

Re-Orienting Teacher Training Curriculum to Reflect Aspirations of Vision 2030, the 2010 Constitution and Competency Based Curriculum in Kenya for Sustainable Development

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Abstract: *The impact of globalization has been felt in Kenya, especially in education, just like the other parts of the world. Education, especially teacher education and development, is tasked to address itself to the rising individual, economic, social, and technical concerns. It is on this premise that the Kenyan Government has given priority to curriculum reforms as manifested in competency based curriculum. Teachers, trainers and lecturers are significant resources in the learning and teaching environment and their preparation and constant professional progression, though confronted with many challenges, it is crucial to the realization of the vision and aspirations of the country. Measures to advance teaching and learning practices so as to realize suitably skilled human personnel for the nation are necessary. A teacher or trainer in this context refers to anybody who divulges skills, competencies, knowledge and attitudes to trainees through accepted pedagogical preparation program and has achieved credited documentation. Reflections on essential teacher education curriculum reforms to realign teacher education to be in tandem with new constitution, vision 2030 and competency based approach in Kenya will be discussed in this theoretical paper, which will be valuable to stakeholders keen to execute the ongoing competency-based curriculum in Kenya.*

Key Words: Teacher Education, Re-orienting, Competency Based Curriculum, Sustainable Development.

1. Introduction

Teaching for viable progression is an evolving but vibrant idea that includes a new apparition of education that is purposed to endow persons of all strata to take responsibility for fashioning a sustainable future. Training is the most operative tool that humanity owns for mitigating the tasks of the upcoming tomorrow. Development progressively is contingent upon informed minds: upon research, innovation, invention and adaptation. Knowledgeable minds and predispositions are required not only in workplaces and research establishments, but also in every domain of life. While

education is not the only cure to every encounter, in its broadest sense, education is a vivacious part of all determinations to envision and fashion new associations among personalities and to develop greater reverence for the requirements of the environment (UNESCO, 2002).

Universally, education is perceived as the crucial instrument of change towards viable progress, increasing citizens' capabilities to change their aspirations for society into realism. In addition to provision of technical and scientific skills, education also provides the motivation, justification, and social sustenance for tracking and utilizing them. On this premise, society must be extremely

worried that much of present education is deficient of what is required. Re-orienting the value and relevancy in regards to teacher education in addition to redefining its objectives to be in tandem with aspirations of the constitution, vision 2030 and competency based curriculum must be among the nation's highest priorities (Orr, 2001).

Teachers, trainers and lecturers are a very important component in curriculum implementation. They are an important resource in the education process and their preparation and incessant expert progression is crucial for the accomplishment of the curriculum objectives and vision of any nation. Measures to reform teacher education curriculum so as to advance suitably skilled human resource for the nation is mandatory. A teacher or trainer refers to one who conveys competencies, skills, knowledge and attitudes to students and has gone through acceptable pedagogic preparation course and achieved credible documentation. Only trained teachers can be registered in the teaching profession (UNESCO, 2001).

The world is endowed with more than 60 million trained teachers globally, and everyone is hypothetically a crucial agent for bringing about the transformation in tenets and lifestyles desired for feasible progression. As a result, inventive teacher training is required to tap this potential. The managements and faculties of institutions of teacher education have what it takes to bring about excellent change, since they fashion the teacher education curriculum, train new teachers, provide professional development for practicing teachers, consult with local institutions, and often offer expert opinion to regional and national ministries of education (Kenya Bureau of Standards, 2016).

1.2 Statement of the problem

The impact of globalization has been felt in Kenya, especially in education sector. Education, particularly in teacher education and development, is tasked to respond more to the rising personal, economic, social, and technological dynamics given its significant role in the learning and teaching environment. It is on this proposition that the Government of Kenya has given primacy to curriculum reforms as evidenced in competency based curriculum. However, despite the important role of teacher education in the learning and teaching environment, little has been achieved in re-orienting teacher training curriculum to reflect aspirations of vision 2030, the changes in 2010 constitution especially on the Bill of Rights and competency based curriculum in Kenya for sustainable development. These will be the gaps to be addressed in this theoretical paper review.

This theoretical paper is intended to reflect on crucial teacher education curriculum reforms necessary to re-align teacher education to be in tandem with new constitution, vision 2030 and competency based approach

in Kenya which will be valuable to stakeholders keen to execute the ongoing competency-based curriculum reforms in Kenya effectively.

1.3 Theoretical framework

1.3.1 Andragogy Model of Learning

Teacher education is underpinned by several theories and models. One of such models is andragogy model of learning. The word andragogy has been in usage from 1833; Malcolm Knowles is ascribed with promoting the concept in the USA in the nineteen seventies. Knowles defined andragogy as 'the art and science of helping adults learn,' (Bowe, Hoewe & Zeldes, 2012) which he juxtaposed with the usage of 'pedagogy', which was initially concerned with assisting learners to learn. With time, the usage of the term pedagogy became intertwined with instructional design in broad-spectrum. In general, nowadays, most people imply instructional design in entirety when using the term 'pedagogy.' For Knowles, andragogy is grounded on four essential suppositions on adult learners and how they vary from child learners. Andragogy shoulders that, as people mature their self-concept transits from dependence to self-direction; their increasing pool of experience starts to function as a resource for learning; their willingness to learn becomes oriented progressively towards the developing tasks of their social roles, as they start to apply what has been learnt immediately to life's real challenges. Consequently, their orientation towards learning changes from one of subject centered to problem centered. It should be noted that in the competency based curriculum, problem solving is one of the key competencies expected to be realized.

Further, the andragogic model suggests five concerns to be considered and addressed in formal learning. These include ensuring that learners understand why something is vital to learn; instructing learners on how to direct themselves through information; linking the topic of study to learners' experiences; learners may not learn until they are set and inspired to learn. Regularly this needs assisting them to overcome inhibitions, beliefs and behaviors on learning. Knowles acknowledges that four of andragogy's five basic suppositions find relevancy in both adults and children. The only variation is that children have less experiences and pre-established beliefs than grown-ups, hence have less to relate. With the introduction of the CBC in Kenya, there is emphasis to move from teacher-centered to learner-centered mode of teaching, which andragogy model of learning embraces. Anagogical methodologies are frequently engaged in adult education, business, religion, law, nursing, social work, agriculture among other professional training institutions (Bowe, Hoewe & Zeldes, 2012).

1.3.2 Visible Learning Theory

Teacher Education is also informed by visible learning theory. Hattie (2012) notes that worldwide, essential reforms in education systems have significant insinuations for curriculum restructuring. Learners need to work in teams, take initiatives, develop critical thinking and resolve problems, communicate through discussions and bring various perspectives to their learning environment (Hattie, 2012).

Visible learning implies an enriched role of instructors as they become assessors of their own instruction. John Hattie affirms that visible learning and teaching takes place when instructors see learning through the eyes of learners and assist them become own teachers. It entails making learner learning visible to instructors so that they can know if they are having an influence on this learning; this is an essential component of becoming a lifelong learner. This resonates with the Sustainable Development Goals and CBC. When teaching *is visible* the learner knows what is to be done and how it is to be done (Hattie, 2012).

2. The Constitution of Kenya 2010 and Education

The 2010 Kenyan Constitution caters for many education associated requirements exemplified in the Rights Bill. Specifically, the constitution of 2010 pronounces itself in these main aspects in reference to education: It underscores Education as a Right for everybody as evidenced in Article forth three of the 2010 Kenyan Constitution; each learner having right to Compulsory and Free Basic Education as in Article fifth three (b). Safeguard of learners from callous treatment, violence and abuse as in Article fifth three (1) (d). Youths being beneficiaries to state affirmative action to guarantee that they have admittance to appropriate instruction and training, employment and safeguard from all forms of destructive cultural practices and mistreatment as in Article fifth five (a, c & d).

Each issue concerning children ought to be considered in the best interest of the children as provided in Article fifth three (2). Individuals with infirmity have right to admittance to suitable education institutions and amenities as in Article fifth four. The 2010 constitution of Kenya similarly states that marginalized and minority clusters are to be accorded with distinctive openings in the economic and educational sector as in Article fifth six (b) and special openings for admittance to employment Article fifth six (c).

As provided for in the Fourth Schedule (Parts 1 and 2) of the 2010 Kenyan Constitution on sharing of roles between National and County governments, National Government is mandated with obligation on education standards , policy, examinations, curricula, university education and

giving charters to universities, tertiaries and other institutions of research. Further it is entrusted with the obligation for special, primary and secondary education in addition to sports. Devolved County governments obligate over home-craft centers, village polytechnics and pre-primary education.

3. Vision 2030 and education

The Education National Goals exemplified in Vision 2030 emphasis on broadening learners' experiences, knowledge and creative understanding at the same time developing cognizance of moral tenets and capability aimed at life-long learning. Core in this objective is the curriculum which will afford skills, knowledge, values and competencies to empower learners to transit with ease from the education structure to the realm of employment, by means of extra academic, vocational and technical education enhancing value to what has been learnt through the education structure (Orr, 2001).

The outgoing primary and secondary school curriculum was revised in the year 2002, and in the year 2004 through evaluation of diploma teacher training curriculum and the primary teacher training curriculum in the year 2007. Moreover, in the year 2008, Kenya's Vision 2030 set out main concerns to be fused in the curriculum, while the 2010 Kenyan Constitution and the continuous variations in the wider economic setting following the ratification of the East African protocol also affected directly the direction and priorities of the curriculum worthy to be considered in the teacher curriculum changes. The polytechnic curriculum for the youths was developed in the year 2007 (RoK, 2012).

The Kenyan's Vision 2030 demands for a curriculum, which embraces moral and ethical ideals, corporate social and individual responsibility. Further, it demands for the progression of entrepreneurial and technical skills, competencies, talents and skills. The basic education content, consequently, has to be restructured to endow each learner with appropriate competencies, skills, knowledge and values, empowering learners to progress to their full potential, enhance the worth of their lives, be able to make well-informed decisions and disposed to involve in learning for life-time. Redefining instructor education curriculum to articulate the aims of Vision 2030 is a national priority (RoK, 2007).

In order to make teacher education curriculum more specific and relevant to Kenya's Vision 2030; there is need to focus on entrepreneurship, innovation, technology and talent progression, and the demand for education to be more meticulously connected to the world of employment as envisaged in the new curriculum as technology depends profoundly on the provision of ICT facilities and use of ICT across the education sector, which should be stakeholders financial priority (UNESCO, 2015).

Rwanda, Uganda and Tanzania our East Africa member countries have embraced the CBC and assessment. The highly examination structured Kenyan curriculum requires review; additionally emphasis should be put on competencies and skills assessment. The initiation of standardized assessment testing in all levels of Basic Education progression will fill this gap. Moreover, currently, technical subjects are provided in few secondary schools, consequently, few students are exposed to them. There is need to increase the number of schools offering technical subjects to meet this objective (Petrilli, 2016).

4. Competency Based Curriculum (CBC) in Kenya

Curriculum is the means through which a nation endows its people with essential skills, knowledge, values and attitudes that enable them to be fortified for individual and national progression. Curriculum, thus, must fulfill the desires of the intended citizens and the country as envisaged.

In line with this curriculum principle and need to keep the curriculum in tandem with the Sustainable Development Goals (SDGs), curriculum transformation has been thought to be an urgent priority in the Kenyan education sector. The Kenya Institute of Curriculum Development (KICD) decided to embrace a Competency Based Curriculum (CBC) in the quest for these reforms informed by the findings of needs assessment report sanctioned in the year 2016, international outstanding education systems practices and curriculum transformations, and the need to make education more meaningful. A few of the trainers in Kenya have had some training on this dimension by the UNESCO International Bureau of Education (IBE-UNESCO), among other specialists. KICD hypothesized competency as the capacity to apply learning resources and outcomes (skills, knowledge, attitudes and values) sufficiently in a distinct context (personal, work, education, professional development etc) (RoK, 2018).

Competency-Based curriculum stresses what learners are anticipated to do as opposed to what they are anticipated to know. Designers for the competency based curriculum envisaged that by the end of the learning level, each learner could have achieved competences such as; Imagination and creativity, Critical thinking and problem solving, Communication and collaboration, Self-efficacy, Citizenship, Digital literacy and learning to learn ((RoK, 2018).

4.1 Structure of Competency Based Curriculum in Kenya

As from 2019 Kenya took a substantive shift from the system of eight years in primary; four years in secondary; and four years in university (8-4-4) to two years in pre-primary; three years in lower primary; three years in upper

primary; three years in junior secondary and three years senior secondary. The duration for university and tertiary training institutions will be contingent upon each course offered, for instance, certificate courses will take a shorter period as compared to diploma or degree courses. Furthermore, university degree courses will not take the same time to complete; however there will be a minimum for all courses (UNESCO, 2018). The organization of Basic Education is systematized in three tiers

4.2 Early Years Education Level

This level covers pre-primary one and two (PP1 & PP2) for ages four and five and lower primary level for grades one, two and three, which constitutes ages six to eight. Vision 2030 had commended the mainstreaming of pre-primary schooling into primary education by 2010. This has been realized with erratic levels of achievement. This structure will enhance the attainment of this aim through:

- Crafting the curriculum for pre-primary and lower primary level with continuous changeover. The emphasis will be on foundation skills of numeracy, literacy and life skills.
- Having all primary schools to initiate pre-primary level.
- Crafting pre-service trainers training for early years of education to enable trainers to specialize in this level

4.3 Middle school Level

This level covers upper primary schooling for grades four, five and six, which covers year nine to eleven and junior secondary schooling for grades seven, eight and nine, which covers year twelve to fourteen. The level will give learners chance to achieve their potential, as in aptitudes, interests and abilities whereas gaining from comprehensive curriculum. This is purposed to prepare the learners to choose suitable pathway and track at senior secondary level that is associated with their career of concern.

4.4 Senior school Level

This level covers grade ten, eleven and twelve, which covers years fifteen to seventeen. In this level, students have a choice of admittance to one of the three pathways: Social Sciences; Arts and Sports or Science Technology, Engineering and Mathematics (STEM). Each pathway has specific tracks. Arts and Sports tracks comprise; Visual Arts, Sports, Performing Arts, Physical Education and Community Service Learning. Social Sciences tracks include; Languages and Literature, Humanities, Business Studies, Physical Education, Community Service Learning while STEM tracks are; Applied Sciences, Pure Sciences, Careers and Technology Studies, Technical and Engineering .

In every track, learners have to select learning segments on the basis of their abilities, aptitudes, and career concerns. Community Service Learning and Physical Education are compulsory for all students. Emphasis in each track and pathway is not only on the learning field, but similarly on entrepreneurship opportunities after senior school and careers. Further there is stress on mentorship from efficacious personalities in the relevant tracks and pathways.

Community Service Learning is obligatory as it assimilates classroom learning and community service which empowers students to connect and apply their classroom experiences to the community service, while on the same breath augmenting their citizenship through service delivery. Students will have the opportunity to:

- Utilize their skills and knowledge in the community, rendering age-suitable and related services.
- Intermingle with, experience, and learn from the community.
- Cultivate sense of responsibility, employability skills, constant learning and flexibility by means of reflection.
- Enhance their individual development through building robust and prolific relationships.

Students further will be required to engage in at least one hundred and thirty five hours of community service outside the classroom in the course of their 3 years in senior level of education. This will be requirement as a qualification from basic education, and also will be a requirement for entry to higher tertiary training, including university.

5. Teacher Education in Kenya

Teacher education in the country is designed to cater for the demands of schooling in pre-primary, primary, secondary and tertiary levels. Pre-primary and primary teacher training curriculum emphasizes on subject content and pedagogy. Secondary teacher training curriculum is delivered in two models; concurrent and consecutive models. In the concurrent model, the trainee teachers study both pedagogy and the subject area simultaneously and graduate with a Bachelor of Education. While in the consecutive model, the trainee teachers engage the subject area first and graduate with Bachelor of Arts or Bachelor of Science degree and later engage a 9 month postgraduate diploma in education to qualify as teachers. Nevertheless, there is no homogeneous content in the teacher education programs offered in various universities in Kenya (RoK, 2005).

Pre-primary, primary certificate and the diploma levels are evaluated by the Kenya National Examinations Council, whereas the degrees are conferred by the various

individual universities. The training of TIVET teachers is spread out in various institutions contingent on level of training. Continuous Professional development of tutors is conducted by many stakeholders such as KISE, KICD, KEMI, DICECE, CEMASTEPA, among others (RoK, 2005).

Yearly, ten thousand educators (10,000) are trained at certificate level whereas twelve thousand (12,000) are trained at diploma level, both levels last 2 years and the only distinction is the admission qualification of the learners. There exists an alleyway for advancement. The Kenya Institute of Special Education (KISE) trains two hundred and forty (240) certificate and one thousand eight hundred (1800) diploma teachers in Special Needs Education (SNE) yearly. Likewise universities engage teacher training for Early Childhood Development Education (ECDE) and SNE at different levels. Universities, both private and public, train education degree programs in many disciplines through several modes such as school based, regular and distance education programmes channeling graduate educators in Art and Science. Notwithstanding the fact that the services of these educators are needed, the constitutional teacher management Agency, Teachers Service Commission is not able to employ all trained educators due to budgetary restraints and skills incongruity (RoK, 2018).

Teacher education policy framework requires re-evaluation to accommodate for the career development and recruitment of teacher educators as a specialized unit in the teaching profession and make clear professional and career roadmap to the making of a teacher trainer.

6. Reorienting Teacher Education to reflect aspirations of Competency Based Curriculum

Teacher empowerment with efficient, effective, and thorough instructional strategies, techniques and methodologies that expedite competency based learning is significant to reflect aspirations of competency based curriculum. Quality education provision is depended upon the capacity of instructors to interpret and implement the curriculum. This involves organizing the learning environment in harmony with the prevailing trends in education and learners' requisites (Makunja, 2016).

The ongoing curriculum reorganizations will embrace a competency-based curriculum slant. Many of the teachers will need re-orientation on delivery techniques for the competency based approach. For the purpose of encouraging experiential learning, innovation and creativity, it is mandatory that utility of technology for learning and teaching inside the classroom and through distance approach should be incorporated to enhance quality and access, as most states around the globe have done. Many learners who would choose flexible learning

at flexible hours due to several limitations could access quality upper primary and secondary education through an open schooling structure. The same technology can be used to enhance and elevate teachers' knowledge and skills in teacher training institutions (UNESCO, 2018).

Consequently, in-service and pre-service training curriculum requires to be restructured to harmonize with the theoretical and philosophical approaches encompassed in the envisioned new curriculum. There is need for the government, through MoE, to craft policies that augment pedagogical techniques that aid critical thinking, innovation, creativity, innovation and sustainable development for teacher education institutions as envisaged in the new curriculum; and enrich trainer quality for effective execution to guarantee attainment of competencies like life skills among others (UNESCO, 2018).

Modalities to enable this includes reforming pre-service trainer education training curriculum at such levels such as Diploma in Teacher Education, Early Childhood Development, Primary Teacher Education and degree programs to empower teachers to assist learners achieve the minimum competencies at each level; Enhance ability of educator trainers to empower them impart skills, knowledge, attitudes and values for execution of the transformed curriculum; Craft a complete curriculum to equip all educators to be inventive and utilize current instructional methodologies; Craft, evaluate and commend Information Communication Technology-based resources to aid attainment of requisite competencies in teacher training institutions; Ensure excellence of programs offered by all private institutions executing any educator capacity progression by having them forwarded to KICD for scrutiny, assessment and endorsement and appraise educator professional progression programs to harmonize them with the changed curriculum, constitution and vision 2030 (Petrilli,2016).

Enhancing educator eminence for operative execution of the competency based curriculum should be given priority by the stakeholders. This could be possible through developing and implementing a national teacher education policy which has been lacking; Elevate the Primary Teacher Education (PTE) into Diploma in Teacher Education (DTE) program; Initiating Information Communication Technology-based resources for educators on the competency-based curriculum facet; Steering constant research on current universal trends on operative instructive approaches; Putting in place a structure to train personnel tasked with instructing void of essential teacher training skills; Coordination and synchronization of the delivery of in-service teacher training which has a lot discrepancies; and encouraging transformative aspects of teacher education (Makunja,2016).

Teacher re-orientation quest towards new paradigm shifts furthermore needs to address each teacher education level specific challenges. For instance, pre-primary competency curriculum is likely to scuffle with old usual unaddressed challenges like majority of teacher trainers lacking teacher education training qualifications; Inconsistency between practice and theory in pre-primary educator training. At theory level, the pre-primary program trains educators to provide for the holistic development of the learner's disposition but in practice, educators are under pressure to equip the learner with the academic requisites required for primary level learning. This has to be reviewed appropriately; For a long time there has been lack of clarity on professional and career pathway to the making of an Early Child Development teacher educator and this needs to be provided for in the policy framework; Teacher instructors have no ongoing Professional Development policy at the Early Child Development Education level in addition to weak institutional based quality assurance in ECDE teacher training colleges for some time now (UNESCO, 2012).

Primary school teacher education is similarly confronted with challenges which may hamper the implementation of competency based curriculum and vision 2030. There has been no curriculum for teacher instructors for primary educator training institutions; many of teacher instructors are deficient of appropriate primary school tutoring experience to keep them at abreast with contemporary practice hence the early teacher education program for primary school teachers requires sporadic appraisal to be in tandem with classroom shifting trends. Lack of clarity in terms of policy framework for teacher training at primary school level is another challenge; There is no distinct professional and career pathway to becoming a teacher instructor at the teacher training colleges; Lack of subject specialization in primary school teacher training; Stress on teaching and instructing approaches, deferring theoretic aspects of instruction to be tackled in post-graduate studies; Lack of synchronized Constant Professional Development of instructors and instructor educators and weak institutional based quality assurance in primary teacher training colleges among other challenges keep on to haunt the sector of education (Elimu Yetu Coalition,2003).

Secondary School Teacher Education is not exceptional to these challenges. It is also characterized by shortage of qualified university teacher trainers with relevant secondary school teaching experience; Absence of standardized teacher training curricula at the university institutions resulting to inconsistencies in the caliber of graduates; Teacher educators are not facilitated in terms of Ongoing Professional Development to empower them to be up-to-date with the dynamic variations in teacher training; There is a feeble connection between educator training colleges and higher education institutions, particularly universities who undertake the training (Elimu Yetu Coalition,2003).

Special Needs Teacher Education has its share of challenges which may hinder the realization of CBC. Teacher instructors possess subject matter but they are not well-versed in pedagogy to train SNE teachers who are currently rendering service (Petrilli, 2016).

7. Conclusion

Conclusively from the scholarly discourses and reflections discussed in this theoretical paper, there is necessity to re-orient the Kenyan teacher education curriculum to embrace the already envisaged changes. Teachers, trainers and lecturers are significant resource in the learning and teaching process and their training and constant professional progression, though confronted with many challenges is pivotal in realigning the country's education system to be in tandem with aspirations of the 2010 Kenyan constitution, CBC and vision 2030 for the realization of sustainable development in Kenya. Measures to reorient educators' education and learning processes so as to cultivate suitable and relevant skilled human resource for the nation are mandatory.

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8. Recommendations

To address these challenges so as to synchronize the 2010 constitution ,vision 2030 and the new curriculum to teacher education , the Ministry of Education ought to; Establish instructors' education and progression standards grounded on standard principles that will guarantee preeminent delivery of CBC; Remodel pre-service and in-service educator training programs (Areba,2019); Initiate procedures on how to employ instructors educators; Initiate obligatory internships for teacher instructors for a defined period; Homogenize teacher training curriculum including teaching practice across all the institutions; Restructure the instructors' education curriculum to mirror the objectives of 2010 constitution, and Vision 2030 with change to CBC methodologies; Expand access in Technical Vocational Education and Training (TVET) instructors training particularly at graduate level; Review of SNE teacher education to cater for the emergent issues; Embrace research and development in teacher training; Develop and execute a complete teacher education and training, administration and professional progression policy on teacher education and Making ICT a priority area in all teachers training institutions since competency based curriculum relies heavily on ICT (RoK,2012).

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