

Resources for Early Childhood Education (E.C.E)

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Abstract

The central theme of this paper is resources for early childhood education. The paper highlights issues such as purpose and benefits of ECE. It also discusses human, material and financial resources and gives detailed instructional resources for effective teaching at this level of education. The benefits of E.C.E. are that there is a positive relationship between E.C.E life performances of the recipient of this level of education. Good. ECE inculcates the spirit of enquiry and creativity through exploration of nature and the local environment. It teaches them cooperation, team spirit and good habit. It also prepares them for primary education. The study also examined the importance of play, things to look for in preschool curriculum which are human resources, materials and finance. Quality support system should include educational training for programme personnel as well as ongoing technical assistance programme providers and individual care provider. Personnel who are well prepare through education, training and support are essential to achieving high quality.

1. Introduction

Education begins from the moment a child is born and continues for the rest of his life. The learning capabilities of children continue for the rest of their lives but not at the intensity that is demonstrated in the preschool years. Early childhood education refers to the formal teaching/learning of young children by people outside the family (except when family member(s) is/are professional teacher(s)) and in settings outside the home. It includes crèche nursery and kindergarten (Federal Ministry of Education, 2004).

Early childhood is referred usually to the age of normal schooling years in most nations. Babies and toddlers need positive early learning experiences to help their intellectual, social and emotional development and this lays the foundation for later school successes.

A child is endowed with some powers that enable him to construct and develop his personality. A child learns a language without conscious effort. He picks a language just by hearing it. Behavioural theories of child development focus on how environmental interaction influences behavior and are based on the works of theorists such as John B. Watson and Ivan Pavlov among others. These theories deal only with observable behaviors. Development is considered a reaction to rewards, punishment, stimuli and reinforcement. The areas of development according to Piaget (n.d.) are:

- Physical Development
- Cognitive Development
- Language Development and
- Emotional Development

Bowlby (n.d.) believes that early relationships with caregivers play a major role in child development and continues to influence social relationships throughout life. Early childhood education focuses on child learning through play. It has been thought that the child learns more efficiently and gains more knowledge through play- based activities such as dramatic play, art and social games. Early childhood education is crucial to child development and should be entered into cautiously with the one that will benefit the child.

Children must receive attention and affection to develop in a healthy manner. Many believe that education at preschool ages can significantly affect a person's ability to deal successfully with later life.

1.1 Theory of Development Interaction

Ogbonnaya (2010) noted that early childhood education can be traced to the efforts of prominent educationists like Rousseau (1712-1788) and Pestalozzi (1748-1827). He also added that one of the modern educationist Maduewesi (1977) holds the view that there is positive relationship between good early childhood education and future life performance of the recipient of this level of education. According to Piaget in Montessori (2009), there are four major stages of cognitive development:

- Sensor Motor: This stage occurs between birth and two year of age.
- Preoperational: The second stage occurs between the ages of 2-7 years
- Concrete Operations: This development stage occurs between the ages of 7 and 12
- Formal Operation: This stage of cognitive development takes place from ages 12 and beyond.

2. The Purpose

Early childhood education is the education received by the child prior to primary education. An important thing to remember when it comes to children and nature is to provide them with positive experiences of the natural world around them. It allows the children to explore and discover for themselves the magnificence of nature by making sure they have adequate opportunities to play outdoors with the guidance of the teachers and caregivers. With innate power of curiosity and imagination they will find ways to connect with nature on their own by exploring worms, dirt, leaves, sticks and rock. The mission of ECE is to provide leadership and support to schools, organizations, educators, families and communities in implementing programmes that assist all children from birth through age 8 to become successful lifelong learners.

3. Benefits of Early Childhood Education

- It is an undeniable fact that this aspect of education is the bedrock upon which all levels of education are anchored. The level of access a child has of early childhood education will definitely determine the ease with which the child can advance through other levels of education (World Bank 2000, Project Ministry of Health, 2004).
- In addition, Highscope Perry preschool study (2005, p.2) stated that it inculcates in the child the spirit of enquiry and creativity through the exploration of nature and the local environment.
- It teaches cooperation and team spirit
- It teaches good habits.
- It prepares them for primary level education
- It provides adequate care and supervision of the children while their parents are at work.
- A study conducted in Ypsilanti Michigan, (1962-1967) found that adults who had preschool programme had higher earnings, were more likely to hold a job, had committed fewer crimes, and were more likely to have graduated from university than adults who did not have it. (2005,p 3)

4. Things to look for in a Preschool Curriculum

4.1 Curriculum

Effective education requires both relevant curriculum and practitioners who understand and are able to

implement the curriculum. Children develop rapidly during the early years physically, intellectually, emotionally and socially. They are entitled to provisions which support and extend knowledge, understanding, skills, and confidence, and help them to overcome any disadvantage. Scientifically based, comprehensive curriculum to help you plan and implement a developmentally appropriate programme that promotes children's socio – emotional development and learning in the core area of literacy, mathematics, science and social studies should be used.

- Teachers need to arrange environments that are symbol rich and interesting without being overwhelming to infants and toddlers.
- Well prepared teachers
- Small teacher – child ratios
- Stimulating and developmentally appropriate curricula and setting

4.2 Structure

- To be effective, an early curriculum needs to be carefully structured. In that structure there should be provision for the different starting points from which children develop their learning, build on what they already do, relevant and appropriate content matches the different levels of young children's needs, and planned purposeful activities which provide opportunities for teaching and learning both indoors and outdoors.
- Ensure that children have access to various activities throughout the day. Look for assorted building blocks and other construction materials, props for pretend play, picture books, paints and other arts materials, and table toys such as matching games, peg boards and puzzles. All the children should not necessarily be doing the same activities at the same time.
- Teachers work with individual children, small groups, and the whole group at different times, during the day. They do not spend all their time with the whole group.
- Classroom is decorated with children's original art work, their own writings with invented spelling, and stories dedicated by children to teachers.
- Children learn numbers and alphabets in the context of their everyday experiences. The nature world of plant and animals and meaningful activities (like cooking, taking attendance or serving snacks) provide the basis for learning activities.
- Children work on project and have long periods of time (at least one hour) to play and explore. Work sheets are used little, if at all.
- Children have an opportunity to play outside every day. Outdoor play is never sacrificed for more instructional time.
- Teachers read books to children individually or in small groups throughout the day, not just at group story time.
- Curriculum is adopted for those who are ahead as well as for those who need additional help. Teachers recognize that children's different backgrounds and experiences mean that they do not learn the same things at the same time, in the same way.
- Children and their parents look forward to school; parents feel secured about sending their children to the programme. Children are happy to attend; they do not cry regularly or complain of feeling sick.

5. Quality Standard

Quality support system includes education and training for programme personnel as well as ongoing technical assistance to programme providers and individual care providers. Research supports the widely

held views that personnels who are well prepared through education, training and support are essential to achieving high quality. Most of these teachers do not have bachelor's degree. Another important component of quality support system is technical assistance – on site consultation and training that help staff at schools, as well as individual providers, to explore different approaches to working with children and address areas in which quality improvements are needed. This type of assistance provides opportunity for hands- on learning and problem solving in areas such as classroom design, effective use of teaching materials, and working with children with unique needs. Technical assistance also serves to reduce the isolation experienced by smaller programmes and individual providers and to assist personnel in continuously upgrading their knowledge and skills.

Programmes are rarely evaluated rather schools are more interested in programme expansion.

5.1 Resources for early childhood education

The purpose of early childhood learning resources is to develop a set of high quality, innovative early childhood resource materials which nurture and support the development of early literacy and numeracy in children from birth to five years. These resources should be based on sound contemporary international research. These informative and practical materials should suit a range of early childhood settings and should provide examples of how parents, caregivers and practitioners can create stimulating environment for their children, thereby making use of the most critical period of rapid development in learning

Resources are the supplies that need by an institution to improve their productivity Availability of resources (human, materials and finance) is critical to the successful implementation of any educational programme. This is because resources are needed to provide a conducive teaching and learning environment, purchase relevant instructional and learning materials and pay staff. The quantity and quality of resources available for any educational programme would therefore determine schools systems capacity for the implementation of the type of educational programme.

Resources are the material, staff and finance available to realize the goal of early childhood education. For any educational programme to achieve its goals, it must be supported with adequate resources. Adediji in Ukala (2012) defined educational resources as the sum of everything that goes into the educational system. This includes human, infrastructure and finance. Early childhood education is capital intensive. It is requires to be adequately equipped with vital input in order to achieve its goal. Physical facilities are land mark for school existence. As a matter of fact, preschool environments, classrooms, provisions of infrastructural materials are essential for meaningful interaction. The educational environment must be conducive enough to facilitate children interaction with their environment that enables them construct experience.

The essential things are: Active play, After school and summer learning, Arts & Crafts, Assessment & Evaluation, Block play, Carpets and rugs, Children's books, Classroom Essentials, Curriculum, Differentiated Instruction, Dramatic Play, Furniture, Great Gifts for kids, Home school, Infant and Toddler care, Language and Literacy, Mathematics, Music and Video, Outdoor Learning, Parent Involvement, Play ground, Profile planner, Puzzles and games, Resource Books, Sand and Water, Social Emotional, Social Studies, Science and Health, Special Needs Inclusions and Technology.

6. Human Resources

6.1 Qualified staff

All children are special so it stands to reason that the people who are responsible for educating them in their early years need to be pretty special themselves. Not only must they have the ability to connect with children and understand the world from their point of view, they must also be able to give the children the attention they need to develop skills and worthwhile learning experiences. Caregivers and teacher should have

knowledge of cultural supports for the language and literacy learning of the children and families they are serving. They need to have sufficient skills in guiding children, give full attention to individual young children's language and literacy efforts. They need to be able to draw out shy children while they help very talkative children begin to listen to others as well as to speak. They should be aware that children are not empty vessels. Their goal is to bring out the hidden potentials in them. They are to bring the children to the highest possible intellectual, social, moral and cultural levels.

Qualified, well trained and dedicated teachers, care givers and administrative staffs are the most important and fundamental resources for effective early childhood education. They must be motivated and adequately remunerated to achieve their goals.

7. Material Resources

Infrastructure is the most basic level of organizational structure in a complex system that serves as a foundation of the rest.

7.1 Infrastructure

Infrastructure needed to support high quality early education services has three fundamental roles such as:

1. Establish and enforce programme and child outcome standards
 2. Create and sustain a system to support elements of quality
 3. Ensure quality through mechanisms for accountability and continuous quality improvement.
- Gallagher and Clifford (2000) noted that states and communities lack adequate structures to ensure that these activities are carried out effectively. The issue of quality in early childhood education is critical with the proliferation of private schools. There is great deal of evidence to show that only those programmes that meet high standards produce significant and lasting benefits to the children they serve. They also observed that one of the most striking characteristics of the current programmes for young children outside the home is the absence of a comprehensive infrastructure. Demand for child care is rising because of a variety of factors, including economic conditions that have made it necessary for mothers to work, woman attaining higher education with improve income, the number of children particularly in child care has steadily grown. With the increasing important role that child care plays in our society, demand is also rising for evidence that these programmes provide high quality educational experiences.

There should be established minimum criteria for safety and quality in early childhood education through its approval standards. While the adoption of voluntary standards has been instrumental in raising the quality of programme, there are still significant gaps between standards for the best practice and the quality of services provided by most schools. Funding these is often viewed less essential than funding that directly supports slots

Adequate indoor play space and workspace for teacher and children are essential. Standard classroom, Cross ventilated, well lit with inbuilt storage cupboards, with access windows. Walls painted in two or three bright colours, staff offices with furniture. Environment should be lovely, structured and orderly. There should be a beautiful atmosphere

7.2 Instructional aids

7.2.1 Importance of Play

Child development experts agree that play is very important in learning and emotional development of all children. It provides children with hands-on- experiences with water, sand, plastering, mud, shells, and twigs.

Play is multifaceted. However, it should be fun for the child, often many skills can be learned through play. Play helps children learn relationship and social skills, and develop values and ethics. Play should always be considered as an essential part of a child's early education.

Functional play helps children to develop motor and practice skills. This kind of play is normally done with toys or objects that are stackable, can be filled with water or sand or playing outdoors. Water play and sand play are favourite among preschool children and a valuable teaching tool. This type of play can make up about 50% of the type of play toddlers to three years old children practice.

Constructive play is characterized by building or creating something. Toys that encourage this type of play are simple puzzles, building blocks, easy craft activities and puppets. Normally four to five years old children enjoy this type of play, but it continues to be enjoyable into the first and second grades of school. Hands and fingers are the best first art tools. Soon they will manage with paint brushes, wedges of sponge, wax, crayons, and hunky chinks. It is advised to avoid rushing a child into making something in particular. Letting them do what they want encourages individuality and decision making. Toddlers also enjoy dough because they can get hands and fingers in to it for poking, rolling and shaping. This type of play develops thinking and reasoning skills, problem solving and creativity.

Pretend play allows children to express themselves and events in their lives. It helps them process emotion and events in their lives. Allow them to pair materials stick and twigs, rock and pebbles, shells and leaves can be sorted, counted, used to build amazing structure, explore with magnifying glasses and use in art projects. Observe nature and ask them what they see.

7.2.2 Active Play

Children develop large muscle coordination through active play: some equipment stimulates gross motor activities that encourage the development of rhythm, hand-eye coordination and balance. A variety of active play toys like bean bags for tossing, parachutes for lifting, mats for tumbling and soft foam balls for passing games.(number mats, safety trampoline bike pan, learn to crawl tunnel folding bike.



7.3 After school and summer learning

Curriculum based learning should not stop when the child is on vacation. Provide grade – appropriate learning materials in an after school and summer learning environment. It is an important element in helping pupils remember what they have learnt during the school day. Children need ongoing opportunities to learn and practice essential skills

- i. Language Arts test prep in a flash Test Prep- Cards provides comprehensive practice for grade – level language art skills

- ii. Shuffling into maths – Fun family Maths games book games that help children learn basic counting numeration skills, addition etc.
- iii. Electronic Learning Games becomes a word master with an electronic touch
- iv. Monopoly Game: Trading game



7.4 Arts and Craft

These activities allow young children to develop creative expression, practice fine motor skills, experiment with shapes, line and colours.

- 2 station Art Easel
- Colour washable Tempera Paint
- Creative design brushes
- Chubby Brushes
- Paint and clay texture kit
- Colour Diffusing Paper
- Crayon



7.5 Assessment and Evaluation

Evaluation result helps professional and parents to plan learning experiences, evaluate programme goals and improve young children's social and emotional development. Early learning accomplishment profile kit measures development in six domains.

7.6 Block Play

Block play offers a rich opportunity for early mathematics and science learning and the development of social, emotional language motor and cognitive skills.

7.7 Totter Tower

Building activity that helps children develop a sense of geometry, and hand-eye coordination e.g. Primary Toddler Blocks. Dado Planks



7.8 Carpets and rugs

Children need softness in their physical surrounding to relax and feel comfortable. Carpets and rugs in bright colours create cozy classroom areas.

Phonics speaking carpet teaches the alphabet.



7.9 Children's Books

Help children develop a close and enjoyable relationship with books: factual book, fantasy, books about people of different races, cultures ages and abilities. Build your classroom library.

7.10 Classroom Essentials

Create a bright, colourful print-rich environment for young learners

- Bulletin board displays
- Decorative prints: art work, favourite characters
- Scalloped edge bordettes for the edges of the board
- Fanciful recycle bag
- Classroom clock.



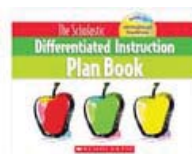
7.11 Clearance

Nursery Rhymes Bulletin Board set



7.12 Differentiated Instruction

Differentiated instructional materials help them different ideas or words. E.g. sound chart, Colour chart.



7.13 Furniture

- Table, Chairs, Storage Units
- Nature storage shelf
- Rest mats
- Standardcot



7.14 Language and Literacy

Teachers read books to children individually or in small groups throughout the day, not just at group story time.

A-Z Pegboards set. Large letter shaped pegboards is a fun way to learn letter recognition and improve – eye coordination.



7.15 Mathematics

To explore quantity, size and shape, Abacus encourages fine motor play e.g. count and sort game.



7.16 Play Ground

Wilkins (2002) identifies play ground, games and toys and other instructional materials as essential for successfully handling of children. Outdoor play maintains health and fitness and enhances learning and creativity. Children have an opportunity to play outside every day. Outdoor play is never sacrificed for more instructional time.



7.17 Puzzles and Games

Encourage critical thinking, problem solving foster language development and refine the basis for learning activities.

Children work on project and have long periods of time (at least one hour) to play and explore. Work sheets are used little, if at all.



7.18 Bilingual Books

Curriculum is adopted for those who are ahead as well as for those who need additional help. Teachers recognize that children's different backgrounds and experiences mean that they do not learn the same things at the same time, in the same way.



7.19 Music and Video

Tool peg puzzle Map jigsaw puzzle Bilingual number floor puzzle



7.20 Resource Books

Create a good professional library with a balanced collection of books on variety of early childhood subject by subject.

- Curriculum and activity books
- Books on child development theory and practice

7.21 Sand and Water

Children learn about measurement and natural science as they experiment with sand and water. Toys that encourage children to dig, scoop, fill and pour enhance learning.

- Transparent sand and water table
- Dump truck
- Sand exploration toddler set



7.22 Science Health

Young children become aware of the wonders around them, develop interest in and concern for our environment. E.g. sorting shells, magnet.



7.23 Social Emotional

Character education curriculum should be designed..

Songs children tend to develop emotional attachment to what is familiar and comfortable to them. If they are to develop a sense of connectedness with the natural world, they need frequent positive experiences with the outdoors.

7.24 Social studies

Inflatable labeling globe



7.25 Technology

Kid safe computer Digital camera Computer mouse Keyboard



7.26 Supplies

Water: good source of water, treated borehole and water dispenser. Constant supply of water must be ensured.

Toilet: classroom toilets with wash hand basins of appropriate height. Separate for boys and girls.

Sickbay and first aid box should be equipped. There should be a well trained nurse.

8. Conclusion

The mission of ECE is to provide leadership and support to schools, organizations, educators, families and communities in implementing programmes that assist all children from birth through age 8 to become successful lifelong learners. It is an undeniable fact that this aspect of education is the bedrock upon which all levels of education are anchored. The level of access a child has of early childhood education will definitely determine the ease with which the child can advance through other levels of education. Quality

support system includes education and training for programme personnel as well as ongoing technical assistance to programme providers and individual care providers are imperative to ensure quality delivery. Personnel who are well prepared through education, training and support are essential to achieving high quality

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