A Holistic Curricular and Pedagogical Approach to Early Childhood Care and Education

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Abstract: The first six years of life are critical years of human life. A stimulating learning environment for years of life makes a positive contribution for lifelong learning. Parents as caregivers are critical in providing a stimulating learning environment to the child. In this context National Curriculum Framework, 2005 acknowledges the significance of involvement of parents, family and community. The ECCE programme needs to be determined by children's developmental and contextual needs, providing for more need based inputs and an enabling environment. For optimal development of all children, a planned curriculum framework occupies a significant place. The curriculum framework needs to cover important learning areas by taking care of all the developmental needs of the young child. It also facilitates adoption of a common pedagogical approach to accomplish the programme. This paper presents a basic curriculum framework for holistic development of children in early stage. The curriculum framework emphasizes various activities and contents for early childhood period. Pedagogical approaches have been suggested for smooth accomplishment of the curriculum programme.

Keywords: Holistic Development, Curriculum Framework, Pedagogical Approaches, ICT Learning Materials

Rationale

Early Childhood Care and Education (ECCE) is assumed as important for its holistic developmental role for very young child. Early childhood education is the formal teaching and care of young children by people other than their family or in settings outside of the home. 'Early childhood' is usually defined as before the age of normal schooling. It is a period when walking, talking, self-esteem, vision of the world and moral foundations are established. The terms "early childhood learning," "early care," and "early education" are comparable with early childhood education. Early childhood is defined as the period from birth to 8 years old. A time of remarkable brain development, these years laid the foundation for subsequent learning (UNESCO). Early Childhood Care and Education involves the total development of children-physical, motor, cognitive, language, emotional, social and moral. The National

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Policy of Education 1986 has given great importance to ECCE as a feeder and support program for primary education and as a support service for working women of the disadvantaged sections of the society. The programme at the early childhood stage should ensure holistic learning and growth. It was believed that a common 'curriculum' would not be appropriate for all. A specific curriculum framework would definitely help for holistic development of the children. Creative integration of Information and Communication Technology into innovative early childhood education occupies a significant presence in children's learning environments throughout their schooling and into their adult lives.

Specifically designed tools as digital toys, social robots or videogames are also commonly used in childhood schools. ICTs are not only used as educational tools but also as supporting ones. Nowadays, there are a wide range of online communities targeted to children, families and teachers that offer different services as discussion forums, search engines, educational resources, etc. Most of the electronic devices being used are suitable to classroom settings only (e.g. interactive whiteboards), but emergent technologies as interactive television (iTV hereafter) gathers a set of features (accessibility, easiness, low cost, great multimedia capability, adult-child co-viewing) especially well adapted to be used at homes.

**Holistic Approach of Curriculum for ECCE**

A meaningful curriculum is integrated so that learning experiences encompass many content areas. It must be based on children's interests and presented in a context that stimulates children to invest in their work. Children need to interact with the curriculum to explore it, utilize it, question it and evaluate it in their own way of learning. Children's engagement ensures purposeful and sustained learning. Curriculum also must provide opportunities for children to see and explore who they are within the context of their family life and culture (Curtis and Carter, 2006). Educators define curriculum as "an organized framework that delineates the content that children are to learn, the processes through which children achieve the identified curricular goals, what teachers do to achieve these goals, and the contexts in which teaching and learning occur" (Bredekamp and Rosegrant, eds.,1995).

The NCERT (2006) stipulated three broad objectives in its position paper for ECCE: holistic development of the child to enable him/her to realize his/her maximum potential; preparation for schooling; and providing support services for women and girls. These objectives are based on holistic approach. Holistic approach to ECCC refers to policies and programming that ensure that child rights to health, nutrition, cognitive and psychosocial development and protection are all met. All interventions should reach the children, including the most marginalized. A number of studies suggest that there are additive and even synergistic effects among interventions that result in greater impacts on the child's development. Improving survival, growth and development requires three interventions: quality basic services, good care practices within the family and community, and the implementation of Early Child Development policies. If these components are combined, there will be greater impact on children's wellbeing. They can be thought of as operating at four levels:

<table>
<thead>
<tr>
<th>MICRO LEVEL</th>
<th>Family</th>
<th>Behaviour, practices, skills, choices and decision-making powers of families and caregivers</th>
</tr>
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<tbody>
<tr>
<td>MESO LEVEL</td>
<td>Community</td>
<td>Services and commodities obtained at community level; community organization</td>
</tr>
<tr>
<td>MACRO LEVEL</td>
<td>National, District, Sub-Regional</td>
<td>Policies, budgets and resource allocations</td>
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<tr>
<td>MEGA LEVEL</td>
<td>International</td>
<td>Goals, targets, standards, and financing mechanisms</td>
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The holistic curriculum for ECCE must address the following interrelated domains of holistic development through an integrated and play based approach which focuses on development of life skills.

- **Physical and Motor Development:** Gross motor skills; coordination of fine muscles with dexterity; eye hand coordination; sense of balance, physical co-ordination, and awareness of space and direction; nutrition, health status and practices.

- **Language Development:** Listening and comprehension; oral skills/speaking and communicating; vocabulary development; pre-literacy/emergent literacy skills like phonological awareness; print awareness and concepts; letter sound correspondence; recognition of letters; building words and sentences and early writing. Introduction to language of school transaction.

- **Cognitive Development:** Development of various concepts including pre number and number concepts and operations (knowledge and skills related to comparing, classification, conservation of space and quantity, one to one correspondence; counting); spatial sense; patterns and estimations in measurement; data handling; skills related to sequential thinking, critical thinking, observing, reasoning and problem solving; and knowledge about concepts and physical, social and biological environment

- **Socio-Personal and Emotional Development:** Development of self-concept; self-control; life skills/ self-help skills; habit formation; initiative and curiosity; engagement and persistence; cooperation; compassion; social relationships; group interaction; pro-social behaviour; expressing feelings, accepting others feelings.

- **Sensorial Development:** Development of the five senses through visual, auditory and kinesthetic experiences.

- **Development of Creative and Aesthetic Appreciation:** Exploring different art forms, develop dispositions, expression and appreciation for artistic, dance/drama and musical activities

### Basic Tenets of Curriculum Development for ECCE

The ECCE teacher, practitioner, curriculum designer must have an understanding of the following basic principles:

- Play as the basis of learning
- Art as the basis of education
- Recognition of the special features of children's thinking
- Primacy of experience rather than expertise
- Experience of familiarity and challenge in everyday routines
- Mix of formal and informal interaction
- Blend of the textual (basic literacy and numeracy) and the cultural
- Use of local materials, arts, and knowledge
- Developmentally appropriate practice, flexibility, and plurality
- Health, well-being, and healthy habits

(Source: Position Paper, National Focus Group on ECCE, 2006, p.37)
Age appropriate Activities for Holistic Development

The age appropriate curriculum for ECCE is suggested as following:

**Curriculum for Infants and Toddlers: for Children under 3 years (0-2+ or 3 years)**

- Focus on health, nutrition and early psycho-social stimulation through free play and a lot of adult child interaction. E.g., (infant games, traditional songs & syllables, access to variety of play materials, individualized adult attention and interaction, opportunities to explore, early introduction to stories, infant books, drawings etc.) in safe, spacious and clean environment. Play is the first and most important defining behavior of a young child. Research shows that play cannot be replaced by any other activity (Bodrova & Leong, 1996). The ability of children to construct meaning from their play should not be underestimated. How excited they become when they first discover how to make purple by mixing other colors, or sing a song that plays with words and sounds. Whether building a home for the guinea pig, or participating in a game with others, playing alone and with others contributes to the development of self, and provides a forum for the development of independence, self-confidence and problem solving (Wassermann, 1990).

- ECCE settings need to be colourful and rich in manipulative objects or rocking toys for play that appeal to infants and toddlers. Children who play freely with designated materials exhibit more thinking skills and problem-solving abilities than those not given opportunities to play. They are also more goal-directed and persistent (Sylva, Bruner, et al., 1976).

- Responsive adults provide trust and support, even careful supervision, creating dependable adult-child relationships.

- Developmental psychology explains that the Infants and toddlers learn through their own experience of trial and error, repetition, imitation, and identification. Hence, warm and supportive social relationships are a significant and essential contribution to the quality of children's experiences.

- Starting from zero years the infant comes across various stages and activities that help him to recognize objects and establish a strong bondage with the objects. Here, the objects may include, face of human being, play materials, food items etc. Up to the age of 09 months the infant develops certain skills as the mother performs various activities like massaging the baby, singing infant rhymes, and playing baby games that stimulate the child to distinguish the familiar face from the unfamiliar face. Gradually, he produces the rudiments of linguistic sounds which stimulate a desire for physical movement. There must be visual stimulus and objects to hold and manipulate.

- During the second year, conversations, picture books, and objects become essential part in the infant's environment. The child needs sand play, ball play, and many experiences of filling and pouring to allow for fine motor experiences. Hence the adults need to guide and supervise this learning by giving emotional support. Adult-child interactions need to be linguistically rich and playful, under-3-year-olds, allowing for active and collaborative exploration.

**Curricular Framework for 3-4 years Children**

- Planned play based programme for all round development with more of free play. Continuous opportunities, more free but some guided, for adult-child, child to child interaction and interaction with play materials and environment through a variety of individual, small group and large group activities.
• Opportunities to listen to stories, learn rhymes, create, indulge in imaginative play, ask questions, do simple problem solving, experiment to promote active and interactive learning and generally have a 'feel good' experience for a positive self-image.

Curricular Framework for 4-6 years Children

• **Reading Readiness:** Picture-sound matching, shapes phonetics; increasing vocabulary; verbal expression, developing bond with an interest in reading through picture books, storytelling, charts etc.

• **Writing Readiness:** Eye-hand coordination, interest in writing, left to right directionality.

• **Mathematics:** Developing skills in classification, pattern making, reasoning, problem solving, forming concepts: pre number and number concepts and space concepts and vocabulary, environment concepts.

• **Motor development:** Fine motor development through activities such as beading, peg-boards and puzzles and large muscle development through running, jumping, balancing activities etc.

• **Creativity and aesthetic appreciation:** Creative drama, cultural activities, field trips etc. The programme should be relevant to individual and societal needs. The age demarcations are indicative and the activities have to be planned according to the developmental level of the children.

Figure 1: Suggested Play-Based Activities for Holistic Development of Children

Curriculum in the Early Primary Grades, 6-8+ Children

At this stage, children get accustomed to the formal routines of the school as well as in learning. The basics of literacy (reading and writing) and numeracy (understanding and applying mathematical concepts and gaining systematic knowledge of the social and natural environment) occupy its position during this stage. The teachers for these children need to have the broad aims to:

i. Develop knowledge and skills in all areas of child development

ii. Help children learn how to learn: a constructivist approach

iii. Understand individual differences and learning styles

Classroom interactions strategies should be based on the following aspects:

- Provide concrete experiences
- Teach through peer interaction
- Encourage cooperative learning
- Use the project method to initiate integrated learning
- Work for the active involvement of children.
- Utilise drama for language teaching.

Teacher-Child Relationships should be as following:

- Allow children to express their feelings.
- Share their trials and triumphs.
- Be responsive and reach out to children.

ICT Learning Tools in Early Childhood

National Curriculum Framework, 2005 state, 'Integration of Information and Communication Technologies (ICT) into schooling needs serious consideration. Teachers, educators, curriculum developers, evaluators and others will have to redefine their roles to tackle ICT rich environment and harness its full potential for the benefit of learners.' Information and Communication Technology (ICT) is an important tool for bridging social divides. ICT should be used in such a way that it becomes an opportunity equalizer by providing information, communication and computing resources in remote areas. ICT if used for connecting children and teachers with scientists working in universities and research institutions would also help in demystifying scientists and their work. Pre-School kit of consists of Flash cards for storytelling, Building blocks, Stuff toys and dolls for role play, Matching and serial cards, Balls, Wheel toys, Masks, Colours, Small drum, etc (Sheeranjan & Awathi, 2010).

ICT based Teaching Kits for Early Childhood may include the followings:

- Puppets
- Picture cards/Puzzles
- Pictures/Charts
- Audio-cassettes
- Video cassettes
- Musical Instruments
Picture Books and Reference Books
Song/Rhyme Books
Black Board
OHP
Cassette Recorder
Television
Video Cassette Recorder
Display Space

Other Technological Tools in Early Childhood Learning
The technologies are generally and widely used by all of us viz, Cell phone, PDA (Personal Digital Assistant), Personal computer, Printer, Scanner, Internet, Dial-up or high speed connection, E-mail, Instant Messaging, Distribution list and/or Listserv, Online discussion group, Chat room, Digital camera and/or video camera, Recordable CD and/or DVD, Direct broadcast satellite or high-speed digital cable TV, Digital video recorder etc.

Managing a child care program is itself a complex activity and managing of the same involves many complex activities. In the present age of explosion in digital information, technology has become most essential aspect for child care professionals in the means of technology training; opportunities for online learning and professional development; access to the wealth of information, resources, and services available on the Internet; and the ability to link electronically with parents, staff, and other child care professionals. Technology tools can make these tasks more manageable (Chip Donohue, 2003).

Pedagogical Approaches for ECCE curriculum transaction
Children learn through their own experience of trial and error, repetition, imitation, and identification. Appropriate pedagogical approaches are significant and essential to the quality of children's experiences. Children need the experiences in order to attain their developmental goals such as: freedom from undue adult restraints through exploration, experimentation, encouragement and challenge; happiness of achievement for the individual through opportunity, guidance, support, security and safety; adapting to be a member of a collective by cooperating, listening, sharing and empathizing. The curriculum adopts a play and activity based approach as children construct their own knowledge and adults play as facilitators. Various approaches may be practiced for transaction of ECCE programmes:

Montessori Method
Teachers understand how to respond appropriately to the care and educational needs of children at different ages, stages according to their interests and abilities, taking account of diversity and promoting equality and inclusion. Maria Montessori's goal was to develop the whole personality of the child and her system is based on her strong belief in the spontaneous working of the human intellect. The main principle of Dr. Montessori's method is that the child learns by himself from experiences within the classroom. The role of the teacher is to prepare the classroom so as to maximize the benefits of the experiences within it. This method is characterized by an emphasis on independence, freedom within limits, and respect for a child's natural psychological development and is transacted through specialized sensorial material.
Reggio Emilia Approach

The Reggio Emilia Approach was developed by Loris Malaguzzi, who was a teacher himself. The program is based on the principles of respect, responsibility, and community through exploration and discovery in a supportive and enriching environment based on the interests of the children through a self-guided curriculum. This is a constructivist approach which focuses on creation of a learning environment that enhances and facilitates children's construction of their own thinking through the combination of communicative, expressive and cognitive languages as they engage actively with people, material and environment. In the Reggio approach, the teacher is considered a co-learner and collaborator with the child and not just an instructor. Teachers are encouraged to facilitate the child's learning by planning activities and lessons based on the child's interests, asking questions to further understanding, and actively engaging in the activities alongside the child, instead of sitting back and observing the child learning. As partner to the child, the teacher is inside the learning situation (Hewett, 2001).

Progressive Method

This is an eclectic approach which draws from the major child development theories. Recognizing the many paths of learning, latest researches and contemporary work lay the foundation of this framework.

Thematic Approach

A thematic approach to teaching involves integrating all subject areas together under one theme in preschool classes especially. It crosses over subject lines and helps children relate basic academic skills to real-world ideas. These themes should enable the children to make meaningful connections among the different concepts and develop holistic understanding of the world around them. The curriculum should be flexible and responsive to the needs of the children in the class. It is to be constructed to suit the diverse social, cultural, linguistic contexts in the country, and initiate integrated learning. The project or theme crosses curricular areas to enhance many aspects of children’s development and learning. The theme or topic becomes an organizer, linking centers, knowledge, skills and experiences, as well as the investigation content. The critical feature is to enable children to make connections with prior learning and motivate them to want more information.

Conclusion

A holistic approach of ECCC refers to policies and programmes that ensure that child rights to health, nutrition, cognitive and psychosocial development and protection are all met. All interventions should reach the children, including the most marginalized. A number of studies suggest that there are additive and even synergistic effects among interventions that result in greater impacts on the child's development. For the fruitful implementation of all the programmes, a holistic curriculum along with pedagogical approaches needs to be adopted at early childhood level. The age specific for ECCE curriculum should include all the domains such as: physical, language skills, cognitive, socio-personal and emotional, sensorial components, creative and aesthetic appreciation components based on the curricular principles as suggested by NCERT for ECCE. Besides, ICT components are need of the hour, they should be included in the curriculum. The pedagogical approaches like Motessori, Regio Emillia, thematic approach etc. are suggested for successful accomplishment of the programme.

References


