

Five Core Principles for Planning and Implementing Developmentally Appropriate Curricula for Early Childhood Education: the Case of Elementary School in Kenya

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ABSTRACT

In a developmentally appropriate curriculum, the teacher's role is that of a facilitator of learning (NAEYC, 2009; Copple & Bredekamp, 2009; Wortham, 2010). Rather than instruction being teacher centred, the child should take an active responsibility for learning. Teachers should use various learning contexts like teacher guided group work and play (Bredekamp, 2011). The child should be provided with opportunities to participate in various activities. The child should explore, combine and transform the materials available (Hohmann & Weikart 1995). Further, the child should make a choice of what to do. Since learning results from the child's needs and interests, the opportunity to choose materials and activities is essential (Hohmann & Weikart 1995). Play is a very significant teaching strategy or activity in a developmentally appropriate curriculum. It allows active exploration of information, social interactions and physical activity essential to learning and development.

KEYWORDS

Early Childhood education; Developmentally appropriate; Curriculum planning; Curriculum implementation.

1. Introduction

The process of curriculum planning and implementation is a complex one that calls for a suitable knowledge base. This paper is a discussion on some core principles in planning and implementing a developmentally appropriate curriculum for Early Childhood Education. For purposes of understanding the ideas advanced in this paper, it's important to begin by defining the words curriculum, curriculum planning, curriculum development, curriculum implementation, early childhood education and developmentally appropriate curriculum. Syomwene, Nyandusi & Yungungu (2017:12) define curriculum as 'the intentions of learning; the actions, interactions and processes elicited and directed by these intentions; and the actual learning that emanates from the prevailing context'. Curriculum planning involves gathering, sorting, synthesising and

selecting relevant information for designing learning experiences (Parkay & Hass, 2000). Curriculum development is a decision making process that involves planning, providing, utilizing, and assessing learning opportunities (Syomwene, Nyandusi & Yungungu, 2017; Shiundu & Omulando, 1992; Print, 1993). On the other hand, curriculum implementation is the process of putting a planned curriculum into use. Early childhood education entails learning experiences provided to young children from birth to eight years of age (Bredekamp and Copple, 1997; KICD, 2017; KIE, 2008; NAEYC, 2009). Developmentally Appropriate

Practice (DAP) can be defined as instruction that is tailored on children's age, needs, abilities and interests and that help them attain challenging and achievable goals (Bredekamp, 2011; NAEYC, 2009)

Development in relation to early childhood education refers to biological, psychological and emotional changes that occur in children from birth based on sequence and patterns of growth and maturity (Charles Worth, 2004 in Jackman, 2009). The principles of Developmentally Appropriate Practice in Early Childhood Education curriculum are based on child development theories about how children develop and learn. Some of these theories are Piaget's cognitive development theory, Erickson's psychosocial theory, Gesell's maturation theory, Vygotsky's socio-cultural theory among others (Jackman, 2009; Syomwene, Nabwire & Musamas, 2015). According to Jackman (2009:13), during early years, a child's physical, cognitive, emotional and social development should be supported within the home, school and community. Developmentally appropriate practice informs teachers and curriculum planners on the fact that each child learns and develops differently. There are various principles of child development and learning that support Developmentally Appropriate Practice (DAP). These include: There are four key domains of child development. These are physical, social, emotional and cognitive domains. The four domains are closely related; and development in one domain influences and is influenced by development in other domains. The four domains of child development inform teachers in the instructional process.

Children's development and learning is sequential. Children exhibit predictable sequences of growth in their early years of life (Piaget, 1985; NAEYC, 2009). The predictable changes occur in the four domains of child development. Later abilities, skills and knowledge build on the already acquired knowledge.

Individual differences occur in children's development and learning. Each child is a unique person with an individual pattern and timing of growth, personality, temperament, learning style, experiential and family background (NAEYC, 2009). Children have variations in their development and learning.

Children's development and learning is influenced by their maturation and interactions with the environment. Children's learning is shaped by both nature and nurture. Children are influenced by their heredity characteristics as well as their environment. Learning takes place when learners interact with each other (Syomwene & Mwaka, 2018; Vygotsky, 1978). Children's experiences during early years influence development and learning. Both positive and negative experiences of a child during early years of life can have powerful and lasting effects.

Children's development and learning proceeds from simple to complex. Learning during early childhood proceeds from behaviour knowledge to symbolic or representational knowledge (Bruner, 1983 in NAEYC, 2009). As children mature, they progress in tasks that are more complex and challenging. Children's physical and psychological needs influence development and learning. Maslow (1954) in NAEYC (2009) in his theory on hierarchy of needs postulates that learning cannot take place effectively unless the physical and psychological needs for safety and security have been met. Other physical and psychological needs include food, clothing and shelter. This calls for the need to cater for basic needs of children in early childhood. Development and learning are influenced the children's social and cultural contexts. Bronfenbrenner (2004) in

his ecological model for child development he describes the factors that influence child development in the context of the family, educational setting, community and society.

Children learn in many ways. Gardner (2006) theorizes that human beings possess seven intelligences: linguistic, logical-mathematical, musical, bodily-kinesthetic, intrapersonal and interpersonal intelligence. All these channels facilitate learning.

Play facilitates children's development and learning. Play gives the children opportunities to understand the world, interact with others in social ways, express and control emotions and develop their symbolic capabilities (Syomwene, 2017; Syomwene & Mwaka, 2018; NAEYC, 2009).

Children have to be presented with challenging opportunities to enhance their development and learning. Children need opportunities to practice newly acquired skills and knowledge and to be presented with tasks beyond the level of their present mastery. Children can do things first in a supportive context and then later independently and in a variety of contexts (Vygostky, 1978)

Children are active learners. Children learn by making meaning out of their daily experiences at home, school and the community (NAEYC, 2009). They learn from observing and interacting with other children, parents, teachers and the environment at large. Children are actively engaged in constructing their own understanding from their experiences (KICD, 2017; Syomwene, 2017).

The aim of Developmentally Appropriate Practice (DAP) is to enhance instruction and development of young children (NAEYC, 2009); Copple & Bredekamp, 2009; KICD, 2017). Five core principles in planning and implementing a developmentally appropriate curriculum for Early Childhood Education are discussed in this paper: Age appropriateness, individual appropriateness, cultural appropriateness, appropriate environment and child centred teaching strategies. The paper draws examples from the early childhood education curriculum for Kenya.

2. Core Principles in Planning and Implementing a Developmentally Appropriate Curriculum For Early Childhood Education

This section discusses the core principles in planning and implementing a developmentally appropriate curriculum for Early Childhood Education.

2.1 Age Appropriateness

A developmentally appropriate curriculum should be age appropriate. Effective curriculum planning and implementation in early childhood education requires teachers and curriculum planners to understand the developmental changes that occur in children's early years as well as the variations of development that occur during these early years (NAEYC, 2009; Copple & Bredekamp, 2009). Although age is not an absolute measure of a child's capabilities and understandings, it does help establish reasonable expectations of what is interesting, safe, achievable and challenging for children. To address age appropriateness, we should plan for and implement activities, routines and expectations that accommodate and complement the characteristics of the children in various age levels (Kostelnik, Soderman & Whiren, 2011)

In planning and implementing a developmentally appropriate curriculum, we should be informed by the ability levels of children on the domains of development: cognitive, physical, social, emotional domains (Copple & Bredekamp, 2009; Wortham, 2010; Syomwene & Mwaka, 2018). We must take into account how

children develop and learn and match it to the content, activities and strategies planned from them in early childhood.

2.2 Individual Appropriateness

Developmentally appropriate practice not only demands for children's age appropriateness but also individual appropriateness (Jackman, 2009; NAEYC, 2009). A developmentally appropriate curriculum should cater for the child's uniqueness. Children have individual personalities, strengths, interests, backgrounds and experiences (NAEYC, 2009; Copple and Bredekamp, 2009). This includes providing each child with the time, opportunities, support and resources to achieve individual goals in the instructional process.

Individual appropriateness takes into account that all children within a given age group are not alike (KICD, 2017). Each child is a unique person with a unique pattern and timing of growth, personality, learning style, strengths and weaknesses (Berk, 2008; NAEYC, 2009). Jackman (2009) observes that certain children are more verbal than others, others enjoy solitude, others crave for company, and some are skilful readers within the expected age, while others may not achieve reading proficiency within the expected timing. Each child enters the classroom with different degrees of familiarity with the learning experiences presented.

2.3 Cultural Appropriateness

Culture is the sum total of a child's or family's way of living (Bronfenbrenner, 2004; Jackman, 2009). This includes values, norms, expectations, beliefs, language, and behaviour. A developmentally appropriate curriculum requires teachers and curriculum planners to know the child's families and learn about the values, expectations and factors that shape their lives at home and in their communities. The Competency based Curriculum for Kenya recommends the transmission of cultural norms and values across all generations (KICD, 2017).

Wortham (2010) argue that teachers working with a culturally appropriate curriculum plan and implement the curriculum bearing in mind the different cultures present in the classroom. A culturally sensitive curriculum should actively challenge prejudice and stereotyping and present an opportunity for the development of mutual respect, mutual sharing and mutual understanding (NAEYC 2009; Bredekamp, 2011). Based on this knowledge base, the seventh learning outcome for Early Years Education in Kenya is to develop appreciation of the country's rich and diverse cultural heritage for harmonious co-existence (KICD, 2017).

According to Spodeck (1991) the content of early childhood programs is embedded in the ideals of truth, virtue, and beauty that are held in a particular community. This content is culturally defined by the values that can be identified within any cultural context like materialism and work; spiritualism and religion; individualism and freedom, community and power; family and sexuality; equality and justice.

Kostelnik (2011) concurs with the sentiments above and says that Developmentally Appropriate Practice is socially and culturally appropriate. We must look at children and families within the context of their communities and culture before we can create a meaningful, and supportive early childhood program. Teachers and administrators should develop reciprocal relationships with children's families. Reciprocal in this case refers to a two way relationship of information sharing and power. Teachers should include opportunities of interacting with the child's family, sharing ideas, support and challenges. Children's culture shape their development and learning. An early education environment should avoid circumstances that suggest prejudice and stereotype.

Bredekamp and Copple (1997) and Gestwicki (2007) propose some focal issues on promoting the child's family involvement in early childhood education:

- ⊗ In early childhood education, there should be team work involving both teachers and families.
- ⊗ Families are the primary educators of their own children.
- ⊗ The teacher learns from the children and their families about the children's world.
- ⊗ Assessing a child's needs and progress must take into account the child's culture and environment.
- ⊗ The teacher should recognise the special circumstances of a child and his family.

KICD (2017) has parental involvement as one of the principles of the Competency Based Curriculum framework for Kenya. A partnership journey between the child, the teacher and the parent is paramount in enhancing quality in early childhood education.

2.4 Appropriate Environment

The environment is a powerful teaching and learning tool in early childhood education. It should be planned with the knowledge of how children learn and develop. Children's health and safety should be considered when designing the learning environment in early childhood education (NAEYC, 2009; Copple & Bredekamp, 2009).

The environment should be supportive of children's physiological needs for activity, sensory stimulation, fresh air, rest and nourishment. The environment should help children to feel secure, relaxed and comfortable rather than disengaged, frightened, worried or stressed.

An effective early childhood education environment should facilitate play, hands on learning and holistic child development. In the early childhood education environment, many activities take place like reading, writing, playing, eating, washing hands, visiting the washrooms and many other activities. All these activities should be catered for in the environment.

Effective early childhood environments should fulfil such conditions as: availability of adequate and relevant materials and facilities; provision of play activities; role modelling by the teachers and care givers; provision of interactive activities and strategies (KICD, 2017; Greenman, 1988; Syomwene, 2017; NAEYC, 2009; Jackman, 2009).

2.5 Child Centred Teaching Strategies

In a developmentally appropriate curriculum, the teacher's role is that of a facilitator of learning (NAEYC, 2009; Copple & Bredekamp, 2009; Wortham, 2010). Rather than instruction being teacher centred, the child should take an active responsibility for learning. Teachers should use various learning contexts like teacher guided group work and play (Bredekamp, 2011). The child should be provided with opportunities to participate in various activities. The child should explore, combine and transform the materials available (Hohmann & Weikart 1995). Further, the child should make a choice of what to do. Since learning results from the child's needs and interests, the opportunity to choose materials and activities is essential (Hohmann & Weikart 1995).

Play is a very significant teaching strategy or activity in a developmentally appropriate curriculum. It allows active exploration of information, social interactions and physical activity essential to learning and development (Syomwene & Mwaka, 2018; Syomwene, 2017; NAEYC, 2009; Bredekamp, 2011; Wortham, 2010).

3. Conclusions and Recommendations

This paper provides a suitable knowledge base in planning and implementing a Developmentally Appropriate curriculum in early childhood education. A Developmentally Appropriate curriculum is very effective in achieving quality in early childhood education.

This paper recommends various guidelines in developing and implementing developmentally appropriate curriculum in early childhood education. These are age appropriateness, individual appropriateness, cultural appropriateness, appropriate environment and child centred teaching strategies. Further, this paper recommends that since curriculum planning and implementation calls for teacher flexibility, early childhood practitioners should continuously stay informed through professional development and research.

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