to talk about and play their favourite, local games.

Language and Literacy

Listening and Speaking	
Competency 1: Children will engage in conversation with others and talk confidently about matters of immediate and personal interest.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Listen attentively in small and large groups, as peers and teachers share their news about everyday events and special occasions. b. Talk about their experiences and feelings with peers and adults. c. Show respect for a variety of ideas and beliefs by listening and responding appropriately. d. Wait for their turn to speak and not interrupt when others are talking. e. Respond to and verbally express a range of feelings, such as, joy or sorrow, wonder and anger. f. Initiate conversation with peers and adults. g. Understand and follow instructions. h. Use correct pronunciation. i. Draw on words from an enhanced vocabulary. 	<p><i>All the following competencies require that teachers start the Language and Literacy programme in children’s Mother Tongue, based on local culture and gradually add Urdu and then English (wherever applicable), and also references from the wider culture. Children need the confidence that their mother tongue is valued.</i></p> <p><i>The primary function of Competency 1 is to enhance children’s confidence and ability to communicate with fluency.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Engage children in conversation by talking about special cultural and national events which are meaningful for them. Encourage them to talk about the previous day’s events at school and at home. Initiate the conversation by sharing own news, experiences and feelings, taking care that these are appropriate for the children. Following the weekend, ask leading questions or comments such as, “I wonder if anyone went to the park yesterday ...” or “I can see that Ayesha has <i>mehendi</i> on her hands. Do you think someone in her family is getting married?” “It looks like Ali has had a haircut.” • Establish an environment where children feel free to talk, by placing self at children’s physical level. Be available to converse with all the children through the day. Refer one child’s questions and problems to another. • Listen actively to children and wait for them to

	<p>complete what they are saying. Be patient with their hesitation and at the same time help other children to listen and wait, by holding up a hand, and nodding, assuring them that they will get a turn. Display appropriate facial expressions and body language to communicate respect, joy, sorrow or wonder.</p> <ul style="list-style-type: none"> • Play games where they have to understand and follow simple instructions. <p>For example, “Ayesha, touch your head and then your nose and then clap your hands.”</p> <ul style="list-style-type: none"> • Repeat the correct pronunciation of word that children may have mispronounced, without telling them that they are wrong. • Help them enhance their vocabulary, by encouraging them to use new words which have been introduced through discussions and stories. Action poems and songs are a good way to learn new words.
<p>Competency 2: Children will describe objects, events and their plans for the day.</p>	
<p>Expected Learning Outcomes</p>	<p>Examples and Ideas for Implementation</p>
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Name things in their environment. Describe and talk about pictures. Share their plans for the day. Express their ideas with clarity. Extend their ideas or accounts by providing some detail about their topic. 	<p><i>This competency is designed to help children to process and comprehend spoken language and to communicate their thoughts, needs, interests and feelings to others.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Take children for a walk around the school and play a game of naming objects that they see in the environment. Back in the classroom, encourage children to try and recall what they had seen in the environment. • Talk about and discuss pictures from children’s story books, or pictures that have been cut out from old magazines or newspapers.

	<ul style="list-style-type: none"> • Encourage children to share which <i>gosha</i> they would like to work in, and what they plan to do there during work time. Be patient if children are unable at first, to describe their plans. Help them to communicate by questioning them gently. • Throughout the Daily Routine, and especially when children move around implementing their plans in the <i>gosha</i> of their choice, help them to express their ideas with clarity by asking open-ended questions to extend their thinking.
<p>Competency 3: Children will enjoy listening to stories and poems and make up their own stories and rhymes.</p>	
<p>Expected Learning Outcomes</p>	<p>Examples and Ideas for Implementation</p>
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Respond to stories, songs and rhymes by joining in verbally or with actions as appropriate. Recognize and differentiate between sounds in the environment. Appreciate the concept of word rhythms and syllables. 	<p><i>This competency focuses on enjoying stories, poems and songs and on making up their own stories and taking part in role play with confidence.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Tell children traditional stories and tales which have cultural relevance for them. Occasionally, use simple props such as puppets and masks and local toys made by the local <i>kumhar</i>. • Sit with the children on the floor, on a <i>darri</i> so that you are closer and at the same physical level as them. • Tell stories without props too, so that children can rely on and build their imagination. • Maintain their interest in stories and poems by being animated and telling or reading a story with pleasure. Pause for children's comments or questions and enjoy their responses.

	<ul style="list-style-type: none"> • Sing songs and recite poems in a similar manner with actions and encourage children to role play. • Play games where children have to shut their eyes and listen for the different sounds in the environment. For example, the sound of a bird, a cat or dog, a rickshaw or a bus. At other times, make sounds such as clapping, tapping or stamping your foot and ask them to identify the sound. • Listen to the children as they work and play, and make up chants and rhymes along with them. Recite rhyming words, even if all of them don't make sense and laugh at these together. Develop a playful interest in repetitive sounds and words, aspects of language such as rhythm, rhyme, and alliteration, and an enjoyment of nonsense stories and rhymes.
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Reading

Competency 4: Children will enjoy books and handle them carefully.

Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Enjoy looking through books. Hold, open and turn pages of a book with care. Predict what comes next in stories. Repeat simple repetitive sequences in traditional and popular children's stories. Tell a simple story by looking at pictures. Retell a favourite story in correct sequence. 	<p><i>This competency focuses on pre-reading skills. Children will enjoy books and handle them carefully.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Hold up books for children when reading a story and show them the pictures. Show enjoyment and respect of books through actions and facial expressions. Share own feelings about books during Greeting Circle Time. Encourage the children to tell a story by looking at the pictures. If they make up their own stories, just accept these. However, if they are retelling a favourite story, and they miss important steps in the sequence, help them to remember by questioning gently and appealing to their sense of reason.

	<ul style="list-style-type: none"> • Establish a library area in the classroom. Encourage children to bring books from home (where possible) to keep in the library area for a few days. • Show children how to hold and open a book without spoiling or tearing it. Show them also how to turn the pages with care. Learning to respect other people's property is an important part of learning about right and wrong. • Build up a sense of anticipation and give children the opportunity to guess what will happen next in a story. Also wait for and encourage them to join in when a sentence is repeated in a familiar story.
<p>Competency 5: Children will understand how books are organized.</p>	
<p>Expected Learning Outcomes</p>	<p>Examples and Ideas for Implementation</p>
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Differentiate between the parts of a book. Know that some books tell stories and others give information. Know that Urdu is read from right to left and top to bottom. Know that English is read from left to right and top to bottom. 	<p><i>This competency will help children understand the different parts/sections of a book, the different kinds of books and the orientation of different languages.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Tell them in a conversational tone, what the different parts of a book are, such as, the cover, the end, the spine. When reading out a story, show them, without expecting them to understand or remember straight away, where a sentence begins and which direction we read in and how we read from top to bottom. • Talk to them about different kinds of books, that some tell us stories and others tell us about so many different things, such as, animals, plants, buildings, history.

Competency 6: Children will recognise familiar words in simple texts.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Understand that words and pictures carry meaning. Identify and name the characters in a story. Recognize their names in print. Begin to recognize letters of the Alphabet. Identify sight words that are meaningful for them. Identify letter sounds through words that have personal meaning for them. Associate initial letter sounds with names of objects in their classroom environment. Think of a variety of objects beginning with a single letter of the Alphabet. 	<p><i>This competency will help children recognize familiar words in simple texts. They will begin to associate sounds with letters of the alphabet and also to recognize letters of the alphabet by shape and sound. They will begin to recognize their own names and other familiar, often repeated words.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Provide a print rich environment. Children learn to read by trying to make sense of the print they come across, so support their efforts by labelling objects and areas in the classroom. Place plenty of books in the learning environment for them to look through, and to tell each other stories. • Create symbols for their names and draw these along with the written name on a label which can be pinned (safely) on their clothes. Let them find their own name tags each day when they arrive. When they are confident and can identify their names easily, remove the symbol and leave only their name on the name tag. • Prepare little cards with letters of the Alphabet (remember to move from mother tongue to Urdu to English) and play matching games. Match the cards to objects and pictures which begin with a particular letter. Say the initial letter sounds of objects and match these to sounds the letters represent. Begin with words that are personally meaningful for the child like, children's own name, names of family members, pets, favourite food and places. Keep an ear open for children's interests and use words that are important for them to help them "read" letters of the Alphabet and sight words.

Writing	
Competency 7: Children will use pictures, symbols and familiar letters and words to communicate meaning, showing awareness of some of the different purposes of writing.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Make marks and scribble to communicate meaning. b. Draw pictures to communicate meaning. c. Hold a pencil correctly. d. Colour a simple picture keeping within a designated space. e. Trace, draw and colour different shapes, such as circles, squares, triangles and rectangles. f. Trace and draw vertical, horizontal and wavy lines and simple patterns made up of lines, circles, semi circles and other simple shapes. g. Trace and copy the letters of the Urdu Alphabet. h. Trace and copy the letters of the English Alphabet. i. Write their own names in Urdu. j. Write their own names in English with appropriate use of upper and lower case letters. 	<p><i>This competency will help children use pictures, symbols and familiar letters and words to communicate meaning, showing awareness of some of the different purposes of writing. It will also focus on learning the skills they will need in writing legibly.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Provide a variety of writing and drawing materials to give children the opportunity to experiment with making marks on paper. Accept children’s scribbling/drawing as their first attempts at writing. Look carefully to find letters and images emerging from their scribbling. Gently, help them to hold their writing tools correctly. Use computers with children’s software where possible. • Talk to them about their drawing and write a word or sentence, exactly as they say it, and then let them trace over it if they want to. They may return to it another day and “read” what was written. This will help them see that pictures communicate meaning. • Provide a tray with sand in it. Encourage children to draw lines and patterns in the sand and then later on paper. They can trace or copy lines and patterns that have been made for them. • Give them plenty of opportunities to colour pictures, trace, draw and colour simple shapes which have been introduced earlier. Let them trace and copy letters of the Alphabet (mother tongue, Urdu, English) and their own names.

Basic Mathematical Concepts

<p>Competency 1: Children will demonstrate an understanding of the different attributes of objects, such as, colour, size, weight and texture, and match, sequence and classify objects based on one/two attributes. They will also engage in pattern seeking and pattern making using different attributes of objects.</p>	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Recognize, name and differentiate between colours. Differentiate between the size, weight, length, width and texture of objects. Arrange objects and later pictures, according to their size/length, going from smallest to biggest, biggest to smallest, shortest to longest and longest to shortest. Arrange objects and later pictures, according to their weight and width, going from lightest to heaviest, heaviest to lightest and narrowest to widest and widest to narrowest. Match one object with another based on similar attributes. Compare various objects and identify those that can be grouped together. Sort and group objects (classify) based on a single attribute (for e.g. colour, size or weight) and later based on two attributes (for e.g. colour and size or colour and weight). Observe, identify and extend patterns developed with various concrete materials. Observe, identify and extend the given picture/symbol patterns. 	<p><i>This competency requires that children use mathematical language as they explore the similarities and differences between the attributes of objects. It focuses on enhancing children's thinking skills through pattern identification and through building relationships.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Give children the freedom to explore patterns and relationships. Give them the opportunity to come up with different answers or solutions and accept what they come up with. Design various interesting activities using simple everyday material to help children build their skills. A few ideas are given below: <ul style="list-style-type: none"> use concrete material such as, beads, blocks, buttons. Help them recognize and describe the attributes of these objects. ask children to compare the given objects and identify similarities and differences between them. Encourage them to group various objects and explain the reasons for doing so. use a variety of material to help children build their classification skills. For example, give children red and blue beads of the same size and ask them to sort these in two groups. Later, give them red and blue beads in small and large sizes and ask them to sort these. In the second case, children may come up with different ideas. They can make four groups (small red beads, large red beads, small blue beads and big blue beads), they may make only two groups (red beads and blue beads or small beads and big beads). Encourage children to consider various attributes while sorting.

<p>j. Create own patterns using concrete material and pictures and explain them.</p> <p>k. Observe and identify the 'odd one out' from the given set of concrete material or pictures and explain the answer.</p>	<ul style="list-style-type: none"> - use the concept of sorting and sequencing in daily class activities, such as, making a queue of children in the order of height, dividing the children for various group activities, organising class material in boxes and arranging books in various piles. - use low cost materials, such as, beads, peanut shells, ice cream sticks and pebbles for pattern seeking exercises. Start by showing a few patterns to children, then engage them in extending the given patterns and developing their own patterns using concrete material and pictures. - engage children in observing the environment and identifying various patterns. For example, patterns on floor tiles (one red tile and one blue tile) patterns of lines and flowers on various clothes and patterns of day and night.
<p>Competency 2: Children will develop a basic understanding of quantity, counting from 0-9 and of simple number operations.</p>	
<p>Expected Learning Outcomes</p>	<p>Examples and Ideas for Implementation</p>
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <p>a. Differentiate between <u>some</u> and <u>all</u> from a given set of objects, and understand that <u>some</u> is less than <u>all</u>.</p> <p>b. Understand one to one correspondence.</p> <p>c. Count correctly from 1-9.</p> <p>d. Use numbers to represent quantities in daily life interaction.</p> <p>e. Compare quantities of objects in different sets and describe which sets are equal, which have more objects, and which have less objects than another.</p> <p>f. Begin to develop an understanding of the concept of zero.</p>	<p><i>This competency focuses on nurturing children's emerging number concepts, through concrete experiences. It aims to develop an understanding of basic numbers and simple mathematical operations.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Engage children in hands-on activities to help them build an understanding of numbers and their numeral representation. • Provide manipulatives, such as, counting bars, small blocks, balls, spoons, ice cream sticks and engage children in: sorting the given objects in groups; counting the number of objects in each group; comparing the quantities in the various groups; and identifying which one has more objects than the other, which has less and which two groups have equal numbers. • Provide daily opportunities to the children to count and recount objects in the environment.

<p>g. Identify and write correct numerals to represent numbers from 0-9.</p> <p>h. Sequence numerals correctly from 0-9.</p> <p>i. Identify which numeral represents a bigger quantity.</p> <p>j. Identify ordinal numbers up to nine.</p> <p>k. Add concrete objects in two given sets.</p> <p>l. Identify the signs of addition and equal to.</p> <p>m. Substitute numerals for concrete objects during the process of addition.</p> <p>n. Use mathematical language, such as, <u>add</u> and <u>makes</u> to describe the process of addition.</p> <p>o. Use the concept of addition in their daily lives.</p> <p>p. Remove the identified number of objects from a given set, and tell how many objects are left in the set.</p> <p>q. Identify the sign of subtraction.</p> <p>r. Substitute numerals for concrete objects during the process of subtraction.</p> <p>s. Use the concept of subtraction in their daily lives.</p>	<ul style="list-style-type: none"> • Encourage children to compare relationships between quantities in their daily life. Ask questions to stimulate thinking. For example: <ul style="list-style-type: none"> - are there more girls or more boys in our class? - are there more brown objects or black objects in our class? - do more children in our class like bananas or do more like apples? • Give two sets of material (such as, cups and spoons) to children, and ask them to arrange them in one to one correspondence. • Introduce numeral representation once children have developed a good sense of numbers and their values. For example, count objects and show its numeral to children on a card or on the board; give number cards (cards on which different numerals from 1-9 are written) and various objects to children and engage them in: sorting the objects in groups; counting the objects in each group; and placing the right number card along side each group. <ul style="list-style-type: none"> - Give children picture cards and number cards and engage them in counting the number of pictures in each card, and matching the picture cards with their corresponding number cards. • Engage children in various activities using concrete material to build the concept of addition and subtraction. • Provide opportunities to use addition and subtraction in daily life. For example, Ali has two books. Asma has three books. How many books does that make? Saima had four biscuits. She ate two. Now, how many biscuits does she have? • Use mathematical language to describe number operations and encourage children to do the same.
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Competency 3: Children will recognize basic geometrical shapes and the position of objects in relation to each other.

Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Recognise, name and draw two dimensional shapes, such as, circle, oval, square, rectangle, triangle. Identify the shapes in their environment. Draw objects of their own choice using various shapes. Understand and describe the position and order of objects using position words, such as, in front of, behind, up, down, under, inside, outside, between and next to. 	<p><i>This competency will help children to develop a sense of shape and space. It emphasizes the provision of hands-on experience to understand the position of objects in space.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Provide several sets of shape cards in the same colour, and ask children to sort these cards using their own criteria; describe their sorting and talk about the criteria they used; and name each shape. Children may use various names, and at this stage, it needs to be accepted. Introduce the shapes and their proper names. Involve children in identifying and talking about similarities and differences among the shapes. Take children on a 'shape walk' looking for geometric shapes in the environment. Provide experiences in making shapes with natural and recycled materials, such as, clay, string and ice cream sticks. Introduce and use various position words to describe the position of objects in daily activities. For example, Akram is putting the ball <u>on</u> the table; Salma has put the pencil <u>next to</u> her book; Zehra is standing <u>between</u> Ali and Asma. Engage children in various games in which they give instructions to each other using position words. Involve children in describing pictures using position words.

Competency 4: Children will develop an understanding of measurement.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Describe and compare objects using length, weight and temperature as measurement attributes. Observe various objects and estimate their weight and length. Verify their estimations using simple tools. Understand informal time units and know that clocks and calendars mark the passage of time. Sequence events in time and anticipate events. 	<p><i>This competency emphasizes developing basic ideas about measurement and measuring attributes through hands-on experiences.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Provide concrete material to children such as, long and short pencils, strips of paper or string, heavy and light blocks, toys and pebbles and engage them in comparing and describing the relationship between these objects, using words such as, <u>longer</u> or <u>shorter than</u>, <u>heavier</u> or <u>lighter than</u>. To lead children towards estimating the measurements, show them a few objects and ask questions, such as, which one seems to be the heaviest/lightest, longest/shortest? To verify their estimations, use simple tools such as, their own hand span, a simple balance or a rope. Using a calendar, indicate special days, months, birthdays and use terms such as, yesterday, today or tomorrow. Use a clock and the daily routine to anticipate what will happen next. Anticipate how many months before <i>Ramazán and Eid</i>, summer holidays, going to the next class, and other events that are of relevance to the children.

The World Around Us

Competency 1: Children will develop an understanding of how families are important.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Talk about their family members and each one's role and importance to the well-being of the family. Collect information about their family members. Identify various ways of showing love and respect for family members. 	<p><i>This competency is designed to help children recognize the importance of family relationships and to learn more about their own families and those of their peers.</i></p> <p><i>The key processes children can be engaged in, are the collection and sharing of information about their family.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Talk to children about their family members and about their roles and responsibilities. This can be initiated by choosing stories based on family relationships. Help children think of a few questions they could ask their family members, in order to learn more about them, such as, their likes and dislikes, hobbies and favourite food. Children can talk to their family members at home, to their family members away from home by telephone or e-mail, and then share the collected information with their peers in small groups in class. Children can also bring photographs of their family members to show to their friends. Help children think of ways in which they can show their family that they love and respect them.

Competency 2: Children will develop an understanding of the people and places around them.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Talk about various community members and explore their roles. Recognise places such as, a library, clinic, cyber café, airport, train station, and talk about their purpose and importance. Talk about food, water and clothes. Discuss where they come from, who brings them to markets and homes and how they get there. Identify and explore various means of communication and transportation. 	<p><i>This competency focuses on exploration and enhanced understanding of the environment. It also focuses on helping children realize the importance of community structures and appreciating the role of various people and their services to the community.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Help children identify and learn more about community members, who are most relevant to their context. These may be the people who provide services to others such as, lady health visitors, carpenters, cobblers, milkmen, sweepers, doctors, drivers, tailors. Help children identify and learn more about community places which are of significance in their local community. Children in different schools may explore different places. Take children on field trips where they can observe the spaces and talk to the people there. Invite various community members to class to talk about their work. Encourage children to ask them questions and participate in discussions with them. Pick a few necessities of daily life and engage children in reflecting and talking about their sources. For example, teachers can choose 'Bread' as a topic and ask questions to help children trace the path to its source: <ul style="list-style-type: none"> where do you think we get bread from? I wonder where bakers get bread from? what do you think bread is made from? where does flour come from?

	<ul style="list-style-type: none"> • Organize interesting exploration activities to help children learn about communication and transport. Engage them in observing various modes of transportation. Ask them to compare these, and sort them in groups using their own criteria. Discuss with them their reasons for why they sorted as they did. • Give children a choice of drawing or making clay models of imaginary forms of transport, for example, a flying rickshaw. Encourage children to come up with their own ideas. Talk to them about their experiences of travelling and mode of commuting used by them.
<p>Competency 3: Children will recognize the plants and animals in their environment and explore their basic features and habitat.</p>	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Recognise animals and explore their basic features. Compare a variety of animals to identify similarities and differences and to sort them into groups, using their own criteria. Recognise plants and explore their basic features. Talk about the significance of animals and plants for human beings. Explain how to take care of animals and plants. Take actions to demonstrate a caring attitude towards plants and animals. 	<p><i>This competency is designed to engage children in the careful observation and comparison of various animals and plants in their surroundings. It also aims to develop a caring and loving attitude towards animals and plants.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Read or tell animal and plant stories, and talk to children about their observations and experiences with animals and plants. • Ask children to observe local animals and their basic features, such as, body parts, sounds, habits, food and homes. • Organise field trips to the zoo to see animals that are not locally observable. In the classroom, they can depict various animal movements. • Help children recognize the main parts of plants, such as, root, stem, leaves, flowers and seeds and compare the parts of various plants. Give them the opportunity to touch,

	<p>smell and feel the different textures, and talk about similarities and differences.</p> <ul style="list-style-type: none"> • Encourage children to reflect on and share ideas about actions which are harmful for animals and plants, for example, beating animals and pulling off flowers and leaves from their stems. Discuss ways of showing respect and care for animals and plants. Talk to children about organisations and people who love and protect plants and animals. • Involve children in a role play to show how to take care of animals and plants.
<p>Competency 4: Children will observe the weather and develop an understanding of the seasons and their significance to people.</p>	
<p>Expected Learning Outcomes</p>	<p>Examples and Ideas for Implementation</p>
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Observe and describe daily weather conditions. Record daily weather condition on a weather chart using symbols. Describe key features of different seasons, based on observations and experiences. Explore and discuss how the changing seasons affect our food, clothes and lifestyles. 	<p><i>This competency focuses on helping children understand their environment by becoming good environmental observers and explorers.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Spend a few minutes each day, talking about the daily weather conditions, using simple indicators such as sunny, cloudy, warm, cold, rainy, windy, dry, humid. • Use simple symbols/pictures to help children record the weather. For example, put up a big chart in the class with boxes for each day and ask children to draw symbols in the relevant box to record their observations. • Engage children in discussions, during winter, about food, clothes and lifestyle related to winter. In summer, design activities to facilitate children to explore summer and help them notice how various aspects of our life changes with the change in seasons.

Competency 5: Children will develop a caring attitude towards the environment.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Understand the need for clean air and how to prevent air pollution. Understand the uses of water and the need to conserve. Identify pleasant and unpleasant sounds leading to an awareness of noise pollution. Discuss and implement the careful use of resources/materials in everyday life. Explore alternate uses of waste material. Identify practices that are useful and harmful to the environment and suggest alternatives to harmful practices. 	<p><i>This competency focuses on nurturing children's abilities to think critically about sustainable development. Identifying problems, thinking of alternatives, generating diverse solutions and asking and responding to open-ended questions, are the key processes in which children need to be engaged.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Work with children on puzzles and general problem solving activities. Select tasks which can be solved in a variety of ways, which have optional solutions, instead of just one correct answer. Engage children in activities which encourage them to think of alternatives. For example, ask children to think of various possible uses for an empty plastic bottle, or an old calendar or an empty carton or biscuit box. Discuss and share ideas for replacing environmentally harmful practices with better alternatives, for example, use of cloth bags instead of paper bags. Engage children in answering open-ended questions which are imaginary and from daily life, such as, <ul style="list-style-type: none"> If you could choose, would you rather be a flower or a bird? Why? What would happen if all the toys disappeared from the world? What could you do if you saw two of your friends fighting in the playground? What would you do if your teacher was not in the class and your friend got hurt?

Health Hygiene and Safety

Physical Development and Safety	
Competency 1: Children will develop a sense of balance, agility and coordination.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Move in a range of ways, such as, running, jumping, skipping, sliding and hopping. b. Refine and improve their movements as they repeat actions. c. Do physical exercises, such as stretching, bending and other drills. d. Move through spaces with consideration of other children/people and objects in the environment. e. Show respect for other children’s personal space when playing. f. Demonstrate the control necessary to hold objects or hold themselves in fixed positions for a couple of minutes. g. Explore a variety of ways to represent ideas through actions and movements. 	<p><i>This competency focuses on children’s developing physical control, mobility and awareness of space in indoor and outdoor environments. It includes establishing a positive attitude towards a healthy, active way of life.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Integrate health and safety activities throughout the day, in different segments of the daily routine. • Model healthy and safe practices and promote healthy lifestyles for children. • Provide safe spaces and opportunities for children to walk, run and climb every day. • Support children in using outdoor gross motor equipment such as swings and climbing frames, safely and appropriately. • Encourage both girls and boys to participate in active play. • Participate in gross motor activities by joining children in their play. • Include large motor activities during transition time, from one segment of the daily routine to another. For example, “hop to the table” or “jump five times while you wait to wash your hands.”

Competency 2: Children will have increased hand-eye coordination and the ability to handle tools and materials effectively.

Expected learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Use a range of child-appropriate tools with increasing control and confidence. b. Handle malleable materials safely with increasing control. c. Show increasing control over fastening of clothes and utility items. 	<p><i>This competency focuses on developing children’s skills to accomplish tasks and activities that require balance and safe handling of tools and objects.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Provide opportunities to use simple tools such as, scissors, thread, paper knives, hammers and screw drivers. • Provide sensory experiences to children such as water and sand play where children can pour, fill and empty. • Organise activities which involve dressing-up using varied fasteners, such as, buttons, hooks, laces and zips. Involve children in opening and closing bottle caps and boxes and bags of various designs and sizes. • Routinely check the environment to ensure that healthy and safe practices are followed. • Review safety rules before involving children in activities, such as cutting, so that children are conscious of them while working.

Hygiene and Safety

Competency 3: Children will develop an understanding of the importance of safe, hygienic practices.

Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Demonstrate an awareness of healthy lifestyle practices. b. Recognise and follow basic safety rules. c. Identify and seek adult help if feeling unwell, hurt, unhappy or uncomfortable. d. Take care of their personal hygiene. e. Identify healthy and unhealthy food. f. Identify people in the community who care for health needs. 	<p><i>The main focus of this competency is on hygiene, safety and well being. It emphasises helping children to internalise the importance of hygienic practices and of carrying these messages home.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Model hygienic and safe practices and read stories about healthy lifestyles. Establish a physically and emotionally safe environment where children know they can talk about how they are feeling. • Discuss safety rules on a regular basis, before starting an activity or going outdoors to play. Discuss hitting, touching others, being touched (and not liking it) pushing, being considerate and walking slowly in a queue, so as not to bump into someone in front. • Discuss how germs are spread. Talk about buying snacks from vendors who do not use covers, and allow flies to sit on the food which in turn spreads diseases. Discuss the hazards of spitting in the environment and the risks of smoking and air pollution. • Talk about the importance of washing our hands, keeping our bodies clean, of brushing our teeth regularly and wearing clean clothes. Demonstrate these practices through action rhymes and songs. • Engage children in a discussion on food types. Over a period of time, children can talk about the hazards of eating <i>meethi chalia</i>, chewing gum, excessive intake of oily foods, sweets/toffees and colas. • Talk about clinics, hospitals, doctors, dentists and other health professionals and their role in society.

Creative Arts

Visual Arts	
Competency 1: Children will express themselves through the use of drawing and colours.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Hold crayons correctly. b. Recognize and use a variety of media and colours to express their imagination and observations. c. Recognize colours and use them to express their thoughts and feelings. 	<p><i>This competency focuses on helping children to initiate the process of building their skills and understanding of drawing and colours. It does not require proficiency in drawing specific objects or to use colours with great skill. Emphasis should be placed on the enhancement of children's confidence to use colours and various drawing tools for self expression.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Introduce a variety of drawing media such as, crayons, charcoal, paint, chalk, and drawing tools on children's computer software (where possible) and provide children with opportunities to experiment with all of them. Give children the assurance that they can draw anything they like, and can use colours of their own choice. • Introduce a variety of colours, including black, and provide opportunities for children to explore these colours by mixing them in water and applying them on large sheets of paper and newspaper. Give children the freedom to represent their thoughts and feelings through the use of these colours. • Provide sufficient time for children to work on their paintings. Encourage them to talk about the process of creating their art piece and their finished product. • Display children's paintings in the class, and place samples in each child's portfolio.

Competency 2: Children will work with a variety of low cost and waste material to create craft projects of their choice.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Share ideas for creating various objects from waste material. Create objects of their own choice using a variety of waste materials collected from their immediate surroundings. Use various art techniques, such as, drawing, colouring, collage or printing to create their craft work. Talk about the process of constructing their craft project, giving reasons for their choice of materials. 	<p><i>This competency focuses on nurturing children's creativity, decision making skills, and confidence in their choice of materials.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Ask children to collect waste material such as used ice cream cups, pieces of cloth, used tissue boxes, straws, pencil shavings and peanut shells, from their home, school and neighbourhood. Involve children in sorting the collected materials and organizing them in boxes and jars. It is important to place all the material within easy reach of children. Materials for colouring, sticking and cutting should also be made available. Invite children to share ideas for creating objects using the collected waste material. Encourage them to decide what they want to make and to work in pairs or groups, if they choose to. Provide sufficient time for children to work on their projects, and to discuss the process and the product. Display children's final products in the class.

Competency 3: Children will experiment with a variety of materials to represent their observations and imagination, in the form of models/sculptures.	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Feel comfortable and enjoy engaging with clay, papier mache and other available modelling materials. Create various sculptures/models. Colour or decorate their models if they choose to do so. 	<p><i>This competency focuses on nurturing children's creative abilities by engaging them in designing and developing models/sculpture) using clay, papier mache, and other available modelling materials.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Engage children in thinking about their ideas and providing them the material, freedom, and encouragement to create sculptures of their own choice. Provide sufficient time for children to work on their projects, and to discuss the process and the product. Display children's final products in the class.
Competency 4: Children will learn the skills for collage work and printing and use these in a variety of ways to create their own art pieces and patterns	
Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Identify a variety of material for collage making. Make personal choices from the available material for creating their own collage. Create their collage by pasting materials of their own choice. 	<p><i>This competency focuses on nurturing children's creative abilities and thinking, through collage work and printing. Like other competencies, it emphasizes children's choice and decision making for creating designs and use of material. The competency also focuses on the development of fine motor skills.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Involve children in the collection of materials for collage work, such as, pieces of paper, old

<p>d. Identify a variety of material for printing.</p> <p>e. Make personal choices from the available material for creating their own art work.</p> <p>f. Create own patterns and designs using different techniques for printing.</p>	<p>photographs, magazine cut-outs, cotton wool, used buttons and pencil shavings. For printing, collect materials, such as, thread, sponges and tops of vegetables that are usually thrown away.</p> <ul style="list-style-type: none"> • Place all the collected materials and other necessary items such as glue, scissors, paper and colours, in a place which can be easily accessed by children. • Show the children some samples of collage work the previous day during story time. Engage them in thinking about their ideas for collage work. • Encourage children to develop their own collage by selecting materials of their own choice. • Demonstrate a variety of printing techniques such as: sponge printing, stamping (with wooden stamps, rubber stamps) thread printing, bubble printing, hand/foot printing and flower/leaf printing. • Engage children in the process of developing their own prints, using their own choice of techniques. • Provide sufficient time for children to work on their projects, discuss the process and the product. Display children's final products in the class. When possible, place samples of work in each child's portfolio.
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Competency 5: Children will observe, practice and explore various techniques of folding, cutting, tearing and weaving paper to make objects and patterns.

Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> Fold paper in a variety of ways. Observe adults and practice using various techniques of paper cutting and paper folding to make simple objects and designs. Explore various ways to make different objects by folding and cutting paper. 	<p><i>This competency focuses on paper art for the expression of children’s creativity and imagination. Like other competencies the elements of imagination, choices and decision making are critical ones.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> Demonstrate the art of paper folding step by step, for example, how to fold paper in halves, quarters, diagonals, etc. with increasing precision. Organise activities where children can practice paper folding and making a few simple objects such as, a fan or a boat with the help of demonstrations. Later, encourage them to explore their own techniques to make objects. Encourage them to manipulate the paper in various ways. Demonstrate and engage children in paper weaving to develop patterns by varying the width and colour of strips or to make objects, such as, mats. Provide sufficient time for children to work on their projects, discuss the process and the product. Display children’s final products in the class. When possible place samples of work in each child’s portfolio.

Sound, Rhythm and Action

Competency 6: Children will listen to, identify and appreciate a variety of sound patterns, rhythms and rhymes as a form of expression.

Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Listen to and identify sounds and rhythms in their surroundings. b. Experiment with different sound producing objects and observe the differences in the sounds produced by them. c. Produce sound patterns/rhythms by counting out beats. d. Explore the sounds made by various musical instruments. e. Recite poems, folk songs, national songs in chorus and solo. f. Participate in teacher guided action poems. 	<p><i>This competency focuses on developing children's sense of sound in terms of rhythm and rhyme, using a variety of objects from their environment.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Collect several sound producing objects such as, wooden and metallic spoons, wooden sticks, glass bottles, hard plastic tubes, metallic and plastic bowls. • Engage children in exploring sounds produced by various objects when they are struck with another object, (such as a spoon or stick) or tapped with the fingers. Provide opportunities to explore the difference in sound when a bottle/container is filled with different levels of water and when it is empty. • Engage children in producing repetitive sounds using various objects, leading to musical patterns. For example, gently tapping a metallic bowl, glass bottle and plastic cup with a metallic spoon in sequence and listening to the sound and then changing the sequence and observing the difference. • Demonstrate beats and rhythms by clapping out number patterns, for example, 1-2-3 stop 1-2-3 stop. These beats can then be played out by tapping or shaking various sound producing objects. • Engage children in reciting poems, folk songs and national songs in chorus and in solo with rhythm and appropriate actions and expressions.

Dramatic Play

Competency 7: Children will participate with increasing confidence in a variety of dramatic play activities to express themselves.

Expected Learning Outcomes	Examples and Ideas for Implementation
<p>By the end of the year children will begin to develop the attitudes, knowledge and skills to:</p> <ol style="list-style-type: none"> a. Explore and enact a variety of roles. b. Imitate the movements they observe in nature, and of various modes of transport. c. Perform/depict a variety of roles and situations in front of the class with increasing confidence. d. Dramatize stories, poems and folk tales individually, and in groups. e. Enact daily experiences and fantasy while working/playing cooperatively with other children. 	<p><i>This competency focuses on building children's confidence, enhancing their imagination and nurturing creative expression by encouraging them to participate in dramatic play activities.</i></p> <p>Teachers can facilitate learning in the following ways:</p> <ul style="list-style-type: none"> • Help children to develop the confidence to participate in dramatic play activities by engaging them in various mimicking and enacting games such as: <ul style="list-style-type: none"> - 'Let's pretend to be...' In this game, children identify an object and try to mimic it. For example, 'let's pretend to be a train': children can make a line and enact the movement and sound of a train. In the same way, encourage children to depict animal actions, plants in the wind, the different movements of water, airplanes and whatever else they can think of. Children can enact the roles of various family members and the occupations of community members, such as, a doctor, a carpenter, a <i>dhobi</i>, a tailor a policeman. - 'Guessing games.' In these games, children think of a situation, a person or an object. The chosen subject is depicted in front of the other children and they try to guess what is being enacted. • Engage children in acting out poems and stories by selecting roles for themselves. • Children can be invited to represent their own imaginings through role play. For example, children can develop a role play to depict 'If I were a magician I would...'

3. 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 at 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 settings 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 express themselves. In school, the child spends most of her/his time in the classroom. It is, 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 can be purchased or else a *darri* 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.

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 or 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 organising, and optimising 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 separate 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 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 organised 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.

The Daily Routine

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 organised and methodical way. A daily routine is important because it:

- makes children feel secure when they know what to expect.
- creates an organised 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 organise 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.

Dua/National Anthem	15 minutes
Greeting Circle	15 minutes
Group Work Time	40 minutes
Outside Time	30 minutes
Snack Time	30 minutes
Plan-Work-Clean up-Review	90 minutes
- Planning Time	15 minutes
- Work/Gosha Time	45 minutes
- Clean-Up Time	10 minutes
- Review Time	20 minutes
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.

- **Greeting Circle:** This is the time of day when the teacher gathers all the children together and initiates general discussions. Teachers and children share their news with each other, and topics from the Key Learning Area, 'Personal and Social Development' can be discussed.

- **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 smaller groups and gives children activities to work on. The activities done at this time are planned and initiated by the teacher.

- **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. This is also a time to discuss safety rules, such as making queues, avoid pushing and taking turns.

- **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. They can learn to spread the *darri/dastarkhawn* and sit around it, giving each other space without pushing. They can say *Bismillah* 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 count, classify and talk about the different kinds of food, learn to pour water without spilling, and clean up when everyone has finished.

• **Plan – Work - Clean up – Review Time**

- **Planning Time:** Planning should be done in the central space on the *darri*. 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 *gosha/s* themselves, and to encourage them to make their own decisions about what they will do there.

- **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 library corner; listening and responding to the set signal when the time for *gosha* work is finished; and tidying up and returning material to the designated place at the sound of the signal.

- **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.

- **Review Time:** Children come back to the central space on the *darri* and talk about their *gosha* 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.

- **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 Library Corner for story time. Children should be encouraged to tell stories that they have heard at home or in school.

4. Assessment

Research informs us 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 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.

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 than not 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 the teacher may have about a child can be recorded here.

- ***Portfolio of Children's Work***

Teachers should also maintain each child's art work, and 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

5. Guidelines for Effective Implementation of Quality ECE

Essentials for Developing a Teachers' Guide

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

“The teacher of little children is not merely giving lessons. She is helping to make a brain and nervous system, and this work which is going to determine all that comes after, requires a finer perception and a wider training and outlook than is needed by any other kind of teacher.”

Margaret McMillan (1930)

Format and Suggested Content

It is crucial that the developers of the Teachers' Guide are familiar with the National Curriculum for ECE (NCECE) 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 Teachers' 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 Teachers' 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 NCECE. It is important for them to know what these basic competencies are, so 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.

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 National Curriculum for ECE.

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, concerns.
- Unbiased and non-judgmental dealing with all children and their parents.
- Appreciation and acknowledgement 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.

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, organising 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 ongoing process of learning.

Section II: Early Childhood Development

This section will help teachers to understand the basic concepts of early childhood development under two key themes: 1) Child Development, and 2) Early Childhood Development and Relationship Building.

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 NCECE:

- Understanding the term ‘curriculum’ and its importance for teachers.
- Key features of the NCECE
 - 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.
 - Organisation 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 organised under three themes: 1) Learning and teaching for the early years, 2) Learning activities and 3) The learning environment. Ideas will be presented in detail using text, graphics and pictures to aid understanding.

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 up – review’ cycle, its importance and implementation. Involving children in free play and exploration activities and organizing hands-on and minds-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 are given 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 a 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, 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 idea 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 displays: 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 photographs as examples of quality classroom displays are recommended.
- Daily Routine: To make optimal use of the valuable time young children spend in school, teachers will be familiarised 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 changes in the 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 checklists for assessment:** This section will help teachers to understand checklists, 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, 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.

Recommendations for Development of the Teachers' Guide

Planning

1. Forming a team by identifying people with good writing skills. The team of writers must include people with the relevant experience 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 NCECE 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 ECE curriculum is based, and to clarify any 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.

Developing

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

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.

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.

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.

Essentials for Developing a Teacher Educators' Guide

Young children need very skilful and caring facilitation from adults in order to explore their environment and build an 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 the 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.

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.

Key Competencies for Teacher Educators

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 programmes, in line with the competencies required by the teachers.

Teacher Educators assume the important and sensitive responsibility of facilitating adults (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.
- 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, families and communities in nurturing children.
- Services available within the community for the development of children.
- Assessment of teacher 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.
- Proaction 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.

Skills: Teacher educators need to have the following key skills to function effectively:

- Andragogical skills to facilitate the learning process of adults.
- Skills for designing, conducting and assessing workshops/seminars/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.

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.

Designing a Professional Development Programme

This section will facilitate teacher educators 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 educators read the Teachers' Guides thoroughly, to understand the scope, nature of work and expectations of an ECE teacher.
- **Forming a team:** Teacher educators need to form a team 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:
 - Neat and clean.
 - Well lit and ventilated.
 - Organised with appropriate seating arrangements, drinking water and with washroom facilities nearby.
 - Attractive with relevant displays and all other teaching-learning resources at hand.

Content of an ECE 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 Years, Learning Activities and Learning Environment.
- **Section V** Assessment and Evaluation.
- **Section VI** The Importance of Planning.

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.

1. 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

experiences and learn about various aspects of their work under the guidance and facilitation of an experienced facilitator.

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 for ECE classes, developing plans, demonstrating lessons.
- A collegial and respectful environment in the sessions so that teachers of varied experience, qualification and personalities feel comfortable, and can concentrate on their own learning, and can also support others to learn.

2. 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 teacher help in planning lessons, observing his teacher's class and helping him to reflect on the lesson, teaching with the learner -teacher in the class to demonstrate and practice specific skills and assisting new ECE teachers in accessing or developing resources. This support is essential as it actually helps the new ECE teacher 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 ongoing 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 others 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 others classes, review each others 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 school.

3. Arranging & Participating in On-going Reviews and Reflection Sessions

These sessions provide a platform to the teachers to get together and share their successes and challenges with each other. They can learn from each others 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.

Assessing Teacher Education Programmes and Teacher Learning

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 sessions and field 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 a 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 added to their learning, what did not 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 identify 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 analyzing 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.

Recommendations for Development of the Teacher Educators' Guide

Planning

1. Forming a team by identifying people with good writing skills. The team of writers must include people with the relevant experience 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 NCECE 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 ECE curriculum is based, and to clarify any aspects of the curriculum which are unclear to the writers.
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6. Forming a review team.

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1. Producing initial, individual drafts as per decisions taken at the planning level.
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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.
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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.

Guidelines for ECE Learning Material Developers

Key Considerations for Materials Development

- **Goals and Objectives:** The first step toward developing learning material is to take account of its utility for, 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 a 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.

- **Inclusiveness of Teaching Materials:** It is of utmost importance that the teaching and learning materials are inclusive in nature. As charted out by UNESCO, learning materials become inclusive 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 inclusive 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 disabilities? 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 actions 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.

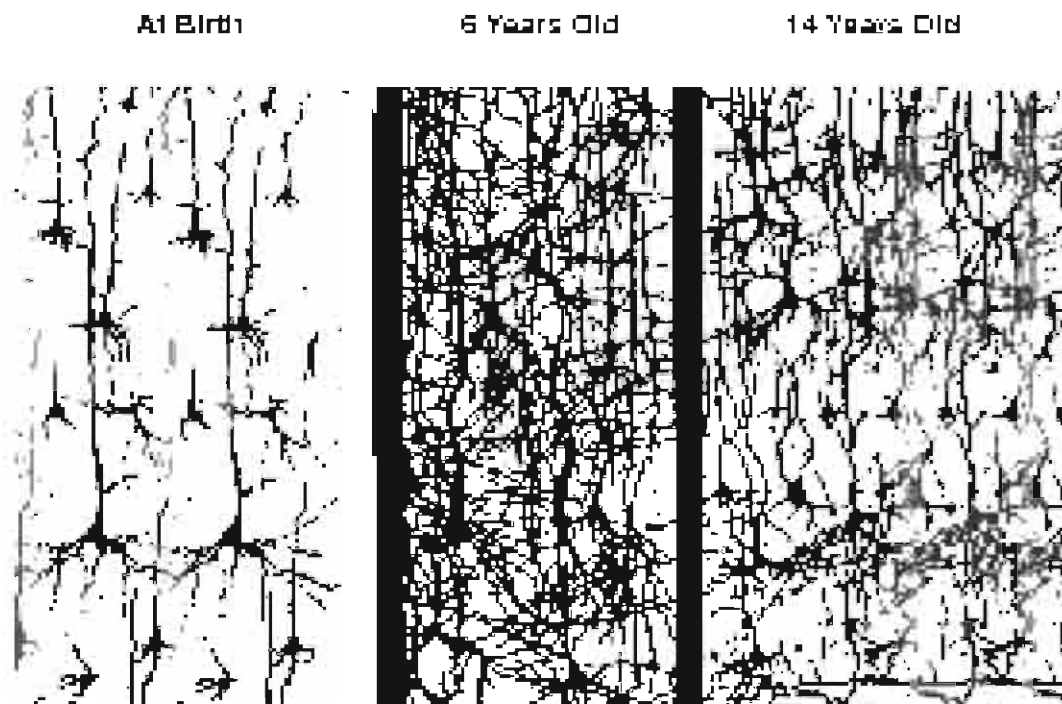
- **Safety of Materials:** Learning resources related to the Key Learning Areas should be produced as far as possible with natural materials. The concept of safety is broader than ensuring that materials do not have sharp edges. For instance, many toys and learning materials are made of poor quality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

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. 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 function? 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 six has twice as many synapses as that of the 14 year old. As the web grows, so do a child's abilities such as, memory, language skills, problem

solving and intellectual capacity. However, the neurons and synapses which are not being used stop working and die. For example, vision (or eye sight) 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.

Piaget's Developmental Stages

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:

The Sensorimotor Stage (Birth – 18 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 recognize 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.

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 around age 7-8. Additionally, the preoperational child is likely to center 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."

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 operational child can operate an action, and then go back to the original condition. For instance, $3 + 2 = 5$ and $5 - 2 = 3$.

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 recognize and identify a problem. They can state several alternative hypotheses, execute procedures to collect information about the problems to be studied, and test the hypotheses.

A Suggested List of Materials for the ECE Learning Environment

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 (but clean) objects and “junk” which can be very useful in an ECE learning environment. 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
- soap shavings
- plastic bottles
- jars for storing paints
- paint brushes of different sizes
- saucers, dishes for paint
- sponges
- smocks, T- shirts
- toothbrushes
- clothespins, bits of wood

- 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
- shoe boxes, small/large boxes
- clay, plasticine
- buttons, straws, small empty cartons
- empty thread spools/reels
- cardboard tubes, paper bags
- cloth, felt, vinyl scraps, feathers/fallen leaves

- Materials for holding things together and for taking them apart

- | | |
|---------------------|----------------|
| - white glue, paste | - masking tape |
| - yarn | - staplers |
| - string | - paper clips |
| - rubber bands | - scissors |
| - cellophane tape | - paper knives |

For Music and Movement

- a tape recorder and tapes of a variety of music,
- a radio
- musical instruments (homemade or purchased)
- bottles of different sizes and textures, metal spoons, wooden sticks

For Pretend Play

- old telephones, old clocks, tool box, soft chair, broom and dustpan
- luggage, small tables and chairs
- props for pretending - clothes, hats, shoes, mirror
- dolls, stuffed animals, doll bed, baby rattles, bibs, bottles
- cushions, small blankets
- child-sized stove/*choola*, fridge, sink
- adult-sized pots and pans, cooking utensils
- teapots, kettles
- cutlery, *doi*, ladle
- mixing bowls, measuring spoons/cups, sifter
- potholders, aprons, towels, dishcloths, sponges, napkins, placemats
- adult-sized plates, cups, bowls
- empty food boxes, cartons, jars, bags

For Building and Pretend Play

- a variety of blocks: hollow, unit, small stacking, cardboard
- blocks made from shoe boxes
- milk cartons, carpet pieces
- large and small boxes, small pieces of wood
- small cars and trucks, small animals

For Experimentation and Discovery

- seeds, fallen leaves and twigs
- magnifying glass
- puzzles, boxes and bottles with lids in different sizes
- washers, nuts and bolts
- pegs, pegboards
- stacking rings
- magnets, scales and balances
- beads, stringing materials
- buttons, stones, shells
- sets of matching picture cards
- sand and water, pumps, sifters and strainers
- materials that will float/sink
- measuring cups, funnels

For Reading and Writing

- pencils, crayons, markers
- computer keyboards, typewriters
- rubber stamps, paper clips, tape, rulers
- different types of paper: with and without lines
- envelopes
- assorted books
- child-made books
- photograph books from field trips
- cozy chair or pillows
- puppets

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. **Colas:** A brown carbonated drink that is flavoured with an extract of cola nuts, or with a similar flavouring.
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. **Diversity:** The state of being diverse, having variety. Individual 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.
6. **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.
7. **Fine Motor:** 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 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.
8. **Formative Assessment:** The term “formative assessment” refers to frequent or ongoing 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.
9. **Gross Motor:** 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. Gross 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.

10. **Imaginings:** Thoughts or fantasies.
11. **Kindergarten:** Friedrich Froebel (1782-1852) known as the “father of the Kindergarten,” – coined the term, which literally 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.
12. **Learning Styles:** Learning styles are students' approaches to learning, problem solving, and processing information.
13. **Lifestyle:** A way of living, conduct, behaviour, customs, culture, habits.
14. **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.
15. **Metacognition:** Awareness and understanding of one’s own thought processes. A child’s ability to consciously and intentionally control own behaviour.
16. **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) re-defined intelligence as the ability to create something which is valued by any culture, in seven intellectual areas which are independent and interdependent. For example, 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.
17. **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.
18. **Papier Mache:** A malleable mixture of paper and glue, or paper, flour, and water, that becomes hard when dry.
19. **Pedagogy:** The art or science of being a teacher of children. Generally refers to strategies or style of instruction.
20. **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.
21. **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.
22. **Proaction:** creating or controlling a situation by causing something to happen rather than responding to it after it has happened

23. **Special Education:** Special instruction provided for students with educational or physical disabilities, tailored to each student's needs and learning style.
24. **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.
25. **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.
26. **Summative Assessment:** The term “summative assessment” 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.

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