### Syllabus

# Diploma in Preschool Education (DPSE)

**Two years Course** 

(Implementation w.e.f session 2015-17)





#### **Diploma in Preschool Education (DPSE)**

#### First Year

#### **CREDIT DISTRIBUTION**

Sr. No.	Paper Code	Courses	Credits			Marks		
			Theory	Practical	Total	Theory	Practical	Total
						External	Internal	
1	101	Early Childhood care and Education (ECCE) in India	4	0	4	100	0	100
2	102	Understanding Child and Childhood	4	2	6	100	50	150
3	103	Health and Nutrition of Children	1	1	2	25	25	50
4	104	Preschool Education Curriculum: Principles and Priorities	4	2	6	100	50	150
5	105	Development of Mathematical Concepts in Children	4	2	6	100	50	150
6	106	Development of Language and Literacy in Children	4	2	6	100	50	150
7	107	Developing Understanding of Environment in Children	2	2	4	50	50	100
8	108	Methods and Materials for Early Childhood Education	3	3	6	75	75	150
9	109	Field Observation and Practice	0	6	6	0	150	150
10	110	Self -Development	0	4	4	0	100	100
	1	Total Credits for 1st Year	26	24	50	650	600	1250

#### **Paper- 101**

#### EARLY CHILDHOOD CARE AND EDUCATION (ECCE) IN INDIA

Credits: 04 Theory (External): 100 Marks

#### INTRODUCTION

Being one of the foundation courses, this course aims to develop in student teachers an understanding of importance of ECCE as a foundation for later learning and development. It intends to familiarize the student teachers with the concept and significance of Early Childhood Care and Education (ECCE) and within it preschool education, particularly in the context of the country's larger goals and priorities linked to social equity and inclusive development. The course will enable the student teachers to realize the great professional responsibility that they are taking on as teachers of young children, by understanding the critical importance of this stage of education and the need for a smooth transition from preschool to early primary, as the foundation for not only school education but for life long learning and development.

It will familiarize them with the structure and system of education in India and the location of ECCE within the larger system and enable them to develop a critical understanding of the sector and related contemporary issues. The course intends to also contextualize growing up and childhood experiences from a socio-cultural perspective for the student teachers. It therefore aims to acquaint and sensitize ECE educators to the multiplicity and diversity of Indian socio-cultural, economic and religious milieu and the implications of this diversity for ECCE. The course will advocate child's rights based approach as a conceptual framework so as to protect and promote childrens' rights and orient student teachers regarding relevant programmes and policies in that context.

The course will be conducted through lecture-discussion mode. It may include presentations by the students and the teacher on various topics under the content of the course. Visits by the students to various ECCE programmes will provide first-hand experience of observing the functioning of programmes in various settings.

#### **Objectives**

The course will enable student-teachers to:

- 1. Understand the holistic concept and critical significance of ECCE, particularly with regard to social equity, and the rationale for including preschool as a sub stage within it.
- 2. Develop an understanding of contributions of different thinkers and educationists in ECCE and their implications for contextualizing the curriculum and

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- methodology in ECCE.
- 3. Become familiar with the historical evolution of ECCE in India leading to current policies and provisions for ECCE across public, private and voluntary sectors.
- 4. Understand socio-cultural, economic and language diversity in 'childhoods' in the Indian context and its implications for planning and provisioning for ECCE.
- 5. Understand the potential of rights' based approach to provide a just and equitable environment for children's care and education and develop related knowledge and skills for planning programs for early years.

#### **Course Content**

#### **Unit 1: Concept and Significance of ECCE**

- Understanding terminologies, "Child", "Childhood", and "Early Childhood Care and Education".
- Importance and significance of ECCE as foundation for learning and development based on the developmental progression, neuro-science researches and influence of environmental forces.

#### **Unit 2: Historical Development of ECCE in India**

- Importance of early years and development as indicated in traditional practices of the Indian culture.
- Central Social Welfare Board: Balwadi programme, (Anutai Wagh), ICDS programme and Five Year Plans.

#### **Unit 3: Contributions of Thinkers and Educationists in ECCE**

- Influence of Western philosophical and educational thoughts of Frobel, John Dewey and Montessori on understanding of childhood and programmes and for young children.
- Influence of theories of Ericson, Piaget
- Influence of Gandhi, Tagore etc. Implications of the above on ECCE programmes and classroom practices.

#### Unit 4: Early Childhood in Contemporary India and Socio-Cultural

- Understanding about Indian context, it's importance and impact on early years from the perspective of: family, community, caste, gender, religion, and geographic location
- Socio- cultural and religious pluralities and their influence: multiple languages, customs and traditions. Relevance and implications of the above for interacting with children and families as well as planning and transaction of ECCE curriculum

• Economic diversity and its influences on early child development.

#### **Unit 5: Policies and Programmes in ECCE in India and Related Issues**

- ECCE Policy Framework: National Policy on Education (1986), National Curriculum Framework (2005), ECCE in Right to Education (2010), National Policy on ECCE (2013)
- Programmes and provisions in ECCE in Indian: Public Sector: ICDS; Rajiv Gandhi Crèche Scheme: ECCE in SSA.
- Issues in ECCE in India: Issues of transition from preprimary to primary and harms
  of accelerated formal learning. Status and issues of Teacher education in ECCE;
  Lack of Regulation and Monitoring

#### Unit 6: Child's Rights and Socio-Political Framework

- Needs of children types of needs; difference between needs and rights.
- Emergence of UNCRC and its orientation in defining children's needs, systems of care giving as societal-state obligations.
- Constitutional provisions for younger children; Article 45 and articles related to minority groups and Right to Education Act 2009; emerging positions of early childhood; current five year plans, major thrusts; concerns and issues.
- Legislations related to food, nutrition, safety, health and care, interventions by Government such as ICDS.
- Consideration of the impact of discrimination of children's well being in terms of children's rights – marginality such as caste, gender, poverty leading to children on street, children without families, single parent families, child abuse, impact of natural and manmade disasters, wars, etc.
- Access to services for the care and protection of children in difficult circumstances.

#### **Suggested Practical Activities**

 No practical's are prescribed for this course. However field visits to various ECCE settings may be conducted or project work undertaken as part of transaction of theory.

#### **Suggested Readings:**

- 1. Kacker, S. (1982) Inner World: Psychoanalytical Study of Childhood in India; OxfordUniversity Press, New Delhi
- 2. Katz, l.(1977) Talks with Teachers.NAEYC, Washington
- 3. Khalakdina, M (2008) Human Development in Indian Context; Vol. 1
- 4. Khalakdina, M. (2011) Human Development in Indian Context; Vol. 1
- 5. Krishnamurthi, J (1974), Krishnamurthi on Education. Krishnamurthi Foundation, India, Chennai
- 6. Kaul, V.et al (2004) Reaching out to the Child; Oxford University Press
- 7. Kaul,V and Sankar,D. (2009) Early Childhood Care and Education in India: Mid Decade Assessment; NUEPA

- Swaminathan, M (1988) The First Five Years: A Critical Perspective on ECCE in India, Sage
- 8. Clarke, P (2001). Teaching and Learning: The Culture of Pedagogy, Sage
- 9. Policy Documents related to RTE (2009); NCF (2005); NPECCE (2013); NCF (2013); NPE (1986); NP on Children (updated) UNESCO (2006).
- 10. Select Issues concerning ECCE in India. Background paper prepared for the Education For All Global Monotoring Report (2007): Strong Foindations: Early Childhood Care and Education, (2007)/ED/EFA/MRT/PI/23. New Delhi: NIPCCD/UNESCO

#### **Paper- 102**

#### UNDERSTANDING CHILD AND CHILDHOOD

Credit: 06 Theory (External): 100 Marks

Practical (Internal): 50 Marks

#### INTRODUCTION

The Early Childhood years have embedded in them some 'critical periods' for development of several cognitive, language and socioemotional competencies for children. The blueprint of most skill sets, learning and personality development is embossed in this period of development. The experiences in these foundation years shape children's overall development, their future health and learning achievements at school, their adjustment in the family, community and in life in general. The impact may be attributed to the fact that on the one hand the process of development is both continuous and cumulative; on the other, there are distinct sub stages within the childhood period which characterize the way children respond and learn. It is therefore very important for any professional proposing to work with children to have an in-depth understanding of the stages and processes related to different domains of development and be aware of what makes children so alike, and yet so individually different.

The Course will enable the student teachers to develop this understanding, to get acquainted with developmental stages and patterns in early childhood, develop insight into how children learn and develop and the requirements of stimulating and responsive environments to nurture their development which would help them to plan and create developmentally appropriate practices and environments for children. With this understanding the student teachers will be able to understand the role of children as actors in their own development and balance this active agency with undertaking the responsibility to provide them with the right kind of response and guidance.

Success of an effective child centered, developmentally appropriate programme will depend on the application of the theory to understanding the behaviour of children. Often students find the course boring when made to memorise the norms. They will be able to appreciate the course when the relevance and application of developmental norms and patterns are brought to their attention. The teacher therefore should teach the course by giving examples as well as by relating the observations of the

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students in their practical classes in schools to the theory. Interactive mode will make the course meaningful, relevant and interesting.

#### **Objectives**

This course will enable student-teachers to

- Understand how children develop and learn.
- Understand the principles and processes of children's development
- Understand children's development along the continuum from birth to eight years and the concept of critical periods.
- Understand the difference between growth, maturation and learning and the implications of these for learning and development.
- Understand the different domains of development, their interdependence and factors influencing their development.
- Be aware of needs and characteristics of children at the different sub stages of child development and their implications for children's learning.
- Be aware of variations in socio cultural and emotional contexts and its impact on child rearing practices.

#### **Unit 1: Introduction to Child Development**

- The unit introduces the discipline of Child Development, its scope and usefulness of this knowledge in interactions with children. Though development is a continuous process from birth to old age, the life span is divided in phases, as each phase has characteristics of its own. Basic concepts of domains of development and principles of development are included in the unit.
- Meaning and scope of child development use of knowledge in understanding children and working with them; Difference between growth (quantitative) and development (quantitative and qualitative), maturation, learning.
- Interdisciplinary basis of child development the contribution of psychology, sociology, paediatrics, anthropology, neuroscience to the field of child development.
- Stages of development up to childhood: prenatal, infancy and toddlerhood, preschool and middle childhood.
- Domains of development, inter-relationship of continuous and cumulative nature of development.
- Principles of development Cephalocaudal and proximodistal, hierarchical

integration, principle of the independence of systems, relationship of physical growth and change in behaviour.

• Factors affecting the growth and development of children

#### **Unit 2: Prenatal Development**

- The unit traces the development from the time of conception to birth and factors influencing prenatal development and need for care during this period.
- Female reproductive system and conception; Care during pregnancy.
- Genetic foundation, chromosomes, genes, dominant, recessive genes, sex determination, monozygotic and dizygotic twins.
- Prenatal growth during three trimesters.
- Inherited and genetic disorders: down syndrome, Fragile X syndrome, haemophilia, diabetes.
- Factors influencing prenatal development, mother's age and health, nutrition, illnesses, pre-natal support, drugs, alcohol, tobacco, radiation, HIV, sexually transmitted diseases, emotional stress, mother-child blood incompatibility.

#### **Unit 3: Neonatal Stage**

- This unit emphasizes the importance of the first fifteen days as the infant's body systems are required to function outside mother's womb and adjust to the environment. Special care needed by preterm and low birth weight babies is also included.
- Transition from intrauterine to extra uterine period of adjustment and stabilisation.
- Height and weight, preterm and low birth weight babies.
- Body systems; circulatory, respiratory, gastro-intestinal systems functioning, body temperature regulation.
- Early sensory capabilities, seeing, visual perception, hearing, smelling, tasting, temperature, touch and pain.
- State of new born: cycles of wakefulness, deep and light sleep and activity
- Care protective and responsive care and stimulation.

#### **Unit 4: Physical and Motor Development**

• Units 4 to 8 discuss the development which takes place in each of the domains from birth to eight years.

Stages of physical development: Height and weight, use of norms; patterns of growth; monitoring of growth; Changes in body proportion, body shape and structure; Body build: endomorphic, mesomorphic; Temporary and permanent teeth; Decrease and redistribution of baby fat; Change in composition of muscles.

- Rapid rate of growth of brain till the age of 6 years, critical/sensitive periods; Development of neurons, cerebral cortex, regions of cerebral cortex, lateralisation of cerebral cortex; Effect of nutrition on general growth and brain; Plasticity and sensitive period; Vision acuity, Skeletal development: ossification, fontanel, skull.
- Factors affecting the physical development of children

#### Motor Development

- Importance and Patterns of motor development; Phylogenetic and ontogenic functions; Mile stones in gross and fine motor skills in infancy and preschool years.
- Interdependence of Motor skills, emotional and social competencies, cognition and language.
- Handedness, ambidexterity.
- Motor development during 6-8 years: refinement of skills, increase in strength, precision, dexterity agility and flexibility.
- Factors affecting the motor development of children.

#### **Unit 5: Cognitive Development**

- Mental processes and cognitive development; perception, thinking, reasoning, problem solving, memory, attention span, imagination, curiosity, creativity and concept formation; Milestones in cognitive attainment.
- Behaviourism: Bandura's Social Learning Theory learning by observation and modeling Learning: classical conditioning in young infant, Operant conditioning, Imitation
- Piaget's Cognitive Development Theory Sensorimotor stage birth to 2 years; sub stages; Preoperational stage; Concept of adaptation, assimilation accommodation and equilibration, egocentrism, animism, conservation, centration, irreversibility, classification, seriation.
- Factors affecting cognitive development: Importance of stimulation, adult interaction and environment.

#### **Unit 6: Language Development**

- Emergence of language in infancy and toddlerhood; Pre speech forms: crying, babbling, cooing, gesture, imitating sounds; Telegraphic language: Use one and two words in early stages; preschool stage-increase in comprehension, vocabulary, fluency. (Detail covered in language and literacy course)
- Bilingualism and Multi-lingualism; issue of home vs school language.
- Speech problems in children.
- Factors affecting language development.

#### **Unit 7 Emotional Development**

- Functions of emotions; Emotions as central adaptive forces in all aspects of human activity: i.e. shame, guilt, embarrassment, early pride. Change in expression with maturation and learning. Emotions like love, affection, crying, happiness, anger, temper tantrums, sadness, fear, joy, aggression; Temperament and children's behaviour.
- Erikson's theory of psychosocial development: social experiences in understanding emotions.
- Milestones in emotional development; Infancy changes in emotional expression;
   temer tantrums; Moving towards expression of emotions in socially approved ways.
- Emotional Intelligence; significance of Attachment; separation anxiety.
- Factors affecting emotional development.

#### **Unit 8: Social Development and Emergence of Self**

- Patterns in social development: Early social contact with significant adults and care givers; Social interactions with children; Learning of social skills and pro-social behaviour.
- Development of self awareness, self concept and self esteem.
- Forms of social behaviour: Cooperation, leadership, friendship, sharing, sympathy, temper tantrums, negativism, aggression and quarrelling.
- Socio-emotional problems in children; Causes of negative and anti-social behaviour and helping child to cope.
- Role of family, school and community in socialization; Child rearing styles and impact on children: Authoritative; Authoritarian; Democratic; Permissive; Uninvolved.

#### **Suggested Practicals**

- The practical classes will enable the students to understand theory and relate it to children's behaviour. More specifically the practicals will enable student teachers to Develop skills for observation
- Become Aware of the effect of physical growth and maturation on behaviour
- Understand individual differences in behaviour in children
- Assess child's development as per norms.

#### **Some Activities suggested:**

• Observe infants and discuss in practical class the mile stones achieved. Find out what is the kind of stimulation the infant is exposed to and his/her reactions.

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- Every student to select two children, one child from younger age group and the
  other from older age group. The same children to be observed for the entire year for
  different domains of development. The observations should coincide with the topic
  taught in theory class. Discussion should take place in the class after observation of
  each domain of development.
- The last assignment will be: prepare development profile of each child and the progress made during the year. A separate summary for the differences observed between the two age groups.

#### **Suggested Reading List**

- 1. Berk, L. (2002). *Child development*. New Delhi: Prentice Hall of India. Charlesworth, R. *Understanding child development*. New Delhi: Delmar Publishers. Eisenberg, A and Murkoff, H and Hathway, S (1996). *What to expect: the toddler years*.
- 2. London: Simon & Schster.
- 3. Feldman. R. S. Discovering the life span. New Delhi: Dorling Kindersley India.
- 4. Goldberg, L; Brindley and Kukar J. (1999). *Pregnancy to parenthood*. Magna Publishing Co. Ltd.
- 5. IIIingworth, R and ILLingworth, C. (1984). Babies and young children. Edinburgh, Churchill Livingstone, Edinburgh.
- 6. Kuppuswami B. (1990): A textbook of child behaviour and development. New Delhi: Konark Press.
- 7. Mittal, S (2004). *Child development*. Delhi: Children and the media vols 1-3; Delhi: Isha books
- 8. Pankajam G. (1994): Pre-school education. Ambala: The India Publications.

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- 9. Sharma, S.P. (2006). *Child development*. Delhi: Visit International publishing house. Srivastava, A. (1990). *Child development*,. New Delhi: NCERT.
- 10. Stoppard. M. (1983). Baby care book. London: Dorling K.
- 11. Stoppard. M. (1995). *Complete baby and child care book*. London: Dorling K. Vyas, J.N. (1994). *Child development*. Nagar: Medi World Press

#### Paper 103

#### HEALTH AND NUTRITION OF CHILDREN

Credit: 02 Theory (External): 25 Marks

Practical (Internal): 25 Marks

#### INTRODUCTION

This course is included as an integral part of any Preschool curriculum, since preschool education is conceptually located in an integrated framework of health, nutrition and education. The course is designed to acquaint the preschool teacher to understand the nutritional and health needs of children to the extent that she can address some of these needs of children as well as educate caregivers on these aspects. Besides the nutritional needs, the teacher shall develop an understanding of the importance of hygiene and sanitation, as well as preventive measures and care during common ailments.

#### **Objectives**

The course will enable the student teacher to:

- Understand the concept of health and nutrition and its importance for children's development and learning.
- Understand the nutritional requirements and effects of malnutrition.
- Identify the signs and symptoms of common childhood ailments and their prevention and treatment.

#### **Pedagogy**

Whatever possible demonstrations be arranged in classrooms

#### **Unit 1: Concept of Health and Nutrition**

- The unit talks about the concept of good health, good nutrition and planning of a balanced diet. It also includes some of the nutrition deficiency diseases, prevention and remedial measures
- Definition of good health and signs thereof.
- Basic five food groups, functions and sources.
- Nutritional values of foods available in the region.
- Planning a balanced diet for children upto six years.
- Deficiency diseases: symptoms due to low calorie intake, protein, vitamins, iron and iodine. Prevention and remedial measures.

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#### **Unit 2: Nutrition during Pregnancy and Lactation**

- Life begins at conception and therefore the required nutrition during pregnancy is essential for the health of mother and development of fetus.
- Importance of nutrition during pregnancy.
- Effect of malnutrition on the woman and her foetus.
- Planning of nutritious diet for pregnant woman.
- Diet of lactating woman.

#### **Unit 3: Care and Diet during Infancy and Childhood**

- Various factors influencing health during infancy and childhood are highlighted.
- Factors influencing good health: cleanliness, hygiene, ventilation, sunlight, open spaces, climate. Clothing, personal hygiene, regular habits and routines.
- Air, water and noise pollution importance of potable water, adulteration and additives in foods.
- Balance between indoor and outdoor play and sleep.
- Importance of breast milk and colostrum.
- Harmful traditional practices of not giving colostrum and breast milk during the first two days after birth.
- Use of galactogogues traditional regional foods.
- Breast milk substitutes, formula preparation, correct proportion of water, cleanliness and sterilization.
- Supplementary foods Planning diet according to region weaning, liquid, semisolid and solid.
- Increased requirement of nutrition with increase in age.
- Inculcating good diet habits.
- Different ways of increasing nutritional quality.
- Increasing nutrient density of meals and snacks.
- Care of skin, eyes, teeth, ears, nose, throat, hands, nails and hair.

### **Unit 4: Prevention and Treatment of Common Ailments and Infectious Diseases in Children**

- For prevention of communicable childhood diseases along with common childhood diseases are included to make the teacher aware of them and take preventive measures where ever necessary and timely measure for treatment.
- Immunisation.
- Contagious/infectious disease whooping, cough, measles, mumps, chicken pox, conjunctivitis, diphtheria.
- Gastro-intestinal ailments diarrhoea, dehydration, preparation of ORS, vomiting, typhoid, worms, cholera, jaundice.

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- Skin ailments scabies, eczema.
- Respiratory ailments asthma, cold, cough, bronchitis.

- Tuberculosis and its symptoms.
- Dental ailments.
- Administration of First Aid minor accidents, electric shock, burns, nose bleeding, drowning, dog bite, foreign body in ear, throat and nose, insect bite, sun stroke and fracture.

#### **Suggested Readings**

- 1. Cameron M. and Hofvander Y. 1983, *Manual on Feeding Young Children and young children*. Oxford University Press.
- 2. Elizabeth K.E. 2010, Nutrition and Child Development. Hyderabad: Para Medical .
- 3. Ghosh S. 1988, *The feeding and care of young children*. New Delhi: Voluntary HealthAssociation of India.
- 4. IGNOU; Study material for Diploma in Nutrition and Health.
- 5. Park J E., Park K., *Preventive & Social Medicine*, Banarasidas Bhanot Publications.
- 6. Srilakshmi B. (2011): Dietetics. New Age International (P) Limited Publications

#### First Aid

- 1. First Aid. St. John's Ambulance
- 2. First Aid Guide, Delhi.
- 3. First Aid Field Manual 2002.
- 4. First Aid No.4-25-11. Washington: Navy Technical Reference Publication.

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- 5. Principles of First Aid and Home Nursing. Madras: Indian Red Cross Society.
- 6. Rajeev Sharma, First Aid Guide.

#### Paper 104

#### PRESCHOOL EDUCATION CURRICULUM: PRINCIPLES AND PRIORITIES

Credit: 06 Theory (External): 100 Marks

**Practical (Internal): 50 Marks** 

#### INTRODUCTION

The early years of life lay the foundation for lifelong learning and development. The educational experiences of children in these years require a totally different approach from later stages of education, to match with their development needs, contexts and styles of learning. Development is a continuous process. Children between 3 and 8 years have similar developmental characteristics and many common features. Therefore extension of use of early childhood education methods and activities in classes 1 and 2 helps in smooth transition from preschool to primary classes. The course provides an orientation for planning for early education of children from the ages of 3 to 6 years, in an age appropriate manner. It would be desirable to extend these even upto 8 years. The early part of the course introduces the concept and importance of early stimulation and interaction during infancy which precedes this stage, but is an important preparation for this stage of education, and which can impact on how children will respond to early learning experiences.

This course provides an overview of the principles, priorities and objectives for development of a child centered early childhood education curriculum. It provides the rationale for the early childhood methods by helping student teachers understand the ways in which children learn and which need to inform the development of the curriculum for them. The course focuses on the developmental nature and significance of children's play for learning and development and the need for adopting a play based activity approach for ensuring children's sustained interest and learning. The student teacher would also develop an understanding of the importance of creating a "learning environment" for children which would given them opportunities to explore, experiment, interact with materials and other children and express themselves freely. They will be oriented in the concept of school readiness, which forms a key part of curriculum for this preschool stage and which can ensure a smooth transition for them from preschool education to early primary education. The student teachers will also get an understanding of the why, what and how of the assessment at this foundation stage.

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The course builds on study of child development domains under Course 1. It enhances understanding of the domains and of the nature of activities and experiences which promote different areas of development such as physical motor, communication, language, sensory cognitive, personal and social development. Active participation of the student teacher in the classroom through activities and exercises, in addition to didactic and discussion modes, is an essential part of the pedagogy of this course to enable them to have clarity on these aspects and to understand how same activity can nurture different domains and the interrelationship of domains. The course is to be taught in an interactive mode, helping students to see the connection between the development of children and suitability of each activity, experience or interaction.

#### **Objectives**

The course will enable the student-teacher to:

- Understand the process of how children learn during the early childhood stage and the important role of play in learning and development.
- Understand the importance of early stimulation for development below 3 years and the kinds of child care practices and interactions that constitute early stimulation.
- Become familiar with the objectives and components of the preschool curriculum both as foundation for all round development and for promoting school readiness and its link with primary education.
- Become conversant with the principles of program planning and goals for immediate and long term planning.
- Monitor and evaluate children's progress, and understand the concept of learning cycle leading to feedback and re- planning.
- Understand the risks of early academic pressures and downward extension of primary curriculum on children's development and early learning.

#### **Unit 1: How Children Learn**

- Children learn in different ways. It is important for the teacher to understand the topic to enable her to provide various opportunities for learning.
- Child as an active learner in constructing knowledge by exploring, experimenting
  and problem solving. Concept of assimilation and accommodation. Use of past
  experiences and knowledge to understand new situations and develop new
  concepts.

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- Multi pronged process of learning: learning by conditioning, experimentation, positive reinforcement, observation and imitation.
- Cooperative learning.

#### **Unit 2: Care and Early Stimulation for Children under Three Years**

- In the early years the development of the brain is very rapid and children under three years require special attention in the form of a stimulating psychosocial and interactive environment.
- Meaning and importance of early stimulation for children below 3 years.
- Understanding the value of local and cultural practices of care of infants
- Suitable play materials for early stimulation.
- Need for and essential features of a day-care programme: Adequate space, clean, safe and stimulating environment for learning, health and nutrition, physical safety; emotional security through love and affection, responsive care, positive social interaction, communication with parents for sharing child's experiences and mutual concerns. Day care centre routine.

#### **Unit 3: Play as a Medium for Learning**

- Play is the most suitable medium for working with young children. Understanding of theories and functions of play would help the teacher to appreciate the importance of play and help her to integrate it in her daily interaction with children.
- Definition of play; difference between play and work.
- Developmental pattern of play during, pre-school and primary grades: Unoccupied behaviour, solitary play, onlooker behaviour, parallel play, associate play and cooperative play; games with rules.
- Importance of play as medium of learning for a child; nature of play and its significance for different domains of development.;
- Factors influencing play: family, play materials, sex differences and attitudes of parents and teachers, indoor and outdoor space. Role of adults in creating a suitable and safe environment for indoor and outdoor play.
- Characteristics of age and developmentally appropriate and safe play materials
- Constructing diverse play environments in the classroom: constructive, dramatic, indoor, outdoor, vigorous and quiet play.

#### Unit 4: Concept of Developmentally appropriate Curriculum: Components and approaches

 This unit will enable student teachers to develop an understanding of goals and objectives of preschool education, of the concept of developmentally appropriate curriculum help them see the relationship between children's developmental needs

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and objectives of preschool education. Different approaches to curriculum would enable students to adopt them according to their contextual suitability.

- Goals and Objectives of preschool education in terms of all round development of child and school readiness; role of teacher; need for a planned curriculum framework with contextualized child centered curriculum
- Understanding terms child-centered, holistic development, play way method and Approaches such as formal vs. informal.

#### **Unit 5: Programme Planning**

- This unit introduces the student teacher to basic principles of a balanced and childcentered preschool programme and its significance.
- Principles of programme planning: Long term and short term objectives; free and guided activities, active and quiet activities;
- Factors influencing programme planning.
- Planning for year, term, weekly and daily.
- Building a personalized approach in social and cultural context to address classroom diversity in religion; language, festivals, food, needs of children in different slums.

#### **Unit 6: School Readiness**

- In this unit, the concept and significance of school readiness and emergent literacy are discussed in the context of it being an important objective of preschool education.
- Factors influencing school readiness: age, chronological and/or mental; home vs. regional or school language; parental literacy and socio-economic environment.
- Importance of early experiences and environment at home and role of preschool education.
- Components of School Readiness: a joyful learning environment for positive attitude towards school; readiness for reading, writing and pre mathematical/number concepts: habits of regular attendance, disposition to persevere on a task; interest in learning
- Multilingual development; facilitating children's transition from home to school language.

#### **Suggested Practical Activities**

 No practicals are prescribed for this course since those are covered under the Courses on Methods and Materials and Planning and Organization will also support this course. However the pedagogy for the course will need to be interactive, experience based with learning by connecting with the school based practice teaching experiences and practical's under the two other courses.

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#### **Suggested Readings**

- 1. Bredekamp, S. & Rosegrant E. (1995). *Reaching Potentials Transforming Early Childhood Curriculum & Assessment*. Washington: MAEYC, Volumes I & II.
- 2. Chugani, N. & Taraporewala R. (1978). *A Handbook for Parents and Teachers*. Mumbai: Xerox Printers.
- 3. Doherty, G. (1997). *Zero to Six: The Basis for School Readiness*. Ottawa: Applied Research Branch, R-97-8E, Human Resources Development.
- 4. Essa, E. (1990). *Introduction to early childhood education*. New York: Delimar Publishers.
- 5. Fursland, E. (1989). *Children's Play*. London: Virgin Books.
- 6. Gall, M.D., Gall J.P. (1990). *Tools for Learning, Association for Supervision and Curriculum Development*. Jacobson & Bullock.
- 7. George, W. & Naudeo (2005). Children's Play. London: Sage.
- 8. Jacobs, G and Crowley, K. (2007). *Play project and preschool standards*. California: Corwin Press.
- 9. Kaltman, G.S. (2006). *Help! For teachers of young children*. California: Corwin Press. Kaltman, G.S. (2006). *More Help! For teachers of young children*. California: Corwin Press.
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#### **Paper- 105**

#### DEVELOPMENT OF MATHEMATICAL CONCEPTS IN CHILDREN

Credit: 06 Theory (External): 100 Marks

Practical (Internal): 50 Marks

#### INTRODUCTION

Many of us may think that children learn mathematics when it is formally taught to them as a subject in the primary school. However, the development of mathematical concepts begins during early years as children participate in the various everyday activities involving social interaction and spontaneous play and manipulate objects to form ideas about quantity, space and shape. They are not engaging in learning mathematics formally at this stage but are nonetheless developing mathematical concepts through activities such as playing in the sand pit, carrying out pretend play with the kitchen set, building towers, singing, predicting during circle time about whether it is going to rain or not, cutting mangoes into pieces and so on. If the teacher has an understanding of the different mathematical ideas and about the progression in them, then she will be able to support the development of the mathematical concepts in children, by subtly incorporating conversations or components into these activities without affecting the flow of the activity. If the teacher sees that a child has made a number of 'chapatis' of clay of different sizes, then she can have a conversation about big and small chapatis, or similarly in another context about long and short malas while decorating the class. Through such activities children develop early mathematical concepts in a meaningful way. This emphasis on meaning making needs to be continued later as well when children are introduced to numbers and other concepts.

However, unfortunately, many preschools function as downward extensions of early primary classes and children are introduced to numbers and shapes in a mechanical way with children spending a lot of time copying numerals and writing number names without having developed number sense. Similarly children may be seen to be memorizing names of shapes but do not understand how these relate to shapes in the real world. In a way the alienation and fear of mathematics which we see among children in the primary grades may have its origin in such practices in the preschool years.

It is important that teachers also learn to see mathematics differently – not as a collection of procedures for getting the correct answers but as a way of thinking and reasoning about the world. When she develops such an understanding she can make use of

everyday activities that children engage in (such as those stated above) to foster mathematical thinking and also design and plan activities keeping the mathematics learning specifically in mind. These also involve activities that are meaningful to the child but these might be introduced keeping specifically the mathematical learning involved. Thus for example playing a board game might be introduced specifically keeping mathematics learning in mind. Even activities that are introduced with specific mathematics learning in mind need to have purposes that are meaningful to children and not involve meaningless rote learning. Therefore, writing numerals need to follow the development of number knowledge and not precede it.

#### Expected Pedagogical Approach

Student teachers need to experience in their own classrooms an inquiry-based approach so that they are better oriented to using a similar approach in their own teaching with children. The teacher educator plans the classes in such a way that students are confronted with a situation and look for solutions based on their own current understanding while being supported by the teacher educator's leading questions. Thus for example, the data collected by the students about the number knowledge of young children becomes the basis for the students' understanding about the role of age and other factors in the development of young children's number knowledge. Expository classes by the teacher wherever required, needs to follow an orientation to the topic so that the students can engage with the purpose of the presentation.

#### Innovative Aspect about the Course

A course of study on early childhood education usually describes the development of mathematical concepts within the larger rubric of cognitive development and often without an explicit focus on mathematics as an area of concept development. In this course a conscious effort has been made to help the teacher see how the development of mathematical concepts is embedded in children's earliest experiences so that the teacher is equipped to make use of naturally occurring opportunities to foster mathematical thinking in children as well plan specific activities for this purpose.

Another important aspect of the course is that in most of the Units, wherever required, the content has been described from two perspectives. Part A of the unit describes what the teacher needs to know to develop the concept in children. Part B of the Unit describes the activities that may be carried out with children to foster the development of that concept.

#### **Objectives**

The purpose of this course is to enable the teacher to understand the development of certain mathematical concepts in young children and plan activities to foster their development

The course will enable the student teacher to

- 1. Understand how everyday experiences and social interaction in joint activity form the basis of mathematical thinking in children
- 2. Make use of children's spontaneous play activities as well as plan specific play activities to foster development of mathematical concepts
- 3. Support development of children's logical abilities involving matching, classification, comparing, ordering and measuring
- 4. Understand the progression in development of number sense in children and plan
- 5. activities to foster the same
- 6. Appreciate the role of emotional engagement, meaning and purpose in the development of cognitive abilities
- 7. Identify how children develop concepts of shape and space and plan activities to foster the development of the same.

#### **Unit 1: Mathematics and the Early Years**

- Perceptual discrimination of quantities in infants, exact and intuitive discrimination up to 3 (subitization), and approximate discrimination of larger numbers
- Early everyday experiences as basis for developing mathematical understanding –
  for example, children's play and experiences with more and less quantities
  (clay/water/rotis etc.), big and small objects (balls and cars) lay the basis for
  development of mathematical concepts related to number and space.

#### Unit 2: Attitude towards Mathematics: Importance of Making Meaning

- Students sharing one's own experiences with mathematics learning and reflecting on these to find possible reasons for liking / disliking the subject.
- Pedagogical practices as contributing towards attitudes towards the subject –
  algorithm based way of teaching vs. linking learning with purposeful and
  meaningful experiences.
- Playing a game which is enjoyable and reflecting on the mathematics aspects and the learning without tears aspect.

#### **Unit 3: Matching and Classification**

Giving opportunities to children through meaningful activities

• to identify objects which are similar/ different; to match objects on the basis of a

given perceptual (visible) attribute – say colour, shape, size, texture;

- to match objects on the basis of function say, things we wear/things we do not wear
- to group/ classify objects according to one attribute like colour, texture, smell, sound, shape
- to group/ classify objects according to two attributes shape and colour
- to group/ classify a collection of objects that are alike in some way and explain basis of classification – for example, a collection of toys of different sizes to be arranged in a cupboard
- Using vocabulary such as similar, different, alike

### Unit 4: Comparing, Ordering/Seriating and Measuring (Continuous quantities – size, length/height, volume, weight, area)

#### PART A: Concept development (additional knowledge) for the teacher

- Developing sensitivity to the process of how children move from perceptual understanding to conceptual understanding
- Experiences of measuring using inches/foot and meter/centimetre/millimetre and the relationships between the two and developing the ability to estimate
- History of different measurement units for length gaz and other regional units and its relationship to British units (yard/foot), metric units' introduction after French revolution to formation of international SI units and adoption in India.

#### PART B – Activities to be done with children

- Giving opportunities and experiences of more-less, big-small, tall-short, heavy-light, far-near, during daily natural experiences of children and specific structured activities using two items
- ✓ Examples comparing heights of children, of towers made, of liquids in glasses, lengths of sticks,
- ✓ Comparing sizes of balls, toys, mud cakes, surfaces, caps, leaves
- ✓ Comparing weights of materials using a weighing balance
- Using vocabulary related to size, distance, weight, amount through such comparisons smaller/ larger, heavier/ lighter, far/ near, more/ less, smaller than/ larger than; more than/ less than, equal to
- ✓ Experiences of ordering 3 or more items on basis of one attribute acquiring and using vocabulary such as smallest/ biggest, heaviest/ lightest.
- ✓ Distinguishing between big/small, long/short and tall/short.
- Using informal units such as handspan to compare the lengths of objects and then to come to the need for an informal uniform unit (a local standard) such as a block or an unsharpened pencil to compare the lengths.

#### **Unit 5: Comparing and Counting (Discrete Quantities)**

#### Part A: Concept development (required knowledge) for the teacher

#### **Practical**

- Conducting interviews with children aged 3 to 6 years to observe the variability in the responses of children when asked to give a small number of objects (2 to 10/20) according to age. Discussion to classify the responses as the numbers increase and between children and interpreting it in terms of children's developing understanding of cardinality and the significance of the last counted word.
- ✓ Some children
- Count and give
- Continue counting
- Grab handfuls to give
- Difference between reciting number names and counting.
- Subitization Perceptual discrimination of quantities in infants, exact and intuitive discrimination up to 3 (subitization), and approximate discrimination of larger numbers.
- Principles of counting stable order, one to one correspondence, cardinality meaning of the last counted word.

#### PART B - Activities to be done with children for developing concept

Designing counting experiences in the classroom focusing up to 5 and supporting counting experiences of children.

- Creating opportunities to count using purposeful activities in the classroom in a
  variety of ways for example, playing the game of boarding the train after counting
  and giving pebbles as per the dots of the 'ticket'; counting the number of children
  wearing green.
- Supporting children in counting recounting with the child with one to one correspondence; repeating the last counted word meaningfully to convey the sense that it signifies the total number; importance of practice where counting is done in varied contexts instead of drill which involves mere repetition without context.

#### **Unit 6: Developing Number Sense Upto 20**

#### PART A: Concept development (required knowledge) for the teacher

- What is meant by number sense (Quantity and Order).
- To develop a sense of quantity how much is 10 or 15, which is more 7 or 11 and so on. Understanding 12 as 2 more than 10 or 3 more than 9 or 3 less than 15.
- To develop the sense of the order relationship between numbers to know that 15 comes after 14 and before 16, Understanding that 15 is equidistant from 10 and 20.
- Splitting numbers up to 20 in flexible ways is an important support for fluency with

number operations later.

• Understanding zero as absence of things being counted; counting to start with 1 and not.

This sense of numbers is independent of the written notation for numbers. Even if a person does not know how to write numbers, the person still can have number sense. This sense emerges through the process of counting objects in meaningful counting situations and not through identifying before and after numbers in isolation or by learning by-heart number combinations.

Counting-on as precursor to understanding the concept of addition. Understanding the difference between counting-all, counting-on and the importance of giving enough opportunity to children to come to counting-on on their own rather than being taught.

- The importance of doing addition and subtraction without place value through counting on, and counting back based on number sense
- The importance of spoken word problems for developing visualisation and abilities to model and using word problems to introduce addition and subtraction; vocabulary used 'and' instead of 'plus' when introducing the addition symbol '+'; spoken word problem with numbers alone written when children cannot read; and then later moving on to bare number sums
- Considering postponing the introduction of the vertical algorithm which is based on place value, till children have developed a conceptual understanding of what is involved in addition/ subtraction by using numbers as a whole
- Importance of observing strategies children use to add or subtract; recognizing multiple ways of addition and subtraction

#### PART B - Activities to be done with children for developing concepts

Designing counting experiences in the classroom focusing up to 20 and supporting counting experiences of children.

- Creating opportunities to count using concrete objects in purposeful activities (collecting leaves during outdoor visits and counting them, collecting materials for decorating objects, building house using towers) either in real life context or through stories, leading to development of sense of order in numbers, sense of quantity, number combinations, especially of 10;
- Exploring the possibility of using the empty number line to represent the order relationships among numbers using 5, 10, 15 and 20 as landmark numbers.
- Opportunities for counting-on and counting back using concrete objects or the empty number line.
- Introducing spoken word problems to children involving addition and subtraction supported by drawing to help visualise the context (and not to depict the numbers involved so as to support mental mathematics) using concrete materials to add and subtract and then word problems with numbers alone; moving to addition and

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- subtraction with bare numbers; vocabulary using the word 'and' instead of 'plus' when introducing the addition symbol '+'.
- Exploring patterns using numbers stringing coloured beads using different patterns such as 3 yellow, 2 blue and one red and counting them.
- Using number combinations to reason about numbers 6 and 7 is 13 since 6+ 6 is 12 and one is 13 (such reasoning will emerge when children have had sufficient experiences with numbers up to 20 and then with splitting a number in different ways).

#### **Unit 7: Developing Number Sense up to 100**

#### PART A: Concept development (required knowledge) for the teacher

- Keeping numbers whole and understanding numbers in terms in terms of relationship with other numbers 720 is between 700 and 800, it is nearer 700 than 800, it is just 30 less than/ before 750, moving on to locating numbers up to 1000 on empty number line
- Understanding place value in terms of
- a. Relationships within the number itself understanding 745 as 700+40+5; 700 as 7 times 100 (7x100), 40 as 4 times 10 (4x10), 5 as 5 times one (5x1),
- b. Relationship between places value of tens place is 10 times the value of units place, hundreds place is 10 times of tens and so on; and the reverse as well tens is 1/10 of hundred, ones is 1/10 of ten.
- Understanding that 745 has 74 tens; has 745 ones and has 7 hundreds
- Having a conceptual understanding of addition and subtraction Different ways of addition based on number sense. For e.g. Addition which can support the mental arithmetic of children

by stringing

$$36+28$$
a)  $36+10 \rightarrow 46+10 \rightarrow 56+4 \rightarrow 60+4 \rightarrow 64$ 
 $36+30 \rightarrow 66-2 \rightarrow 64$ 

splitting

b) 
$$30+20 \rightarrow 50$$
  
 $8+6 \rightarrow 14$   
 $50+14 \rightarrow 64$ 

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Adding vertically from left to right -

(Group discussion can be used to develop the activities)

#### PART B

#### **Practical**

- Developing meaningful counting activities for children who are more than 5 years
  and categorising them in terms of activities that can be repeated frequently while
  retaining the freshness such counting the number of children in class; activities of
  counting that are connected to other domains such as language or environmental
  explorations and are done during specific activities, such as for example counting
  seeds.
- Observing the differences in the responses of children, in terms of the number ranges they are comfortable with and the difficulties they face with specific number names (Difficulties with transitions in counting in different languages and the ways to support children's learning for example in English transition from twenty nine to thirty, thirty nine to forty and so on. In Hindi adtees (38) to unchalis (39).

#### **Unit 8: Space, Shapes and Patterns**

#### PART A: Concept development (required knowledge) for the teacher

- Understanding, properties of polygons and the interrelationships (squares are also rectangles, opposite side equal is not necessarily rectangle and the need for equal angles or right angles, relationship between parallelogram and rectangle, square and rhombus); Understanding angles and distinguishing between the lengths of arms and size of the angle and angle as inclination of one line to another.
- Straight lines understanding that sleeping lines, standing lines etc. are all straight lines and considering whether it is necessary at all to use these terms
- Understanding the limitation of the typical 'show and tell' method of introducing shapes to children.
- Introducing shapes to children through the process of familiarization through play, manipulation and construction.
- Use of informal words to characterise shapes such as square, rectangle before technical/geometric words are used depending on the context. (These can be like using *chokor* instead of *aayat* and *varg*. In some contexts *dabba* and *lamba dabba* could be used. The word square can also be used along with oblong and later children can learn that they are both rectangles with special properties).

#### PART B: Activities to be done with children for developing concept

- Identifying and creating situations in which children can participate and use the
  following words meaningfully to understand the terms such as, inside/outside;
  above/below, in-between, in the middle, in-front of / behind , straight / curved
  (Group discussion can be used to develop the activities)
- Seeing how activities with strings, broomsticks etc can be used followed by

- drawing on paper to learn to distinguish between straight line and curved lines.
- Devising activities through which children become aware of objects that roll, objects that slide and those who can do both and through that come to the understanding of flat and curved surfaces. Devising activities where children sort objects using informal words. Predicting the rolling/sliding behaviour of objects.
- Devising activities for free play in which children can create shapes to resemble objects they see or think about by using solid blocks, pattern-blocks and to see how they can talk about those figures.

#### **Unit 9: Data Handling**

• Students to understand the importance of data handling in modern life and how organised data leads to understanding the underlying patterns. Examples from own life. It's links with science.

### **Unit 10: Planning and Conducting Maths Experiences in the Classroom and Assessing Progress (practical)**

- Discussing about the following supported by videos of actual classroom teaching transactions:
- ✓ How to support free play and be aware of opportunities that arise to support maths concepts.
- ✓ How to conduct a dialogue how to lead a discussions in which children can
  express their method of solving a problem/their reasoning without fear of being
  right or wrong. How to take a cue from a child and revoice and take others into the
  discussion if something important has been said. How to frame questions in such a
  way that finding an answer for the class is the real motivating factor and not
  performance by a child.
- ✓ How to use mathematical language and problem-solving naturally in an integral way in other daily and special activities where the focus is not the learning of mathematical concepts.
- Preparation of a unit/lesson plan by the class as a whole and trying out in groups in
  different locations. The lesson preparation needs to take into account not only the
  mathematical idea for example number combinations from understanding it to
  reaching automaticity and flexibility but also the way children can relate to it.
- ✓ The expected number sense and knowledge of children before such a lesson can be rolled out.
- ✓ The stages through which the understanding can develop
- ✓ The possible responses that can come from children.
- ✓ Whether story or games have to be used and if so when
- ✓ Role of visual and tactile experiences in the different stages of the development of

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#### understanding

- ✓ How to take care of variability in the class
- ✓ How to introduce 'Number talk' and 'space talk' into the classroom

#### **Practicals:**

The practicals in this course are integrated with theory.

#### **Suggested Readings**

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- 2. Bruce, B. & Threlfall, J. (2004). One, two, three and counting Young children's methods and approaches in the cardinal and ordinal aspects of number. *Educational Studies in Mathematics* 55: 3-26. (mainly pages 3-8 UNIT 1)
- 3. Donaldson, M. (1978). *Children's Minds*. London: Fontana Press. (pages 17-25 human sense & p 41-50 for class inclusion) UNIT-2, UNIT 3
- 4. Gunderson, E.A. & Levine, S.C. (2011). Some types of parent number talk count more than others: Relations between parents' input and children's cardinal-number knowledge. *Developmental Science*, 14 (5), 1021-1032. UNIT 10
- 5. Jordan, N.C. et.al. (2006). Number Sense Growth in Kindergarten: A longitudinal Investigation of Children at Risk for Mathematics Difficulties. *Child Development*. 77.1. 153-175. UNIT 6.
- 6. Kirova, A. & Bhargava, A. (2002). Learning to guide Preschool Children's Mathematical Understanding: A Teacher's Professional Growth. Early Childhood Research and Practice. 4.1. UNIT 4 & UNIT 10.
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- 9. Menon, U. (2014). Two three is not twenty three. Available at: www UNIT 2
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- 12. Newcombe, N. S. (2010). Increasing Math and Science learning by improving spatial
- 13. thinking. American Educator. Summer. 29-43. UNIT 8
- 14. Subramaniam, K. (2003). Elementary mathematics: A teaching learning perspective. Economic and Political Weekly. 37 (35). 3694–3702. (pages 3694 to 3699 UNIT 7) Thompson, I. (1994). Early Years Mathematics: Have we got it right?. Curriculum 15:1. 42-49 (Excepts- UNIT 5 & 6)

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#### Paper 106

#### DEVELOPMENT OF LANGUAGE AND LITERACY IN CHILDREN

Credit: 06 Theory (External): 100 Marks
Practical (Internal): 50 Marks

#### INTRODUCTION

The development of child's language begins from birth. The critical period for language development lies between 6 months after birth to 4 ½ years of age.. Language is the medium for children to connect with people as well as construct and organize their knowledge about the world. The development of children's oral language seems to occur quite spontaneously and effortlessly as the child is immersed in language from the earliest days and hears others around him/her use language for authentic real life purposes. The development of the ability to read and write needs more guided attention from adults but is also spontaneously facilitated if the children are immersed in a print rich environment from their earliest years and see others around them using reading and writing to carry out their daily activities. In such a facilitating environment, children simultaneously develop as speakers, listeners, readers, writers and meaning makers from birth. The development of reading and challenging who writing may be for those come from print environments and further experience mechanical and drill like pedagogies in the preschool and early primary classrooms where the focus is on getting children to memorize the alphabetic principle, comprising meaning making as the central motivation for the children to learn to read and write.

Children know much about spoken language and use it with a great deal of facility when they enter school. They are actively creating concepts about reading and writing embedded in their respective families and neighbourhood and their linguistic and socioeconomic backgrounds. When the teacher is able to conceptualize the learning at school as a continuation of learning before school for each child, she is able to plan for meaningful literacy experiences in school enabling children to grow as readers and writers from the earliest days in school.

In order to support and organize for children's literacy development in the classroom it is important to understand the theoretical background. This paper guides the student-teacher through a systematic study of young children's language and literacy development, with a focus on the latter. It also equips them with pedagogic tools to translate the theoretical understanding into practice in linguistically and culturally diverse preschool and early primary classrooms

Importance of the course: The literacy indicators with respect to young children in the country present a dismal picture. Many of these children come from disadvantaged settings where they have no exposure to meaningful print in their environments. When they further experience pedagogies in school which privilege mechanical, drill like rote learning, their interest and motivation in wanting to be readers and writers is further diminished. The way out of this vicious cycle lies through teacher education wherein teachers are theoretically grounded in perspectives to children's language and literacy

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development and are enabled to implement meaningful pedagogic strategies in the classroom catering to diverse needs of children.

The course will be transacted through constructivist methodologies enabling critical analysis and reflection. Group discussions, use of case studies, films, observation and analysis of teaching practices will be used to strengthen the understanding developed through readings and theory based lectures.

Innovative aspect of the course: The courses training teachers to work with young learners largely focus on development of their oral language. This course is a unique attempt to enable the learners to see the development of oral language and literacy as a continuum. The pedagogies typically used in early years education for fostering oral language development can be easily extended to foster literacy development but this does not usually happen because of lack of theoretical grounding of the teachers in literacy education. This course aims to bridge this gap and enable the teachers of young learners to help initiate the children on road to an abiding interest in reading and writing.

#### **Objectives**

After completing this course the teachers will be able to make theoretically sound choices for implementing pedagogic strategies to facilitate language and literacy development of young learners.

The specific objectives of the course are to enable student-teachers to:

- examine and understand the close relationship between oral language and early literacy
- understand the theoretical perspectives to the development of language and literacy in young learners and develop a critical understanding of multiple approaches to early literacy.
- implement pedagogic practices to support and nurture the developing language and literacy of young learners in classrooms.
- be sensitive towards cultural, linguistic and socio-economic diversity in the classroom.
- develop their professional identities as teachers as educators for the early years

#### Unit 1: Relating Oral Language development with Early Literacy / The Nature, Structure and Functions of Language: Implications for the Classroom/ Development of Oral Language in the Early Years

• (Note: The first title is what is contained in syllabus submitted to NCTE; the second title is what Rekha is suggesting now; third is Sonika's suggestion) Sonika's comment – Rekha, originally, the focus of the unit was to examine the development of children's oral language and the content described below reflects the same. The

titles given above shift the focus to literacy, in case of the first one and to a certain extent to the structure of language, in the second one.

- Functions and forms of language including language as a medium for thinking and learning
- Transition from home language(s) to school language challenges
- Implications for the classroom: a rich talk environment with opportunities to speak and listen, engage in a dialogue for various purposes; a safe classroom that welcomes diverse language possibilities, acknowledgment of children's prior learning

**Practical:** Observe and record verbatim the conversation between two children around four years of age for 3 minutes. Analyze this piece of conversation and state what were the purposes for which children used language.

#### Unit: 2 Understanding the Reading Process and the Interplay of Meaning Making and Decoding / Understanding the Reading Process

(Note: The first title is what is contained in syllabus submitted to NCTE; the second title is what I am suggesting now)

- Relationship between written and spoken language similarities and differences
- Examining oneself as a reader: purposes of reading, adapting strategies to suit the purpose, reading as meaning making, role of prior knowledge of the reader in the reading process

**Practical:** Chose an age-appropriate illustrated story book for children in their mother tongue (such as "Billi ke Bachche" or "Lalu and Peelu' in Hindi for children whose mother tongue is Hindi). Give the book to the child and observe the child's reading behavior according to the guidelines that you have studied in theory paper

#### **Early Language and Literacy Education II Semester III**

Credits: 3

#### Unit 3: Emergent Literacy Framework: A Developmental View of Reading and Writing

(Note: This title is same as in syllabus sent to NCTE)

Examining children's engagements with literacy: concept construction about functional and formal aspects of literacy.

- Drawing and scribbling
- Labeling
- Picture reading
- Print awareness

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- Pretend reading
- Invented spellings

Development of comprehension in the early years - the significance of meaning in language processes; meaning- the ultimate goal of oral and written language.

**Practical:** Narrate a story to a group of four children. After narration give each child a A4 sheet of paper. Ask the children to now express the story on paper in whichever they want. For example, you can say, "Tell me something about the story which you liked using this paper and crayons." Analyze what stage of writing the child is in (Remember drawing is a stage of writing).

#### **Unit 4: Diversity in the Classroom: Pedagogical Implications**

(Note: This title is the same as in syllabus sent to NCTE)

- Using multilingualism in the classroom as a resource challenges and possibilities.
- Language dynamic and not a monolithic entity: issues of correct pronunciation, standard language, dialect(s), grammar.

#### **Practical:**

Observe a classroom of 6 year olds for half an hour when the teacher is actively engaging with the children. Make detailed notes on the language used by the teacher and the language(s) used by children. Critically analyze your observations with respect to the debates about school and home language.

Carry three common objects with you in the classroom. Ask the children what do they call these objects. Record the various labels given by children. Analyze what this tells you about the diversity of language in the classroom.

#### Unit 5: Children's Literature: Selection and Use

(Note: This title is the same as in syllabus sent to NCTE)

- Significance of children's literature in the early years.
- Examining different genres of children's literature for the early years: picture books, illustrated books, big books, rhymes, poems; features of an appropriate literature for children.
- Reading aloud: selecting a book, organizing for a reading aloud session; how to read aloud.
- Storytelling: strengths of a good story/storybook; how to narrate telling a story is not a performance.

**Practical:** Carry out this activity in pairs. One member of the pair narrates a story to a group of children. The second person provides detailed feedback about the various aspsects of the narration. Then the second person narrates another story to the same or another group of children and the first person provides feedback.

#### **Unit 6: Creating a Language Learning Environment: Principles and Practices**

(Note: I feel we should simply say 'Principles' as practices are contained in the other Units)

- Child as creator and constructor of meaning; primacy of children's experience and perspectives in classroom literacy practices.
- Strengthening child's oral language development.
- Focus on comprehension to be taught actively through a variety of strategies.
- Creating a print rich environment.
- Valuing multilingual classrooms.

## Unit 7: Learning to Read and Write: Multiple Approaches/Routines and Practices in a Literacy Classroom/Learning to Read and Write: Routines and Practices in a Literacy Classroom

- Balanced Approach to children's literacy development features and implications for pedagogy; using whole language approaches with contextualized and meaningful phonics instruction.
- Creating literacy rich physical environment: age-appropriate books and other print and literacy material; reading and writing corners; classroom libraries; display of children's writing.
- Whole language approaches Language Experience and organic reading Approaches (LEA) – using children's experiences as the basis for reading and writing, morning message, comprehensive and active use of children's literature: poems, rhymes, stories of different kinds, play songs and creating opportunities for reading and writing for a variety of purposes, reading aloud to children, storytelling, use of puppets, active use of context-relevant environmental print.
- Planning for Meaningful Skill Development within an Early Literacy Programme –
  developing skills required for school based learning; skills for phonological
  development; and higher order skills like creativity and problem solving in a
  language classroom.

#### **Practical:**

- Visit a classroom for young children and note the print available in the classroom.
   Make a record of each type of print and analyze whether it in term of its appropriateness for children.
- Observe a classroom when the teacher is carrying out a language activity with children. Analyze the teacher's approach with respect to various theoretical perspectives you have read about in the course.

#### **Unit 8: Assessment**

- Examination of prevalent practices of assessment in the early years including shrutlekh, sulekh, saswar vachan; the assumption these convey about children's literacy learning and development.
- The purpose of assessment.
- Principles of assessment: assessing and valuing the processes of literacy rather than the product, assessing the context and, authenticity of assessment.
- Assessment procedures: maintaining records of children's works: portfolios and anecdotal records, reporting on children's reading with the use of miscue analysis.

#### **Unit 9: Introducing English in Early Years**

- Challenges of introducing English in early years education
- Building children's oral language abilities through meaningful routines and activities

#### References

Separate attachment Useful Links http://cllcindia.org/

#### Unit 1

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#### Unit 2

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#### Unit 3

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Strickland, D.S. & Morrow, L. M. (1988) Creating a print rich environment, *The Reading* 

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#### Unit VIII

Teale, W. H., Hiebert, E. H. & Chittendan, E. A. (1987) Assessing young children's literacy development, *The Reading Teacher*, 40, pp. 772-777

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#### Paper 107

#### DEVELOPING UNDERSTANDING OF ENVIRONMENT IN CHILDREN

Credit: 04 Theory (External): 50 Marks
Practical (Internal): 50 Marks

#### INTRODUCTION

Children are constantly learning about the world around them. This learning is holistic in nature and not fragmented as science, language, culture studies etc. When a child enters formal education s/he brings to class an array of ideas gathered by her/him. This knowledge has an important influence on subsequent development.

The significance of the course is to enable the student teacher to understand the child's environment with its varied contexts. The student teacher would learn to use the child's environment and knowledge of it to create relevant meaning by active engagement.

The home-school connect would create a continuity in the child's life and bring about readiness for preschool/school. The child would learn by exploring the surrounding environment. The focus would be on experiential learning, promoting reflective thinking and developing a balanced attitude toward the environment.

**Expected Pedagogical Approach:** The course will be transacted through interactive sessions, lectures, discussions and projects. The student teachers would also observe and analyse various teaching practices. This course is an unique attempt to enable the student teacher to use the environment as a resource to enrich learning about the environment.

#### **Objectives**

After completing this course, the student teacher would be able to implement pedagogic practices to facilitate learning about the environment.

The course will enable the student teacher to

- Understand the interdisciplinary nature of study of the environment.
- Give importance to the child's own knowledge.
- Develop an understanding of the vision of the discipline as envisaged in NCF 2005.
- Develop themes for learning about the environment.
- Implement pedagogic practices to nurture learning about the environment.
- Create activities using locally available material.
- Be sensitive toward the diversity in the classroom.
- Integrate understanding of environment with language and mathematics.

#### **Unit 1: Interconnectedness of the Natural, Social and Cultural Environment**

- This unit emphasises the holistic nature of the environment and the interdisciplinary approach of learning about the environment.
- The environment and the child: aspects and components of the environment, understanding the child's interaction with the environment, identifying the varied ideas and knowledge of children.
- Significance of understanding about the environment: vision of this discipline in the
  national curricular framework 2005, objectives of learning about the environment,
  integrated and interdisciplinary nature of Environmental Studies, understanding the
  environment as an approach to learning, emphasis on holistic learning.

#### **Unit 2: Understanding the Learner in context with the Environment**

The child comes to school with a varied knowledge about the world around her. The unit connects various theories of how children learn as given by Piaget, Bruner, Vygotsky, etc. with the learning about the environment. It promulgates the diversity present in the classroom as an enriching resource for learning.

How children learn: Bruner with respect to attainment of concepts, multiple intelligence, exploration of the environment.

#### What children know

Diversity in the classroom: children come to classroom with varied backgrounds and interests, how this can be used as a resource to develop an understanding of the environment.

#### 1) Promoting understanding of the environment in the classroom

The unit focuses on how to create meaningful learning experiences. It accentuates concept attainment, along with the development of skills and values in learning about the environment.

Approaches to learning about the environment: inquiry based learning, exploration, discussion (sharing ideas), field visits, use of poems and narration (facts and fiction), and theatre.

#### Learning of concepts.

Skills: developing skills for age group 3-8 years, observation, classification (sorting), questioning, recording, surveying, experimenting, analyzing, predicting, and pre-mapping skills.

Developing values and attitudes: develop an awareness of environmental issues – gender concerns, issues of marginalization and oppression, values of equality and social justice, sustainable development; developing sensitivity to others' perspectives. Integration of environmental studies with language and mathematics.

#### Content enrichment

The unit calls attention to the need for student teacher's own knowledge base. It is envisaged that the concepts identified and studied are based on the needs and interests of the group and may vary in different institutes across the country.

The focus would be to develop content knowledge of the student teacher in a few areas. Emphasis would also be given to learning how to acquire knowledge. Examples of a few themes:

- Plants: parts of a plant, varieties and types of plants, leaves and flowers, how seeds
  germinate, plants as a source of food fruits vegetable, grains; plants as a part of a
  our social/cultural life tulsi, peepal, mango, banana, coconut, marigold; how to
  care for plants.
- Family: what constitutes a family, different types of family, functions of various members, migration, social and cultural aspects.
- Festivals: the festivals celebrated in the region, festivals based on-religion, harvest, seasons, other important issues; ways of celebrating; stories linked to the festivals.

#### **Unit 3: Exploring the Environment as a Resource**

- The unit deals with the environment as a resource to learn about it. While teaching the course, Units 4 and 5 may be dealt together.
- Learning from the natural/socio-cultural environment
- Learning from the community: types of resource/materials available experts, textual material, newspapers, local material

#### **Unit 4: Developing Themes**

- The unit brings together the understanding of units one to five. The student teacher would learn to prepare plans for meaningful learning about the environment. The student teacher would develop the notion that the themes would vary depending on the location of the school, interests and knowledge of children, and the availability of resources.
- How to select themes, its relevance with the life of a child, concept mapping, theme based learning for understanding the environment. Some examples are given:
- Myself: my body, my family, my friends, likes and dislikes, my neighbourhood, my school.
- Animals around us: at home, in the garden, how to care for animals, and sounds of animals.
- Assessment: Learning and assessment merge with each other. The unit highlights
  the purposes, techniques and sources of assessment. It would help the student
  teacher to carefully select the approach of assessment to understand the learner's
  unique qualities.

- **i.** Purpose: assessment as an integral part of learning, significance of assessment, cumulative assessment, feedback.
- ii. Approach to assessment: comprehensive, process-based, assessment of content, skills, and attitude; assessing the individual child.
- iii. Techniques: observations, anecdotal records, building a portfolio.
- iv Sources of information: the child's work (projects and assignments), teacher observations, anecdotal records, parents.

#### **Practicals:**

- Observation of a preschool class in a variety of preschools and analyzing it with respect to the principles of enabling children to understand the environment.
- Developing a thematic web for integrated learning (language, maths, and Environment Studies), developing lesson plans and teaching materials.
- Doing a project: visiting a monument/museum, developing a garden, mapping, recording the climate of your city/village, vermiculture, how things are made – pencils, books, clothes, vessels.
- Assessing 1-3 children during internship using a variety of strategies, making a portfolio of a child.

#### **Suggested Readings**

- 1. Atma Vidya Educational Foundation (1994). *Up and About*, Orient Longman: Chennai. Centre for Environment Education (CEE), *Exploring a Tree: Teachers Manual*, Ahmedabad.
- 2. EVS Textbooks for the Primary School: NCERT, Khushi Khushi, Aas-paas, Khoji Pothi. (for units 3,5 and 6).
- 3. Harlan, J.D. (1992). *Science Experiences for the early Childhood Years*, 5<sup>th</sup> Ed. Macmillan Publishing Company: New York.
- 4. Johnston, J. (1996). *Early Explorations in Science*, Open University Press: Buckingham. NCERT Activity Books for Classes 1 and 2. (for unit 3)
- 5. NCERT, Position Paper on EVS, NCF-2005. (for units 1 and 3) NCERT, Source Book of Assessment in EVS, Classes III-V. (for unit 7)
- 6. Ratna Sagar P. Ltd., *Prashika: Eklavya's Innovative Experiment in Primary Education*. UNESCO Source Book.

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#### Paper 108

#### METHODS AND MATERIALS FOR EARLY CHILDHOOD EDUCATION

Credit: 06 Theory (External): 75 Marks

**Practical (Internal): 75 Marks** 

#### INTRODUCTION

The Foundation course on 'Child Development' will provide the student teacher with an in- dept understanding of the nature of growth and development as well as the milestones of sensory, physical and motor, cognitive and language development during the various sub stages of the early childhood years. The objective of this "Methods and Materials in ECCE" course is to help the student understand how these different development domains can be fostered in the early childhood years through children's play and play based activities, experiences and interactions in a planned manner. Play is the natural activity of children and this leads to spontaneous development of sensory, physical and motor, social and cognitive abilities of the child. Yet the ECCE teacher needs to be aware of how children's free play contributes to their development and also how to enhance this natural development through guided and structured play activities. Physical, motor and sensory, language and cognitive development can be promoted through a variety of indoor and outdoor games and activities, which can be both vigorous and quiet in nature. While in the early years of childhood children engage in these activities individually, as they grow older and get opportunities to interact with children, they begin to engage in group play. Towards the end of the early childhood years by the time the child is 8 years old, the child can participate in team games with rules. The ECCE teacher needs to be aware of this trajectory of development in order

peer group interactions which can serve to extend children's learning, Play equipment and materials for games and other outdoor and indoor activities needs to be carefully selected keeping in mind safety, durability, multiple utility and cost.

to plan age appropriate activities and experiences enriched by active adult-child and

imagination the teacher can use then naturally occurring environment as a resource for children's indoor and outdoor play. Play material can be developed of other domains as well

- for example, playing outdoors in a group will foster not only physical and motor development but also capability for of cooperation and social development. The Course also exposes the student teachers to distinct features of different methods being adopted/adapted internationally for Early learning programmes such as Montessori, Regio Emila, Progressive method and provides them an opportunity to examine these critically to further their own understanding,

#### **Objectives of the Course**

 Understand the concepts of child-centered, age appropriate and play based and participatory learning experiences and materials for children at the preschool stage;

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With

- Become familiar with different approaches to Early Childhood education curriculum such as Montessori, Regio Emilia, Progressive approach, Activity based curriculum; Thematic Approach etc and understand implications for materials and curriculum planning.
- Plan, prepare and organize age and developmentally appropriate participatory learning experiences and materials for children at the preschool stage to promote all round development and learning in children; nature and importance of free play.
- Appreciate and accept individual differences, special needs and contextual diversity and develop understanding of how to plan activities and materials accordingly, keeping sensitivities and contextual needs in view.
- Qualities of a good teacher; role of teacher as facilitator, manager and administrator.

#### **Unit 1: Different Curricular Approaches/Models in Preschool Education**

 There are many innovative approaches to developing and implementing a preschool curriculum across the world, each having its advantages and disadvantages. For designing a good curriculum a judicious use of various approaches or elements in an eclectic form will contribute team effective preschool programme.

*Montessori Method:* Origin; Essential principles, method and materials; learning environment; Role of the teacher; Advantages and challenges.

# **Unit 2: Components and Related Activities for Promoting All Developmental Domains**

• It is important for the teacher to be familiar with the different components related to each domain that need to be nurtured through planned activities and play materials and how these can be contextualised.

#### Unit 2.1: Physical and motor development

- Objectives of physical and motor development: Development of Fine and Gross motor skills; Eye hand coordination and their importance.
- Opportunities and Activities for gross motor development: walking, running, balancing, climbing, jumping, kicking, galloping, throwing, catching, music and movement etc.
- Opportunities and Activities for fine motor development and eye hand coordination : threading; tearing and pasting; scribbling; free drawing; cutting; tracing; sorting; painting; clay work; block play etc.

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Teacher's role and important considerations for planning activities-safety, age
appropriateness and adequacy of materials; use of natural and locally available no
cost materials; importance of utilising activity corners, free play and teacher – child
and child to child interaction for motor activities.

#### Unit 2.2: Communication and language

- For proper language development, several skills need to be promoted at the preschool stage. Situations, activities, materials and experiences are required to be planned to promote good communication and language development.
- Need for promoting communication and language.

**Objectives:** Comprehension, building vocabulary, pronunciation and sentence construction; Development of language skills:

**Listening**: Importance of and experiences for its promotion through conversation, following directions, stories, songs, rhymes and riddles, picture talk and audio visual tapes **Speaking:** Opportunities for oral expression through adult and peer interaction, narrating experiences, describing observations and pictures, "show and tell", narrating stories, singing songs, reciting rhymes, answering questions (what, who, how, when, where and why)

#### Materials and activities:

Stories: Values, criteria for selection, use of various audio visual aids for story -telling, creating own stories.

Riddles, creative drama, role playing etc

#### Unit 2.3: Sensory and cognitive development

- Different methods and experiences required for creating awareness about environment and cognitive development are highlighted in this unit. The teacher is introduced to the various cognitive skills and concepts which are required to be nurtured and developed to enable the child to function at higher level.
- Objectives for Sensory and Cognitive development Development of five senses;
   Formation of basic concepts related to understanding the environment;
   development of cognitive skills, such as observation, classification, seriation,
   sequential thinking, reasoning; problem solving. Memory and increasing attention
   span.
- Concept of interdependence, value, respect and care of environment.
- Activities and materials for cognitive development puzzles, games, worksheets, science experiments and story cards; what is missing etc.
- Importance of sensory stimulating children's curiosity and participation, exploration, asking questions, developing observational skills, problem solving:

Role of teacher.

#### Unit 2.4: Personal and social development

- The unit details the various personal kills and its nurturance for becoming an effective social being.
- Need for promoting personal and social development.
- Objectives promoting personal habits related to health and hygiene; developing pro-social behaviour like sharing, cooperating, waiting for turn, respecting other; and appreciating different cultures and traditions; expressing emotions in socially acceptable ways.
- Activities and materials for promoting socio emotional development such as celebration of festivals, birthdays; encouraging group activities; doll's corner; imaginative play; cooperative learning activities; projects; group activities etc.
- Emotional intelligence and channelizing of emotions in children.

#### Unit 2.5: Development of creativity and aesthetic appreciation

- Encouraging children to explore and experience variations in colour, shape, texture in nature like flowers, leaves and others.
- Facilitating children to experience different forms of music and rhythm in the environment like chirruping of birds, train, or sound of rain.
- Criteria for selecting songs and rhymes.
- Music and movement Responding spontaneously to rhythm creatively; Use of dance as a form to explore movement of body and a mode of communication; body movements.

#### **Unit 3: School Readiness**

- In order for a child to make a smooth transition from preschool to formal education, concept and significance of school readiness and emergent literacy are discussed.
   Various activities and experiences are suggested to help the child with the complex task requiring various abilities.
- Pre-reading Activities: Reading stories and rhymes from picture and story books; print rich environment; Activities for sound discrimination like words with beginning sounds and end sounds; picture talk and picture books; discriminating shapes and symbols through work sheets like what is different? Reading /books corner for free play etc.
- Components for writing readiness Factors for deciding writing readiness: age
   (chronological and mental); eye-hand coordination, finer motor control; shape and
   sound discrimination and alphabet recognition; memory; attention span; follow left
   to right lines top to bottom; seeing meaning in writing.

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• Activities for writing readiness: activities such as colouring within outline, pattern drawing, joining dots, drawing, threading beads, recording of children's stories, activities and conversation; encouraging make believe writing; following patterns from left to right and gradually moving down the page, printing labels in class etc.

#### Unit 4: Risk of Early Academic Pressures on Children's Development

- Factors to be considered before introduction of writing.
- Overemphasis on Rote memorization leading to weak foundation for later learning.

**Practicals**: The student teacher will carry out the practical activities in the classroom/laboratory. Whenever possible they can try them out with children to gain firsthand experience of working with them.

• Each student to prepare a resource file which will contain samples of creative activities along with description of functions, materials required and teacher's collection of songs, rhymes, poems, riddles and gist of stories and other material which can be later used while working with children.

#### Motor Development

#### Large Motor Skills: Difficulty level to increase gradually;

Activities: Walking on a straight line, curved line, walking fast and slow, backwards, tip toe, heels, creeping, crawling, crawling under a rope, through an empty drum, throwing and catching a ball, rolling a ball, jump from a height, jumping in squares, circles in sequence, alternate, balancing, walk on thick rope, walk on planks of various widths, balance an object on head, with and without hand assistance, running fast and slow; running fast, stop and run again; marching, hoping and galloping, pulling and pushing and ball games.

#### **Encourage students to design other challenging activities.**

Finer Motor Skills: Rangoli with locally available materials like pebbles, shells, seeds, powder, coloured saw dust etc for threading prepare paper/mud/beads/bottle tops, lacing cards; Prepare frames for buttoning; Prepare a list of equipment which promotes large and finer motor skills, e.g. slide ladders, jungle gym, swing, nuts and bolts, screw top bottles, peg board, drop box for shapes, etc.

• Expose student teachers to Montessori play equipment and other toys. Classify each according the domains of development it promotes.

#### Creative Arts

**Note:** Various activities are given below. These can be used for development of other domains of development also. Besides promoting finer motor activities, they also help in cognitive, socio-emotional development and readiness for reading and writing.

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*Drawing:* Wet paint with different kinds of brushes, cotton wool, thread, and broomstick etc. Students to make brushes from other materials. Crayons, dry and wet chalk, wax drawing to be fully coloured with crayons etc; Finger Painting; Printing: Block, vegetable, string, crumpled paper, sponge, cotton wool; Spray Painting; Marble Painting; Cutting, paper folding, folding and cutting, pasting cut shapes, paper tearing and pasting; Collage; Modelling with clay, dough; Mosaic; Craft activity; Whenever possible, children should be allowed to child to colour or decorate the craft.

*Music, Movements and Rhythm:* Clapping to music, rhythmic movements, marching, stomping to music beat, different body movements to rhythm of music; Singing rhymes with expression and action; rhymes with finger play, free dance to music, playing different instruments to rhythm; Collect nursery rhymes and songs and learn tunes; Music appreciation, listening to music; Making musical instruments, using sticks, coconut shells, tins, paper boxes with seeds and pebbles, bells, other locally available materials.

*Creative Drama:* Make masks of animal faces: children after wearing masks imagine and imitate animals; After listening to a story, getting children to dramatise it.

#### Fostering Language

#### Functions, materials required and teacher's role;

Select pictures or draw and prepare Bulletin Board for children to be used for discussing a topic, student teachers to use the Bulleting Board to discuss the topic with "what, where, when, how and why" questions; Storytelling and puppet play: prepare aids and use them, different types of puppets, flannel board, sand trays using stick puppets and flash cards; Prepare picture and information books; read aloud children's stories from books with appropriate modulation of voice — story telling without any teaching aid but with modulation of voice; practice follow up of story-telling session; Making stick, finger and glove puppets and learning to manipulate. Making a compilation of language games, riddles, rhymes, stories, scripts for puppet play on different themes.

#### Cognitive Development

Functions, materials required and teacher's role;

Make one piece whole object puzzles and then range in number of pieces. Cards for sorting, matching, classification, seriation; pattern making in different colours, sizes, shapes etc. Dominos, simple e.g. matching/relating same picture or shape to complex ones requiring reasoning e.g. lock and key, hair and comb, alphabets, numbers and objects; Memory games and materials; materials for classification, comparison, seriation, patterning and counting. Prepare a list of mathematical vocabulary, e.g. long and short, thick and then, hot and cold, far and near, etc. with related activities. Design and conduct simple science experiments.

Plan for festival celebration.

#### **Suggested Readings**

- 1. Bredekamp S. & Rosegrant E. (1995): Reaching Potentials Transforming Early Childhood
- 2. Curriculum & Assessment, Washington: MAEYC, Volumes I & II.
- 3. Chugani Nalini, Taraporewala R. (1978): *A Handbook for Parents and Teachers*, Mumbai, Xerox Printers.
- 4. Doherty, G. (1997): *Zero to Six: The Basis for School Readiness*, Applied Research Branch, R-97-8E. Human Resources Development, Ottawa, Canada.
- 5. Gall M.D., Gall J.P., Jacobson & Bullock (1990): *Tools for Learning, Association for Supervision & Curriculum Development.*Kaul Venita (1997): *Early Childhood Education Programme*, New Delhi, NCERT.
- 6. Kaul Venita (1997): Pressures on the Pre-school Child: Issues and Strategies and role of Professional Organisations for Advocacy in ECE, NCERT, New Delhi, A Seminar Report. Kuppuswami B. (1990): A textbook of Child Behaviour and Development, New Delhi, Konark Press.
- 7. M.S. Swaminathan Research Foundat8ion (2001): *Scaling Heights*, Report of the Workshop, Chennai.
- 8. Muralidharan Rajalakshmi & Asthana Shobita (1991): Stimulation, Activities for Young
- 9. Children, 0 -3 Years, NCERT, New Delhi.
- 10. National Curriculum Framework (2005: *Early Childhood Care and Education*, NCERT, New Delhi.
- 11. Pankajam G. (1994): *Pre-school Education*, Ambalka: The Indian Publication. Srivastava, Ashok (1990): *Child Development*, NCERT, New Delhi.
- 12. Swaminathan Meena (1998): *The First Five Years*, New Delhi: Sage Publications. Swaminathan M. & Daniel P. (2000): *Activity-Based Developmentally Appropriate Curriculum for Young Children*, Indian Association for Preschool Education, Chennai, Coimbatore, Neyveli.
- 13. Swaminathan M. & Daniel P. (2004): *Play Activities for Child Development A Guide to Preschool Teachers*, National Book Trust, New Delhi.

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- 14. Wilson, LaVisa Cam (1986): Infants and Toddlers Curriculum and Teaching, Delmar
- 15. Publishers Inc. Albany, New York.

#### Paper 109

#### FIELD OBSERVATION AND PRACTICE

Credits: 06 Practical (Internal): 150 Marks

#### INTRODUCTION

This course represents a vital hands-on component of the Diploma programme. While each theory course has its own practical work, this course aims to bring together the learning from all courses and enable the student to apply it while working with young children. Through this course the student will get opportunities to observe teachers imparting preschool education in at least two different settings and will themselves transact activities and themes with preschool children under guidance and supportive supervision, beginning with one or two activities a day to full internship throughout the day over a period of time. Through this course the student will learn how to plan and conduct developmentally appropriate activities, how to plan daily, weekly and monthly curriculum, how to organize the outdoor and indoor classroom space for activities, organize materials for conduct of activities and learn ways of interacting with children in groups and individually.

#### **Purpose and scope**

The purpose of the course is to enable the student to make linkages between theoretical concepts and actual practice in the classroom. By actually conducting activities with children the student teacher will develop pedagogical skills and will learn to plan and adapt activities as per the needs and abilities of children. Through supportive supervision and mentoring by faculty, the capabilities of the student-teacher to be a reflective practitioner will be strengthened. The period of internship will enable the student-teacher to experience the totality of the preschool environment and understand how the transaction of the curriculum is not confined to the activities conducted in the classroom but is determined by all the experiences the children have during the time they are in the preschool.

#### **Expected Pedagogical Approach**

The course will be conducted through close interaction between the student-teacher, the faculty of the teacher education institute as well as the teacher of the preschool where the student will be placed for conducting the field observation and practice. The student will be provided formats to note observations, make activity plans and record the conduct of activities. The student teacher will discuss her observations and activity plans with the supervisor and mentor on a regular basis and the mentor

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will provide supervision during practice teaching and internship.

#### **Innovative Aspects of the Course**

Through this course the student teacher will get opportunities to work in two different preschool situations. The student will be encouraged to plan a developmentally appropriate, holistic programme for children to meet their needs across domains of development and would also focus on fostering creativity, emergent literacy and mathematical abilities of children.

#### Objectives of the course

- The course will enable the student teacher to
- Gain actual experience of working with young children in preschool setting
- Identify their pedagogical strengths and areas where they need to strengthen their skills
- Develop skills in understanding young children and their needs and be able to plan a relevant as well as a holistic programme for them.
- Learn the various aspects of classroom organization and management
- Be reflective practitioner

#### **Course Content**

This course has three segments which can be visualized along a continuum

**Stage 1:** Observation of teaching in preschools followed by conduct of activities by student teacher in simulated situations and feedback by mentor/supervisor

Stage 2: Practice teaching: Conducting planned activities for part of the day with children in classrooms.

*Internship:* Actual full time placement in two types of preschools involving independent working for a specified duration to get a holistic experience.

#### **Suggested Readings**

- 1. Kaul, V. Early Childhood Programme. (2009) NCERT, New Delhi.
- 2. Singh, A. & Swaminathan, M. (1995). A Training Manual for Early childhood Education. Swaminathan, M. and Daniel. P. (2004). Play Activities for Child Development: A Guide to Pre-school
- 3. Teachers. National Book Trust, New Delhi.

#### Paper 110

#### **SELF-DEVELOPMENT**

Credit: 04 Practical (Internal): 100 Marks

#### **INTRODUCTION**

Working with young children demands certain core competencies and behaviours along with the understanding of child development. These may include skills related to communication, art, music, drama, puppetry, organizing play and interaction with children, skills and attitudes—related to team work, as also activities for personal development. Given the priorities today in the job market as well as in the social arena, the student teachers may also need to be well conversant with spoken English and use of ICT, not only for their own personal communication but also for its use in their pedagogical practice, and be able to articulate their views with clarity and precision. These skills and attributes are expected to enhance their own self image and levels of confidence. The Course has been conceptualized to provide student teachers this opportunity, which is expected to complement their professional development. The student teachers would be encouraged to map out their own personal development plan and engage in these learning opportunities to acquire the needed knowledge, attitudes and skills.

This course is in a workshop module and will involve interaction with experts from different fields. Resource persons would engage with the trainees in participatory modes to explore different areas of self growth of the teacher.

#### **Objectives**

The workshops will enable the ECCE teacher to

- Facilitate development of a professional identity
- Develop self awareness as a teacher of young children and as an individual
- Improve communication skills, including in English, that would enable the teacher trainee to communicate clearly and effectively with children, others and parents
- Learn strategies, techniques and methods for classroom challenges.
- Develop skills for using different communication technologies to enrich the pedagogical techniques, as required for the programme.
- Develop familiarity with participatory classroom interactions
- Develop critical thinking

#### Methodology

This course is largely to be transacted in workshop modules and involves participatory techniques, group discussions, presentations, seminars, field visits and interaction with experts in the field. Resource persons would engage the student teachers in a participatory mode to explore different areas of self-growth, using a variety of techniques such as team games, dramatization, essays, debates, demonstrations, hands on practices etc. In addition, two planned courses are suggested on Yoga and English Communication. (courses enclosed) A course on applications of ICT is also desirable.

#### Workshops

#### **Unit 1: Enhancing Personal Development**

- Understand and reflect on one's strengths and weaknesses: SWOT Analysis of Self Concept –Self Esteem: Approaches to self development: Enquiry and introspection; Memories of childhood and their influence Family history and impact on individuals;
- Developing Thinking and Reflective Skills
- Developing Positive Mental Attitude patience, enthusiasm, versatility; Managing Stress and problem solving. Clearing Beliefs, Mental Blocks and Stereotypes; Facing Today's Realities.
- Developing an understanding and skills of self directed learning
- Leading Change and Sustained Growth
- Giving one's hundred percent: Quality improvement in all you do
- Assessment: Reflective writing assignments (Marks 10), Simulation Exercise

#### **Unit 2: Enhancing Communication Skills**

- Using Visual Aids Effectively
- Public Speaking
- Active Involvement of Audience
- Parent Communication and Managing PTMs
- Strengthening Spoken English and Basic Grammar
- Conversation Skills: Assertive/ Aggressive/ Submissive Communication
- Assessment: through Presentations; Practice; Role playing; Question & Answer session

#### **Unit 3: Advanced Writing / Creative Writing**

- Visit to library and book/ journal/ report reading sessions to understand library texts Creative Writing for Children
- Story Writing/ Song Composition

- Effective Report Writing
- Assessment: A story for children (Marks 10); report on the Report Writing Workshop

#### **Unit 4: Enhancing Professional Development**

- Classroom Management
- Develop an understanding of self directed learning
- Ways to address diversity in ECCE and early primary classrooms
- Making use of drama/ music, movement, yoga for young children
- Interpersonal effectiveness and ability to collaborate with others in team work.
- Organizational skills for an effective organisation of ECCE classroom
- Goal setting and effective time management
- Conflict Resolution
- Assessment: Plan a week's programme when the centre is organising Sport's Day Event; Plan a music and dance activity for children;

#### **Unit 5: Integration of Technology in Classroom / Embracing Technology**

- Using ICT to learn, not just learning to use ICT
- ICT and Role of teacher in an ECCE setting, How much is too much
- Introduction to Microsoft office (Word, Excel, PowerPoint)
- Introduction to email, net search, copyright issues and plagiarism
- ICT for assessment
- ICT for record keeping
- Preparing worksheets and activities
- ICT integrated projects for ECCE and early primary programme
- Assessment: A power point presentation on any concept; innovative activity and worksheet for introduction of numbers to children; Writing and analyzing the workshop experience and reflecting on the course and nature of participation, involvement and self evaluation

#### **Rationale and Aim**

The purpose of this course is to enable the student-teachers to improve their proficiency in English. A teacher's confidence in the classroom is often undermined by a poor command of the English language. Research has shown that improving teacher efficacy, or her own belief in her effectiveness, has a tremendous impact on the classroom. The teacher should be aware that isolated sound/letters, words and sentences do not make language. Whether it is in print media, visual media or day-today

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#### **Unit 1: Status of English**

- Introduction
- English around us
- English as a global language
- Constitutional provision; English as an Associate Official Language
- English as a Second/ Foreign Language

This Course has been taken from the revised D.El.Ed. curriculum framework of NCTE with permission of the Chairperson.

#### **Unit 2: Understanding Language – Listening to and Producing Oral Discourses**

- Introduction
- Listening with comprehension
- Making oral presentations and constructing different oral discourses
- Opportunities to use language in context.
- Activities:
  - a) Theme-based interaction
  - b) Listening to oral discourses (speeches, discussions, songs, news reports, interviews, announcements, ads, etc.)
  - c) Producing oral discourses (speeches, discussions, songs, news reports, interviews, announcements, ads, etc.)
  - d) Using classroom theatre (drama, choreography) as a pedagogical tool

#### **Unit 3: Critical Reading**

- Reading different types of texts such as descriptions, conversations, narratives, biographical sketches, plays, essays, poems, screenplays, letters, reports, news reports, feature articles, reviews, notices, ads/matrimonial, brochures, etc. and identifying their features
- Reading for global and local comprehension
- Understanding the process of critical reading
- Activities:
  - a. Identifying the features of various discourses they have read
  - b. Interpreting tables, graphs, diagrams, pictures, etc.
  - c. Reviewing any book/article
  - d. Using reading as a tool for reference skills i.e. use of dictionary, Encyclopaedia and internet

#### **Unit 4: Creative Writing**

- Introduction
- Writing for specific purposes and specific audience and understand writing as a process
- Experience the classroom process of writing (individual, collaborative, editing)
- Writing texts such as descriptions, conversations, narratives, biographical sketches, plays, essays, poems, screenplays, letters, reports, news reports, feature articles, reviews, notices, ads /matrimonial, brochures, etc. and identifying their features
- Recognising errors as a part of learning process
- Activities:
- ✓ Writing individually and refining through collaboration
- ✓ Reading related texts for refinement of the written work in terms of discourse features and theme

#### **Unit 5: Vocabulary and Grammar in Context**

- Introduction what is grammar
- Problems with traditional prescriptive grammars
- Auxiliary system (Tense, Modals, Perfective and Progressive Aspects, Passive)
- Word formation (prefix, suffix, compounding)
- synonyms, antonyms, homophones.
- Activities:
- ✓ Reading passages and analyzing the distribution of linguistic elements

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- ✓ Checking the generalizations in the light of new passages
- ✓ Writing discourses and editing them individually and also through collaboration, feedback
- ✓ Critical reading of specific areas of grammar as discussed in a few popular grammar books and reaching at conclusions.
- ✓ Dictation
- ✓ Speak a few lines on any given topic or object
- ✓ Text reading
- ✓ Creative writing ( paragraph or letter)

#### **REFERENCES**

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- 2. Craven, M. (2008). *Real listening and speaking -4*. Cambridge: Cambridge University Press.
- 3. Driscoll, L. (2008). *Real speaking*. Cambridge: Cambridge University Press. Elboum, S. N. (2010). *Grammar in context 3*.Heinley?
- 4. Grellet, F. (1981). Developing reading skills UK: Cambridge University Press.

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## **Diploma in Preschool Education (DPSE)**

## **Second Year**

### **CREDIT DISTRIBUTION**

Sr. No.	Paper Code	Courses	Credits			Marks		
			Theory	Practical	Total	Theory	Practical	Total
						External	Internal	
11	201	Understanding Gender, Diversity, Discrimination and Inclusion	3	1	4	75	25	100
12	202	Planning and Organizing a Preschool Education Programme	4	2	6	100	50	150
13	203	Working with Children with Special Needs	2	1	3	50	25	75
14	204	Working with Parents and Community	1	1	2	25	25	50
15	205	Field Practice	0	6	6	0	150	150
16	206	Pre-school Internship	0	8	8	0	200	200
17	207	Self-Development	0	1	1	0	25	25
		Total Credits for 2 <sup>nd</sup> Year	10	20	30	250	500	750

# Syllabus

# Diploma in Preschool Education (DPSE)

**Two years Course** 

(Implementation w.e.f session 2015-17)



