Theoretical Bases Influencing Curriculum Decision Making in Early Childhood Education

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Abstract
The curriculum decision making process is theoretically based. This paper is a discussion of some major theories that inform curriculum planning and implementation processes in Early Childhood Education. The theories discussed in this paper are Gessell’s Maturation theory, Piaget’s cognitive development theory, Vygotsky’s social cultural theory, Behaviourist theories, Freud’s psychoanalytic theory, Social learning theory, Erickson’s psychosocial theory and Maslow’s needs theory. This paper holds that we cannot make appropriate curriculum decisions for Early Childhood Education without this knowledge base. On the other hand, no one theory is comprehensive enough to adequately explain all aspects of child development and learning. Therefore, teachers and curriculum planners should draw from diverse theories to fully understand how best to support child development and learning.

Keywords: Early childhood education, curriculum, theory, child development

Introduction
The curriculum decision making process is theoretically based. This paper is a discussion of some major theories that inform curriculum planning and implementation processes in Early Childhood Education. Early Childhood Education refers to the care and education services provided to children during their early years. In Kenya it encompasses zero to eight years (both pre- primary and lower primary levels of education) (Kenya Institute of Education (KIE), 2008). These theories guide the process of stating educational objectives, selecting and organizing learning experiences as well as the evaluation process.

This paper shall adopt a definition of curriculum by Parkay and Hass (2000:pp 3) that: Curriculum is all of the experiences that individual learners have in a program of education whose purpose is to achieve broad goals and related specific objectives, which is planned in terms of framework of theory and research or past and present professional practice.
Curriculum planning involves gathering, sorting, synthesising and selecting relevant information from many sources. This information is then used to design experiences that will enable learners to attain the goals of the curriculum (Parkay & Hass, 2000). Curriculum development is the process of planning learning opportunities intended to effect certain desired changes in pupils and the assessment of the extent to which these changes have taken place (Shiundu & Omulando, 1992; Print, 1993). The process of curriculum development is a complex one that is systematically undertaken in various stages. Tyler (1949) postulates that the process of curriculum development can be successfully undertaken by answering four fundamental questions.

a) What educational purposes should the school seek to attain?

b) What educational experiences can be provided that are likely to attain these purposes?

c) How can these educational experiences be effectively organized?

d) How can we determine whether these purposes are being attained?

These four questions translate into four steps through which the curriculum planning and development process should proceed. These are: Stating the objectives, selecting the learning experiences and evaluation process. Curriculum implementation entails the process of putting the planned curriculum into use. Theoretical considerations are pertinent in the curriculum decision making process. Beauchamp (1981) defines a theory as the knowledge and statements that “give functional meaning to a series of events and take the form of definitions, operational constructs, assumptions, postulates, hypotheses, generalisations, laws and theorems. What follows is a discussion of some major theories that influence curriculum decision making process in the Early Childhood Education. The theories discussed are: Gesell’s Maturation theory, Piaget’s cognitive development theory, Vygotsky’s social cultural theory, Behaviourist theories, Freud’s psychoanalytic theory, Social learning theory, Erickson’s psychosocial theory and Maslow’s needs theory.

**Gesell’s maturation theory**

Arnold Gesell (1880-1961) established norms for the ages at which behaviours emerged in young children (Wortham, 2010). Gesell worked in a laboratory in Yale University, studying children and their developmental stages. Gesell was among the first professionals to compile developmental stage information about children. Gesell believed that development was biologically or genetically determined. He felt that children development patterns opened automatically by biology as the unfolding of a flower does because it is genetically programmed to do so in the right environment. Therefore, as a flower requires proper soil and rain, children require a nurturing, stable environment in order to mature both biologically and psychologically. Maturations theory assumes that the sequences of changes in abilities and behaviour are largely predetermined by children’s biological growth process rather than by their experiences or learning (Weber, 1984; Bredekamp, 2011).

This theory informs curriculum decision making process in Early Childhood Education in various ways. According to maturation theory, any difficulties a child experiences in the school curriculum is found within the child. This informs curriculum planners on the need to plan and develop curricula for young children that are age specific; the need for teachers to be patient with children as they mature biologically and psychologically with age and the need to organise content and learning experiences from simple to complex. Further, the selection of content and learning experiences should be based on the learners’ abilities (Tyler, 1949). Gesell’s theory advocates for the late birth day phenomenon in children. Sometimes, children
who are the youngest in their classes have a late birth day and sometimes can be branded by
the teachers as slower and less ready for instruction. These classrooms tend to have a ratio of
boys to girls of between 7:1 and 10:1 (Aldridge & Goldman, 2007). The implication is that
girls tend to mature faster compared to their boy counterparts.

Jean Piaget’s cognitive development theory
Jean Piaget proposed a stage theory of cognitive development which signifies that children
have different levels of understanding at different ages. According to Piaget’s theory of
cognitive development, children’s thinking passes through four separate stages and changes
qualitatively in each of these stages. Piaget’s stages of cognitive development are as follows
(Piaget, 1985):

i) Sensory motor stage (Birth to 2 years). During this stage children use their senses to
explore their world and develop their cognitive understanding. At this stage children
get excited with experiences that allow exploration of senses of sight, hearing, touch,
taste and feeling.
ii) Pre-operational stage- (2 to 7 years). At this stage, children are less reliant upon
senses and physical exploration and according to Piaget are illogical thinkers.
iii) Concrete operations stage- (7 to 12 years). At this stage, children begin to develop
more logical thinking with the use of concrete materials for example use of counters
to solve Mathematical problems in Early Childhood Education.
iv) Formal operations stage- (12 years and above). At this stage, children are capable of
more abstract thinking.

Piaget was the first educationist to note that children play an active role in learning (Wortham
2010). According to this theory children actively construct their knowledge and
understanding of their world. Unlike maturation theory that proposes biological readiness
controls the ability to learn or behaviourist theories that suggest that environment shapes
behaviour, and learning, Piaget’s theory holds that a child’s interaction with the
environment and cognitive organization of experiences results in intelligence (Piaget, 1985).

Piaget viewed intellectual growth as a process of adaptation (adjustment) to the world
(Piaget, 1985). This happens through various processes: Assimilation, accommodation and
equilibrium (Piaget, 1985). Assimilation is the process of using an existing schema
(knowledge) to deal with a new object or situation. Accommodation happens when the
existing schema (knowledge) does not work and needs to be changed to deal with a new
object or situation. Equilibrium occurs when a child schemes can deal with most new
information through assimilation. However, an unpleasant state of disequilibrium occurs
when new information cannot be filtered into existing schemas (Assimilation). Equilibrium is
the force which drives the learning process as we do not like to be frustrated and will seek to
restore balance by mastering the new challenge (Accommodation).

The implications of Piaget’s theory to Early Childhood Education curriculum is that since
children are active participants in their own learning, teachers should provide varied activities
through which children can explore and learn. Children learn best through doing (discovery
learning). Children in their early years also need a stimulating environment with varieties of
materials for exploration. According to Piaget’s theory, development progresses with age and
this points out to curriculum planners to order and sequence learning experiences from simple
to complex. The curriculum should be planned with reference to learner’s age and abilities.
Piaget’s theory also points out the centrality of play in children’s learning. Play allows interactions and explorations that facilitate the child’s cognitive development.

Piaget’s theory strongly suggests the notion of readiness in the school curriculum. According to Piaget, children should not be taught certain concepts until they have reached the appropriate stage of cognitive development. The theory advocates for learner centred teaching methods that require discovering or reconstructing truths. The role of the teacher is to facilitate learning rather than direct tuition; to use collaborative as well as individuals’ activities for the children to learn from each other. Teachers need to devise situations that present useful problems and create disequilibrium in the child. Similarly, they should evaluate the level of child development, so the best suitable tasks can be set.

**Vygotsky’s Social Cultural Theory**

Like Piaget, Vygotsky believed that children construct knowledge. Vygotsky believed that social interactions within a cultural context play a significant role in learning (Vygotsky, 1978; Wortham, 2010). The More Knowledgeable Other (MKO) plays a significant role as a social mediator. The MKO can be an adult, older peers and teachers. The social environment includes the family, school, community and culture (Vygotsky, 1978). Vygotsky uses the term scaffolding to explain the behaviour that the teacher uses to support the child in learning and development. The teacher provides instruction, materials in the environment and other experiences to support the child and enable the child to acquire competences and continue to move to new competences (Berk & Winsler, 1995).

In his theory, Vygotsky advanced the concept of Zone of Proximal Development (ZPD) which is the difference between those functions which the child is able to perform without assistance and those that the child can manage when given the assistance. The scaffolding opportunities provided by the MKO facilitate the optimal development.

Vygotsky’s theory has enormous implications to the Early Childhood Education curriculum. Vygotsky emphasises the importance of interactions between children and more knowledgeable peers and adults. He believed that children’s cognitive understandings are enriched and deepened when they are ‘scaffolded’ by parents, teachers or peers (Berk, 1996). Like Piaget, Vygotsky saw the child as an active partner in their own learning. He also emphasised on the importance of language development, learning and teaching to a child’s cognitive development.

Vygotsky’s theory, emanating from the Zone of Proximal Development requires that children experience a challenging curriculum, not content meant for older children, but content that moves them ahead in thinking and problem solving. The role of the teacher is not as the controller of the classroom, but as a collaborator with children in constructing their learning. Teachers should scaffold children’s learning, and set up situations where groups of children work together to solve problems and have the freedom to think out aloud. Similarly, play should be used to teach all curriculum areas in Early Childhood Education to promote social interactions. Teachers should be effective role models as they are the More Knowledgeable Other. Further, a variety of materials should be provided for all curriculum areas in Early Childhood Education.

Both Piaget and Vygotsky advocate for a Developmentally Appropriate Curriculum for early childhood education. This is a curriculum attuned to children’s ages, experience, abilities and interests and that helps them attain challenging and achievable goals (Bredekamp, 2011: 70).
Behaviourist Theories
The proponents of behaviourist theories include J.B. Watson, Ivan Pavlov and B. F. Skinner. According to behaviourist theories, individual development is determined by the environment (Aldridge & Goldman, 2007). Development is considered a reaction to rewards, punishments, stimuli and reinforcement. While Gesell (1925) maturation theory focuses on nature, behaviourist theories focus on nurture and its effects on child development (Aldridge & Goldman, 2007). According to behaviourist theories, learning occurs through observation, imitation and practice. If behaviours are rewarded they will be repeated but behaviours that are ignored or punished will decrease. The role of the teacher is thus to reinforce the learners so that the learned skills can be retained.

Based on Behaviourist theories, an effective curriculum for early childhood education should permit the following: Teachers should be effective role models whom children can imitate; they should provide practice activities through which children can practice the skills learnt (active learning); the need to use a variety of visual aids as children learn best through observation; they need to increase rewards and reduce punishments. Further, the teacher should create an appropriate environment that allows exploration and experimentation. Such an environment should contain a variety of materials.

Freud’s Psycho Analytic Theory
The proponent of this theory is Sigmud Freud. The theory is mostly concerned with social, emotional and personality development (Wortham, 2010). According to Freud, child development is described as a series of psychosexual stages. These stages are oral, anal, phallic, latency and genital stages (Aldridge & Goldman, 2007). Each stage involves a satisfaction of a libidinal desire and can later play a role in adult personality. If a child does not successfully complete a stage, Freud suggested that he or she would develop a fixation that would later influence adult personality and behaviour.

During the oral stage (From birth to one year), the infant’s primary source of interaction occurs through the mouth whereby the infant derives pleasure through oral stimulation like tasting and sucking. The infant is dependent upon caretakers and thereby develops a sense of trust and comfort through this oral stimulation. Oral fixation can result in problems with drinking, eating, smoking, nail biting and thumb sucking. The second stage is the anal stage (one to two years). The primary focus during this stage is bowel and bladder control, the major conflict being toilet training. Developing this control leads to a sense of accomplishment and independence. According to Freud, success at this stage depends on the parent or caregiver responses. Through the use of praise and rewards, the child can become a competent, productive and creative adult. Punishment and ridicule can result to negative outcomes. The third stage is the phallic stage (three to six years). The primary focus at this stage is the genitals. Children at this stage begin to discover the differences between males and females. During this stage boys tend to be close to their mothers and girls to their fathers. The fourth stage is the latent period (Age six to puberty). This is time of exploration. The sexual feelings are inactive. This stage is important in the development of social and communication skills and self-confidence.

The last stage is the genital stage (Puberty to the rest of life). The individual develops a strong sexual interest in the opposite sex. If the individual has completed other stages successfully, he /she now become well balanced, warm and caring. The goal of this stage is to establish a balance between various life areas. Freud also proposes that if the child’s instincts
are not over or under gratified by parents, and other caregivers, the child will progress naturally through oral, anal, phallic latency and genital stages (Santrock, 2002).

Based on this theory, behaviour problems displayed by children are viewed as symbolic manifestations of unresolved conflicts, often emanating from early care giver interactions (Hinshaw, 1994). Freud (1935) as cited by Aldridge & Goldman, (2007) suggested that personality development is composed of instincts of id, ego, and super ego. The id is the only component of personality present from birth and is driven by pleasure principle which strives for immediate gratification of all desires, wants and needs. Failure to satisfy these needs immediately results in a state of anxiety or tension. The id is very important in ensuring that the infant’s needs are met. The ego is the component of personality that is responsible for dealing with reality. The ego strives to satisfy the id’s desires in realistic and socially appropriate ways. The super ego is the last component of personality that provides guidelines for making judgements, the sense of right and wrong. The super ego works to suppress all unacceptable urges of the id and struggles to make the ego act upon idealistic standards rather than realistic principles. According to Freud, the key to a healthy personality is a balance between the id, the ego and the super ego.

The implications of this theory in Early Childhood Education are that early caregiver and parental interactions have a significant role to play in child development. Children’s personality is influenced by early care giver and parental interactions. These interactions influence the social skills displayed by a child later in life like self-confidence, self-control, independence and communication. Play is prerequisite in early childhood curriculum as it provides intervention of behaviour problems. Through play, children release stress and unresolved conflicts.

Social Learning Theory
The proponent of the theory is Albert Bandura (born in 1925). This theory is both a behavioural and cognitive theory as it serves as a bridge between the two views of learning. Whereas behaviourists emphasise that a person’s behaviour needs to be directly reinforced to change, Bandura emphasises that people learn more efficiently from observing the consequences of other persons’ behaviour. Bandura’s emphasis on a mental image adds a cognitive dimension to the learning theory separating it from behaviourism (Bredekamp, 2011). According to this theory, children learn new behaviour from observing and imitating other people. By observing actions of others like parents and peers, children develop new skills and acquire new information. Behaviour is learned through individual reactions to and interpretations of situations (Wortham, 2010).

Bandura’s theory has implications in Early Childhood Education. Through punishments, a child can observe another being punished for an inappropriate behaviour thereby learning the appropriate response. Bandura (1986) proposes four phases of observational learning behaviourism (Bredekamp, 2011) that greatly inform early childhood education. The first phase is attention. Children pay attention to role models who are interesting and novel. Teachers should use interesting activities and examples to hold children’s attention. The second phase is retention. During this phase, the teacher models behaviour and gives children a chance to practice it. The third phase is reproduction. This step is for children to reproduce the behaviour on their own. The fourth phase is motivation. Children should be rewarded for imitating the desired behaviours.
Erickson’s psychosocial theory
The proponent of this theory is Erick Erickson who was a student of Freud. Erickson proposed that a child’s personality development is strongly determined by social contexts such as the family, the school and individuals interactions with environmental influences (Wortham, 2010). Erickson proposed a stage theory of development focusing on the entire human life span. Erickson’s psychosocial stages of development in the early childhood years are presented in Table 1.

Table 1: Erickson’s psychological stages of development in the early childhood years

<table>
<thead>
<tr>
<th>Stage</th>
<th>Age</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Trust versus Mistrust</td>
<td>Birth to 18 months</td>
<td>If the infant’s needs are met by loving dependable adults, trust is developed. If adults fail to meet the infant’s needs, mistrust develops</td>
</tr>
<tr>
<td>2 Autonomy versus shame and doubt</td>
<td>18 months to 3 and a half years</td>
<td>If the child is allowed to explore and develop a sense of self as an individual, autonomy develops. If parents are rigid, severe in toilet training and impatient, the child will develop a sense of shame and doubt.</td>
</tr>
<tr>
<td>3 Initiative versus guilt</td>
<td>3 and a half to 6 years</td>
<td>Physical and mental abilities expand. If the child is encouraged to explore and parents encourage play and imaginative thought, the child will develop initiative. If parents are restrictive and punitive, the child will develop a sense of guilt.</td>
</tr>
<tr>
<td>4 Industry versus inferiority</td>
<td>6 to 12 years</td>
<td>Achievement becomes important. If parents help the child find learning and achievement rewarding, the child develops a sense of industry. If the child does not experience success in achievement, a sense of inferiority develops.</td>
</tr>
</tbody>
</table>

Adapted from: “Figure on Erickson’s psychological stages of development in the early childhood years” by Wortham (2010:39).

According to Erickson, development does not end during early childhood but continues throughout the life span. After childhood, children progress to later stages thus: Stage 5 (12 to 18 years): Identity versus role confusion; Stage 6 (Young adult): Intimacy versus isolation; Stage 7 (Middle adulthood): Generativity versus self-absorption; Stage 8 (Late adulthood): Integrity versus despair (Bredekamp, 2011).

Erickson observes that each stage of development is focused on overcoming a conflict. The resolution of conflict of each stage determines the course of personality development of an individual (Wortham, 2010). It’s necessary to resolve the life crisis at each stage if the next stage is to be resolved successfully.

Erickson’s theory has significant implications for Early Childhood Education. Children in their early years should be left under the care of responsible caregivers who can provide security, consistent and responsive care. They need time, space, activities and materials to pursue and master hobbies and interests. A ‘both/and approach’ in early childhood practices is essential (Bredekamp, 2011). For example trust is essential but children also need a healthy sense of caution when interacting with strangers. Similarly, initiative should be encouraged but they also need limits.
Maslow’s self-actualization theory
Maslow (1954) developed self-actualization theory which identifies a hierarchy of needs that motivate peoples’ behaviour and goals. Figure 2 is a representation of Maslow’s hierarchy of needs.

**Figure 2 Maslow’s hierarchy of needs**


The bottom two layers represent the basic physical needs required to sustain life like food, water, shelter and fundamental psychological needs for safety and security. What follows in the hierarchy are needs for love, a sense of belonging and self-esteem. The top of the pyramid represents self-actualization which is the achievement of life’s goals in individual ways. Though children may not reach the pinnacle of Maslow’s hierarchy, self-actualization, the foundations are laid during the early years (Bredekamp, 2011).

Maslow’s theory provides a framework for understanding how children can be motivated. For example if children are hungry it can affect their learning. The same case applies if children are frightened or emotionally insecure. Maslow’s theory justifies school feeding programmes in early childhood education.

**Conclusion**
This paper has discussed various theories and their influence in curriculum decision making in Early Childhood Education. The paper holds that we cannot make appropriate curriculum decisions for Early Childhood Education without this knowledge base. On the other hand, no one theory is comprehensive enough to adequately explain all aspects of child development and learning. This means that teachers and curriculum planners should understand the different theories, and apply them according to the prevailing educational contexts. Effective teachers draw on diverse theories to fully understand how best to support child development and learning (Bredekamp, 2011). To achieve effectiveness in Early Childhood Education, the
curriculum should be planned and implemented with attention to individual differences and cultural variation among the children (National Association of the Education of Young Children (NAEYC), 2005). In addition, teachers should be familiar with the key learning and developmental outcomes for children in different stages of development.

References