Preschool Teachers in Bottom-top Curriculum Change-Invigoration and Implementation

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Preschool Teachers in Bottom-top Curriculum Change-Invigoration and Implementation

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Abstract

With Kenya having rolled out the Competence-Based Curriculum effective as from 2019, anchoring in it preschool education as an integral component, there is still a level of indistinctness as to the role of the preschool teacher in the core domains of curriculum development and reform. The perspective brings to light insights of preschool teacher engagement and interlinkage in effecting the much-desired curriculum development and reform through learner growth, creating an enabling environment, the need for preschool teacher involvement in curriculum evaluations, reforms and adaptability to transformation. The perspective examination integrates documentary analysis as well as discourse analysis. Evidently, progressive implementation of the Competence-Based Curriculum in preschool education alongside any desired adaptations in a timely, expertise and pragmatic manner driven by classroom realities is considered core in ensuring seamless successive transition of learners. It is not only the basis for foundational skills of literacy and numeracy, but also life skills grounding for learners. The findings examination posits for well-anchored and dynamic policy transition considerations at the governmental level on preschool teacher capacity development. As informed by the core domains of curriculum development, it is recommended that reform thought processes and ideologies ignited by preschool teachers from the grass-root levels should encourage a bottom-top channel of curriculum adjustment recommendations rather than a top-down, unilateral and bureaucratic system.

Keywords: Preschool, teachers, curriculum, kenya, learners, education.

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Introduction

Curriculum is the vehicle through which a nation empowers its people with the essential knowledge, skills as well as values to attain a socially and economically engaged and empowered state. It nurtures constructive and productive people to steer both national and international development. Therefore, a curriculum should ideally meet individual citizens' and the nation's prerequisites, while its development and change should be steered in a holistic and systematic fashion, critical to ensuring its effectiveness and sustainability, and keen to avoid a piecemeal approach (Kabita & Ji, 2017; Waks, 2003). It is without doubt that such changes desire bidirectional, nonpartisan bottom-up and vice versa in-depth consultations in order to ensure relevance, common understanding, ownership, commitment and holistic levels of support. It is thus unequivocal to affirm that any country's curriculum change rationale should be clearly grounded to offer planners the much-needed impetus to remain focused to the change, while roping in the significantly-needed support from all stakeholders. It should consider the fact that all citizens in a country, by way of being parents, learners, employers, teachers and siblings or relatives of learners (Ho, 2010; Kabita & Ji, 2017; Voogt, Pieters, & Handelzalts, 2016), are pertinent stakeholders of the education sector. The rationale thus affirms curriculum change being a high-stake, technical, political and sensitive quest (Ho, 2010; Kabita & Ji, 2017).

The preschool teacher has, over time, been the center of a global discussion due to the rising value attached to early childhood education. Whereas the Kenyan 8-4-4 education structure, which in its policy and operational guidelines was silent on preschool education, has substantially remained intact since its implementation in 1985, some reviews of the curriculum have taken place, in 1990, 1992, 1995, and in 2003 (Cunningham, 2006; Gachathi, 1976; Kabita & Ji, 2017; Kenya Institute of Curriculum Development, 2016; Ntarangwi, 2003; Wanjohi, 2011). A summative evaluation of the same education curricula conducted by the Kenya Institute of Curriculum Development (KICD) in 2009; and a national needs assessment study, also conducted by KICD, in 2016 showed that most stakeholders deem the education system not fit for purpose, both in its structure and curriculum (Kenya Institute of Curriculum Development, 2016; Kabita & Ji, 2017; Wanjohi, 2011). This is based on a number of advanced observations such as the system being too rigid and with limited opportunities to align basic education with children's career interests, aptitudes and abilities. It is also said to best serve only those who score high grades in traditional subjects such as English, Math, Sciences, and the Humanities at the end of secondary education. These students then proceed into higher education and pursue or focus on taking up white-collar employment opportunities. More so, the traditional knowledge-based curriculum suppresses students' interests in learning and hence prevents them from exploring and developing inherent talents as they pursue higher education. It is worth noting that no country in the world designs its education system with the aim of having all children attend universities to follow the few traditional careers (Kabita & Ji, 2017; Richter, 2015; Wanjohi, 2011), as the 8-4-4 turns out to have presumed (Kabita & Ji, 2017). Nevertheless, there are many children whose aptitude, interests, and abilities lie in vocational education, the arts and sports, yet the system does not seem to critically factor this into consideration. Beyond the core STEM subject areas, the Kenyan economy also offers diverse employment opportunities in the fields of vocational education, the arts, and in sports. This seems to have escaped the minds of the framers of the curriculum. It is worth noting that the employment market in the 21st

century is evolving to create more opportunities in small and micro enterprises, rather than the traditional models of career employment. This calls for a more holistic individual to confront such a great yet explorative demand. Finally, an education system that emphasizes the acquisition of knowledge without pedagogical emphasis on application undermines the core essence of education for development.

Going by the findings of the KICD's needs assessment study of 2016, international best practice and a desire to make learning more meaningful, they resolved to adopt a competency-based approach (CBA) to curriculum reform (Kenya Institute of Curriculum Development, 2016; Kabita & Ji, 2017; Ntarangwi, 2003), hence the conceptualization of Competence-Based Curriculum (CBC) by KICD on the basis of competency being the ability to apply learning resources and outcomes (knowledge, skills, values, and attitudes) adequately in a defined context (education, work, personal, or professional development) (Kabita & Ji, 2017; Nganga, 2009). Placed in context, CBC is considered to emphasize mastery of what learners are expected to do rather than mainly focusing on what they are expected to know (Norman, Norcini, & Bordage, 2014). In principle, such a curriculum is learner-centered and adaptive to the changing needs of students, teachers and the society as far as business and the job market is concerned. It affirms the fact that learners can acquire and apply knowledge, skills, values, and attitudes in order to solve the evolving challenges they encounter in everyday life. Essentially, a learner who goes through basic education requires seven core competencies in order to develop, which are communication and collaboration, critical thinking and problem solving, creativity and imagination, citizenship, self-efficacy, digital literacy, and above all the skill of learning to learn. In order to attain these core competencies, basic education has to be reorganized with a shift away from a structure of eight years primary, four years secondary, and four years of university education (8-4-4) to a structure of two years pre-primary, six years primary, six years secondary education, and three years of university study (2-6-3-3-3).

In the three-tier basic education, early years education covers pre-primary one and two (ages 4 and 5), and lower primary education (grades 1, 2 and 3) (ages 6 to 8). The adoption of appropriate pedagogy, subjects, learning areas, curriculum designs and schemes of work, textbooks, lesson plans and other teaching-learning materials will be the vehicles through which core competencies are developed and experienced by learners (Charles, Triscott, Dobbs, Tian, & Babenko, 2016; Kabita & Ji, 2017; Waks, 2003). Adaptability, validity and applicability of these core learning resources, through which mastery at the foundation level of the curriculum pyramid is imparted, is critical without doubt, hence the need for meticulous attention in preschool teachers' capacity building and involvement (Voogt et al., 2016; Yoshikawa et al., 2013) under the advanced CBC in Kenya (Nganga, 2009). With hindsight of the 8-4-4 curriculum bias on preschool education, and in light of the new CBC dispensation, the perspective thus seeks to bring to light insights of preschool teacher engagement and interlinkage in affecting the much-desired curriculum reform. The reforms focus on learner development, creating an enabling classroom environment, learner assessment, and the need for teacher involvement in curriculum reform and for preschool adaptability to curriculum change.

Preschool teacher strategic capacity and place in curriculum development

The development of the curriculum itself through its various stages is a laborious task. The teacher, as a stakeholder to the realization of the curriculum goals, plays a pivotal role. Since teachers are responsible for curriculum in the classroom, they have to know the various steps that are involved in its development. The literature contains a variety of models for curriculum development dating back to Ralph Tyler (1949) and Hilda Taba (1962) (as cited by Läänemets & Kalamees-Ruubel, 2013). These models have gradually worked to shape the process of acquiring a curriculum that satisfactorily serves the society. The goals of curriculum for countries have majorly been centered on creating a competitive education system that is able to favorably compete with other leading nations, and Kenya is no exception. Curriculum development as a field of study majorly focuses on the invention of new knowledge from the environment, an improvement of already existing curricular, and the contextualizing of various approaches to curriculum in education. Teachers are the key players in the realization of these objectives. Optimizing their effectiveness will help to qualify their effort in the process of curriculum reform, and therefore teachers will be able to invent, improve, and contextualize curricula according to their immediate society.

The processes of curriculum development may take a considerably long period of time, particularly because the desired outcomes (Thijs & van den Akker, 2009) are incorporated within a cyclical process of curriculum analysis, design, development, implementation and evaluation (see Figure 1), which all take place interactively (Voogt et al., 2016).
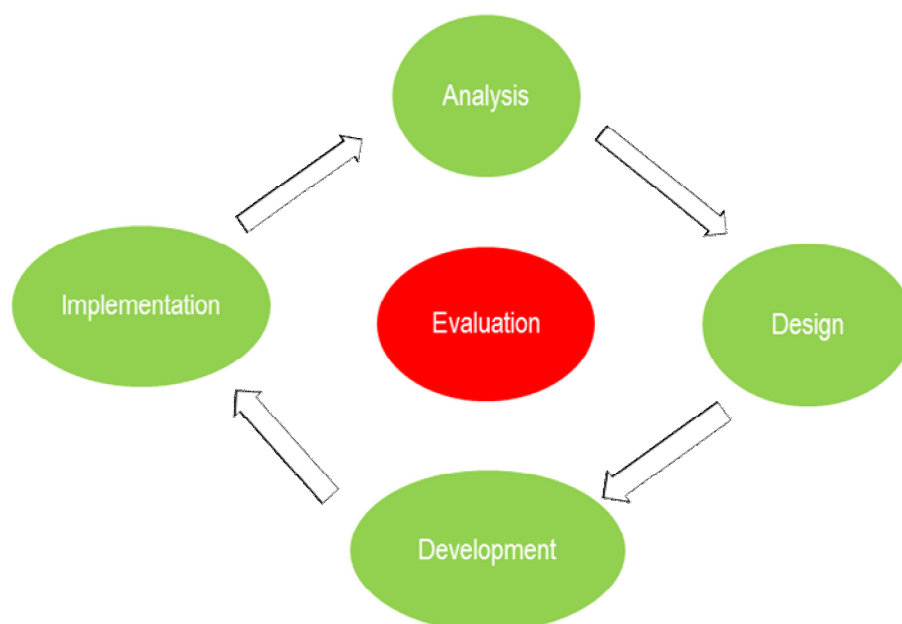

Figure 1. Core activities of curriculum development

This model, also called the ADDIE model, adopts a linear yet reciprocated design where curriculum development starts with an analysis of the existing setting and the formulation of intentions for the proposed change or innovation. The analysis is followed by curriculum design, where the curriculum requirements are carefully developed, tested and refined into a relevant and usable product. Evaluation is at the central position of the cycle and it casts light on the users' wishes and possibilities in their practical context, revealing the best way

to attune the product to the practical setting (Allen, 2010). Development of the curriculum and implementation of it compliment the processes of curriculum design and analysis. The development stage involves the generation of lesson plans and the materials required for lesson instruction. The teacher in this phase seeks to develop their lesson using available media and materials. At the implementation phase, the main concern is vested in both efficient and effective instruction. The teacher ensures that the learner has adequate support to master the objectives and to translate them into the required knowledge. Evidently, there is a very high sense of teacher engagement with roles centered on appraising and reflecting on the societal needs and to interpret them into objectives that can be addressed by the curriculum through an analysis of needs, and then to project the outcome of students' results through summative or formative evaluation. The highlighted dimension cannot underestimate the need for preschool teachers who are the anchors of any national curriculum at the foundation level.

Curriculum analysis and preschool teacher synergy

The role of any curriculum analyst is to engage an already existing curriculum in order to determine if it serves the purpose for which it was originally intended. Analysis involves appraising the curriculum in terms of standard or agreed-upon design principles (Priestley, Edwards, Priestley, & Miller, 2012).

The preschool teacher has a major role to play in the process of curriculum analysis, and they should not be disregarded or ignored due to stereotypical misconceptions as to their ability to inject notable contributions. While the teacher as part of the curriculum analysis team does not make final policy or political decisions about the curriculum, they do have considerable influence on the outcome. This process ideally involves the cross-checking of needs based on previously existing experiences, thus the preschool teachers have a role in the curriculum analysis. There are a number of reasons to conduct curriculum analysis, which can be viewed within seven dimensions:

- Curriculum assessment: To make an assessment of the curriculum in order to improve it, or better still change it completely.
- Foresight and recommendation: To identify potential and actual problems as early as possible and to recommend possible solutions.
- Decision making and recommendation: To make decisions about future support for continuation of the curriculum.
- Goal setting and evaluation: To determine whether the goals that were initially set have been met and to identify blind spots, biases, perspectives that build on the topic.
- Pointing out potential strengths and weaknesses: To identify strengths and successes in order to build upon them, and to point out weaknesses to place emphasis on how to seal any loopholes.
- Validity and practicability: To examine whether assumptions underlying the curriculum are valid and defensible to see whether the different parts hold together.
- Value placement: To demonstrate the worth of the curriculum to different stakeholders.

Education philosophy experts John Comenius and French Philosopher Jean Jacques Rousseau advocated for the interest of the child in education. The former argued that

education should teach all things to men; preferably appeal to the child's interests, while the latter, who is also considered the father of child-centered education, called for consideration of a child's needs and interests in the learning process (Ngaroga, 2008) In this regard, through their experiences with young learners at their initial stages of learning, preschool teachers can narrate more than meets the common eye. They understand the relevance of specific learning materials which could be used at the preschool stage for the solid foundation of any desired curriculum. Preschool teachers should therefore incontrovertibly be considered part and parcel of the analysis of curriculum needs. In the wake of the Kenyan curriculum reforms, significant efforts have been ignited to bring the stakeholders, preschool teachers included, on board. However, decision making has been subordinated to the personalized interests of the powerful political and economic class. This has left crucial players acting only as spectators to the entire curriculum revolutionizing endeavor.

The place of the preschool teacher in curriculum assessment

An assessment is a machine for reasoning about what students know, can do, or have accomplished based on a handful of things they say, do or make in particular settings (Mislevy, Almond, & Lukas, 2003). This process determines the extent to which learners have acquired specific knowledge, skills, values, attitudes, abilities and competencies. The purpose of assessment is to establish the extent to which the learner has acquired the expected competencies with a view to informing interventions for further acquisition and mastery of expected competencies. Therefore, assessment plays a significant role in diagnosing and monitoring the progress of a learner, and provides feedback to learners, parents, teachers and curriculum designers and implementers. This helps them plan learning in terms of what the learner needs in order to continue advancing and filling gaps in performance. In the context of the Kenyan preschool teacher, assessment will provide the basis for advising teachers on pedagogical methods and deliberate interventions (Kenya Institute of Curriculum Development, 2017).

In Competence-based assessment, the focal point is based on actual skills and knowledge that a learner can practically demonstrate. The process starts with a personal assessment against a set of competencies, and it is the responsibility of the assessor to determine what and how much evidence is required to judge the assessment. Evidence is used by assessors to make a judgment about whether or not an individual is competent. Assessment of competencies is criterion-referenced, as compared to assessment of an objective-based curriculum on the basis of purpose, content, item characteristics and score interpretations (Huitt, 1996). Criterion-referenced assessment focuses on determining whether or not each learner has achieved specific skills or concepts while norm-referenced assessment focuses on ranking learners with respect to the achievement of others in broad areas of knowledge. Comparative judgement theory espouses the need to create a forum for preschool teachers to develop specimens that represent the assessment standards for competencies (Huitt, 1996).

Under the current curriculum reforms in Kenya, competency-based assessment is a key reformation which will facilitate the adoption of formative assessment practices that promote diagnostic approaches, and which will in turn enhance learning and improve learning outcomes (Kenya Institute of Curriculum Development, 2017). This is a departure from current assessment practices that compares learners against each other and shifts

towards assessment practices that seek to collect evidence and make judgments on the extent and nature of progress towards a learner's achievement (Kenya Institute of Curriculum Development, 2017). Thus, with the pre-primary curriculum in Kenya under CBC designed with a focus on the foundation skills of literacy, numeracy and life skills (Kabita & Ji, 2017), it is imperative for the bottom-up and top-down progressive curriculum reforms to be strongly upheld to ensure timely interventions for sustained implementation relevance and adaptive capacity development among both curriculum developers and teachers (Kabita & Ji, 2017; Waks, 2003).

Preschool teachers as pillars of requisite early stages of learners' development and adaptation to change

The concept of educating and empowering young children has been in place for many years (Kamerman, 2007; Morgan, 2011) and early childhood education also called Preschool education is currently being practiced almost *globally; either* informally or formally. Preschool education in Kenya under the new 2-6-3-3 curriculum begins at the age of four through six years of age. The overall benefit of preschool education is anchored on its benefits to cognitive development (Lourenço, 2012). Jean Piaget, a Swiss Biologist and Psychologist is one amongst several other scholars who have been in the forefront in the study of early childhood education and development, explaining the developmental stages of a child and how they learn in his theory of cognitive development. Piaget's Theory of Cognitive Development suggested that humans need to construct their prior knowledge through prior personal experiences in order to enable them to create mental images (Barrouillet, 2015). Since humans learn by constructing their own knowledge, they are able to automatically understand and use the available information. This recognizes the bottom-up approach to curriculum implementation as propagated (Fullan, 1994). The preschool teacher in this context serves as the guide to the learner to construct the desired knowledge based on the context without affecting their natural and bottom-up inclination of knowledge acquisition.

Piaget's Learning Model remains an almost obligatory reference to any subject on developmental psychology. He believed that cognitive development is a product of the mind achieved through observation and experimentation. In his model of child development and learning, Piaget suggests that children, create "mental maps" or cognitive structures at different levels of learning where these mental images and maps enable them to understand their environment (Barrouillet, 2015). Their teachers are therefore expected to pick the mental ability of every child and help them relate to their environments. Thus, preschool education is basically the experimental lab for this theory and teachers in preschool education need to understand their curriculum thoroughly in order to guide the learner to achieve their invention and discovery capacities. This can only achieve the desired optimum impact if and when the preschool teachers are not relegated to the role of curriculum implementation only or substantially so, but are also engaged in curriculum reforms as trends of development dictate both through global dynamics and classroom experiences. The suggested pragmatic rationale draws its influence from the fact that learners build their own knowledge through experience which helps them build mental models. Children also depend on people around them, especially parents and teachers in order to learn, feel protected and relate, an argument that has also been emphasized by constructivists who argue that the role of the community is to offer support that enables construction (Al Natsheh & Komulainen, 2008). When children experience sensitive and responsive

interactions with adults, social adjustment, improved behavior and, most importantly, learning undoubtedly takes place (Sapungan & Sapungan, 2014). Every child is born with the potential that they should be allowed to explore their world (Murray, 2011); however, the teacher is often known to prompt the learning progress of learners and in many instances determines the direction (Murray, 2011). In this regard, preschool teachers are among the most crucial contributors to curriculum reform. Their role and predominance on proposed changes in curriculum cannot be disputed.

Nonetheless, since any change comes along with its own unique demands, not every change is welcomed by society. This is mostly because people feel a sense of insecurity with the introduction of new demands. Research has shown that even in developed nations, the implementation of new curricula takes teachers a considerable amount of time to accept and become competent and confident in its administration (Gray, Scott, & Mehisto, 2018). This reinforces arguments that curriculum initiatives are seldom completely successful, but possibly subject to significant risks of not meeting the intended targets if the bottom-up reform dimension is underestimated. This is because it breeds a sense of exclusion and lack of inclusive ownership, hence the need for underpinning the preschool teachers position as pillars of the requisite early stages of learners' development and adaptation to change since it is they who initiate the curriculum foundation among learners.

Preschool teachers in curriculum foundation classroom management

Classroom management is a crucial factor in the process of knowledge acquisition and instruction. The preschool teacher plays a huge role in setting up and managing the classroom in order to facilitate successful learning achievement, and is basically viewed as the practice that creates finished products from a perpetually developing process (Djigic & Stojiljkovic, 2011). There are quite a number of interchanges that take place throughout the process of teaching and learning, and together these activities create a momentum that puts the teacher on the frontline practically every minute of their teaching career. The teacher in this case needs to drive the classroom at a brisk pace whilst being mindful to manage transitions in ideas between themselves and their student learners, and to score an achievable interlude of events in the course of learning. For a classroom to be accomplished and attain measurable milestones, teachers have to keenly navigate the dynamics of the classroom's needs as per the available resources driven by reality and according to the accredited national and global standards (Djigic & Stojiljkovic, 2011; UNICEF, 2009).

Besides the physical setting and arrangement of the classroom, teachers should create and effectively implement a set of short and simple rules as boundaries that protect their students' right to learn and also protect teachers' freedom to teach (Linsin, 2013). Linsin advises teachers to be *"incredibly personable with the students, and build really close relationships, but when it comes to classroom management, you're an unfeeling robot almost. You call them like you see them"* (p. xx). In the spirit of the just-launched CBC, where the curriculum now focuses on the learner, the classroom management pillar will be to create a classroom that students love being a part of. This will outrightly afford the teacher leverage (Linsin, 2013), hence the need to walk with them through the facets of curriculum reforms and guiding philosophies to ensure adaptive classroom setting and management. Such efforts have the capacity to inform what would sound like mundane effects and impact determinants at face value, but have a deeper role on aspects of how teachers should

choose activities for their students carefully and ensure they are both age-appropriate and progress from simple to complex (Allen, 2010), and are also well-anchored in the anticipated curriculum.

Overall, the Education for all (UNESCO, 2015; UNICEF, 2009) principle advocated for teacher support in terms of their proper remuneration, provision of spaces for professional development and training, along with appropriate retention strategies for teachers should act as motivating factors for teachers being at the very core of the educational system. Teachers need to own and seek to improve the curriculum in an attempt to resolve the perpetual and perennial problems that accompany its innovations, right from its conception through to implementation (Kirk & MacDonald, 2001; UNICEF, 2009).

Conclusion

Progressive implementation of the CBC for early years education, and particularly pre-primary education alongside any desired adaptations in a timely, expert and pragmatic manner driven by classroom realities is considered core going by Kenyan standards. Its' effective implementation will ensure seamless successive transition as it is not only the basis for foundation skills of literacy, numeracy and life skills for learners, but also calls for primary schools; both public and private, to start a pre-primary level. This is in addition to well-anchored and dynamic policy transition considerations at the government level on preservice teacher training for early years education, thereby allowing teachers to specialize and deliver in this tier in an engaging, effective and timely fashion. A flexible curriculum and appropriate content delivery methods are undeniable factors for the successful teaching of young learners. Emphasis has been placed by teacher educators on the need to ensure a practicable curriculum and a balanced classroom that allows for adequate attention to be paid by teachers to the needs of learners. In this way, a teacher-learner bond is created, and learning becomes rather more natural as a result. The teacher is expected to sensitively navigate through the curriculum dynamics in order to help learners increase their capacity with minimal effort. Governments should therefore encourage policy dialogue and in doing so, corroborate the ideas of most education agencies and scholars who advocate for sufficiently participatory curriculum reform. It is therefore recommended that reforms should be instigated by teachers from the grass-root levels, and that reformers should encourage a bottom-top channel of curriculum recommendation, rather than reliance upon the more traditional top-down, unilateral and bureaucratic system.

Notes

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