

Teacher Education as a Driver for Sustainable Development in Kenya

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Abstract

The Kenya Vision 2030 recognizes education and training within the social pillar alongside the economic and political pillars that are cornerstones expected to transform Kenya into a newly industrializing middle income country providing a high quality life to all its citizens. Teachers are an important component of education whose services are indispensable in the realization of educational goals the world over. Due to their central role in the enterprise of education, teachers at all levels require effective and sufficient education to be able to adequately carry out their roles and responsibilities. There are variations of teacher education programmes for the different levels of education from early childhood to tertiary education. Teacher education is a whole range of activities that constitute preparation for and improvement of the teaching profession. This encompasses pre-service and in-service teacher education programmes. These forms of teacher education programmes involve the study of professional disciplines, teaching subjects and general knowledge subjects. With the advent of free primary education (2003) and free secondary education (2008), the need and demand for more teachers has resulted in re-engineering and expansion of teacher education programmes for all levels of education with the realization that teachers are crucial personnel whose contribution activates the optimal functioning of the social, economic and political facets of a country. This confirms the fact that teacher education is an important driver for sustainable development since literally every knowledgeable and skilled individual in micro and macro productive activity has been shaped in some ways by the contribution of a teacher. It is thus important that teacher education programmes are crafted in a manner to energize their impact on the learners and humanity in general. This paper surveys the various teacher education programmes at all levels of education in Kenya in an effort to appraise and propose instrumental adjustments to sharpen their impact on sustainable development.

Key Words: Teacher education, driver, sustainable development.

Introduction

The Kenya vision 2030, which is the nation's new development blue print for 2008 to 2030, recognizes education and training within the social pillar alongside the economic and political pillars that are cornerstones expected to transform Kenya into a newly industrializing middle income country providing a high quality life to all its citizens by the year 2030 (Republic of Kenya, 2007). The education goals of the 2030 vision are to provide globally competitive quality education, training and research for development by increasing access to education, improving the transition rate from primary to secondary schools, raising the quality and relevance of institutions, increasing the adult literacy rate and the integration of special needs education into learning and training institutions. In addition to vision 2030, the millennium Development Goals (MDGs) whose main aim is to encourage development by improving social and economic conditions in the world's poorest countries by 2015. The MDGs focus in three areas of human development: bolstering human capital, improving infrastructure, and increasing social, economic and political rights. Within the human capital focus, education is key.

Teachers are, thus an important component of education whose services are important in the realization of educational goals the world over. Due to their central role in the enterprise of education, teachers at all levels require effective and sufficient education to be able to adequately carry out their roles and responsibilities. Otiende et al (1992) acknowledge that trained teachers are vital for quality education. Teaching according to Hough and Duncan (1997) is an activity, a unique professional, rational and human activity in which one creatively and imaginatively uses himself/herself and his/her knowledge to promote the learning and welfare of others.

A teacher, according to Shiundu and Omulando (1992), is the most important person in teaching who sees that educational programmes are successfully implemented by organizing and managing the learning experiences and environments. To educate others therefore, one needs to be educated and have a broad background of general cultural training that provides a broad liberal education. Working as an expert requires the acquisition of knowledge and practical abilities to work in complex situations. Teachers need the self-confidence to carry out their duties in demanding unique situations and need to implement their expertise in such a way that their customers, stakeholders and colleagues trust them (Isopahkala Brunet, 2004). They need research-based, research-informed knowledge and be open to acquiring and assessing local evidence (Scardamalia and Bereiter, 2003).

Teacher education is an important component of education. Through it, school teachers who are considered mentors of society are prepared and produced (Lucas, 1972). Kafu (2003) says that teacher education is ostensibly designed, developed and administered to produce school teachers for the established system of education. Loughran (2006) looks at teacher education as the pre-service and in-service teacher preparation where students of teaching seek to develop knowledge and skills of teaching and to learn how to competently apply these in practice. These views summarize the importance and the role of teacher education in the life of a given society. Education in this respect is regarded as the driving force for social development. Teacher education in this paper is seen as the pre-service and in-service education and training of all those involved in the dissemination of knowledge at all levels of education aimed at exposing them to new ideas and practices which continuously improve their ability to educate. The improved ability to educate is an important ingredient for sustainable development.

There are variations of teacher education programmes for the different levels of education from early childhood to tertiary education. These forms of teacher education programmes involve the study of professional disciplines, teaching subjects and general knowledge subjects. The provision of both subject area education and professional knowledge is vital as it makes a teacher competent in the subject content as well as professional areas. Dove (1986) notes that teacher education emphasizes the cognitive development and specialist understanding of the subject. It comprises wider perspectives including an understanding of socio-economic and professional aspects of education, psychological practice and social theories underpinning pedagogical practice and knowledge of teachers' roles and responsibilities. Teacher education is institutionalized educational procedures carried out in colleges and universities which have vocational and educative objectives.

This paper surveys the various teacher education programmes at all levels of education in Kenya in an effort to appraise and propose instrumental adjustments to sharpen their impact on sustainable development. With the advent of free primary education (2003) and free day secondary education (2008) the need and demand for more teachers has resulted in re-engineering and expansion of teacher education programmes for all levels of education with the realization that teachers are crucial personnel whose contribution activates the optimal functioning of the social, economic and political facets of a country. Furthermore, the promulgation of the new constitution in August, 2010 brought about new structures of government which calls upon government departments including education to reform. It is thus, important that teacher education programmes are crafted in a manner to energize their impact on the learners and humanity in general. Farrant (1980, P. 286) says the need for training becomes more essential as teachers undertake increasingly complex roles and find natural gifts are insufficient to cope with all tasks expected of them.

This paper focuses on the various levels of teacher education, teacher education programmes and issues of teacher education in Kenya.

Levels of teacher education in Kenya

There are four levels of teacher education in Kenya namely, early childhood development teacher education, primary teacher education, diploma and under graduate teacher education (Otunga et al, 2011).

Early childhood Development teacher education (ECDE)

The training of teachers for ECDE is done in different ways and by different agencies. There are national and District systems of training and development. The most common training is done at two levels: Certificate and Diploma. All are offered by District centres for early childhood education (DICECE), the kindergarten headmistress association (KHA) and the Montessori.

On completion of the training, participants are awarded certificates (K.N.E.C, 2007). The curriculum of ECDE centres is developed by the Kenya institute of education's National centre for early childhood education (NACECE). At the core of the ECDE curriculum is the endeavour to address the total needs of children (NACECE, 1999). The aim of ECDE is to develop the whole personality, encompassing physical, intellectual, cultural, spiritual, and mental: provides a holistic education, particularly at this formative stage of the child (K.I.E, 2006). The ECDE centres are run by parents and local communities at the district levels with the help of the central government, local and external agencies. District centres for early childhood education are the most active centres for training ECDE teachers

Teacher Certificate in ECDE

The certificate in ECDE is offered through pre-service and in-service, each having 810 contact hours. Pre-service programme is covered in one year and in three residential school terms and with one term (or 300 hours) of teaching practice in ECDE institutions. The in-service programme takes two years in residential sessions during school holidays (Otunga et al, 2011). To be admitted in this programme, one needs a D+(Plus) in KCSE or a pass in KCPE and must have taught in ECDE for a minimum of three years and passed a proficiency test offered by Kenya National Examination Council (K.N.E.C., 2007) .

The curriculum at this level covers institutional methods of assessing, types of assessment at the early childhood level and institutional materials for teaching at this level. The teacher trainee should be able to analyze measurement and geographical concepts, apply practical instructional methods in teaching, develop instructional materials, and design assessment tools to evaluate children's progress in learning (K.I.E., 2002).

Diploma in ECDE

The ECDE diploma programme was launched in 1985 and it is intended to equip teachers with the necessary knowledge, skills and attitudes desired and stimulate children in preparation for primary education. The course is also meant to fill the gap between the certificate and degree course to provide an opportunity for professional upward mobility in the ECDE programme (KIE, 2006, P. 22; Mbaabu, 1996).

Diploma in ECDE is a two-year programme through pre-service and in-service of 780 contact hours. Pre-service is a three residential academic school terms, with one term (or 300hrs) for teaching practice in an ECDE institution. In-service alternative involves six residential sessions during school vacation. Admission in this programme according to Otunga et al (2011) requires DICECE, Kindergarten headmistress association or Montessori certificate, PI certificate, C (Plain) in KCSE or its equivalent.

Teaching practice is mandatory and must be passed before qualifying for award of a certificate. A trainee is attached to an ECDE centre for at least three months to interact with children, teachers, parents and community. The student teacher is assessed on the preparation of schemes of work, classroom management and control and record keeping. Trainees also undertake a course in research, monitoring and evaluation. They are to design and research on a relevant topic (K.I.E., 2006).

Training ECDE teachers at University level

From 1990s, universities embarked on the programme of training teachers for this level of education. This programme is offered at Kenyatta University, Moi University and University of Eastern Africa, Baraton (Otunga et al, 2011).

Primary teacher Education

There are currently 19 public primary teacher training colleges and 68 private ones. In July 2010, a total of 7827 candidates were admitted to the 19 public primary colleges for the PI training. Of these females were 3932, an indication that gender parity had been achieved in the admissions (Internet, 21 July, 2010).

The teacher trainees in primary teacher colleges undergo a two-year pre-service course, which leads to the award of primary teacher education certificate (PTEC). The entry requirement for PTEC Course is a minimum C (Plain) in KCSE or its equivalent and must have attained D (Plain) in mathematics and C- in English.

The PTE curriculum currently used was revised in 2004. The improvement was necessitated by the need to make curriculum reflect and respond to the changes in the society, as emphasized in various education forums such as the conference of college principals association held in 2004.

It was an attempt to harmonize the PTE syllabus with the revised primary and secondary curriculum. The curriculum is broad-based with ten subjects in the first year of study. In the second year, the students study nine subjects, five (5) core subjects and four (4) elective subjects from either the humanities or science categories to allow for specialization. The five core subjects are English, Kiswahili, Education, Physical education, and information communication technology (ICT) and each student is then required to choose four subjects from either option A or B. Option A subjects include Science, Home Science, Agriculture and Mathematics while option B subjects include Music, Art and Craft, Social studies and religious studies (MOEST, PTE Syllabus, Vol. 2, 2001). Teaching practice is mandatory and is conducted in three sessions, one in the first year and two in the second year.

Diploma Teacher Education

Diploma Teacher education programme is a three –year programme. Trainees are admitted with a minimum mean grade of C+ (Plus) and a C+ in the subjects of specialization and C (Plain) in Mathematics for those taking sciences, D+ (plus) in Mathematics for those taking humanities and C (Plain) in English for all applicants. Trainees are offered a broad–based curriculum which comprises two teaching subjects and professional and support subjects. Professional and support studies are education, environmental education, physical education (PE), communication skills, entrepreneurship, ICT, General workshops practices, library and information studies, and guidance and counseling (Otunga et al, 2011). Currently we have two diploma teachers college namely, Kibabii DTTC for humanities and Kagumo DTTC for Science.

We have also Kenya Technical Teachers’ College (KTTC) offering technical education and Kenya institute of special education (KISE) offering special education which have their own admission requirements. The Kenya government recognized the importance of technical education in moving the country to an industrialized state by the year 2030 (Republic of Kenya, 2007). It is for this reason that the country plans to spend at least 25 million dollars with the assistance of the Netherlands Government to buy modern equipment and train teachers in 13 new polytechnics where each province is expected to have at least one polytechnic (Nganga, 2010).

Bachelor of Education Programme

The bachelor of education course has various strands which include B. Ed. (Arts) B. Ed. (sc.), B. Ed. (Technology), B. Ed. (Guidance and Counseling), and B. Ed. (Early Childhood and Primary Education) . The teacher is equipped with skills for teaching in ECDE, primary, secondary, teacher training colleges, Institutes and polytechnics. The course content at this level has two major components: teaching subject content and professional areas. In addition, teaching practice is mandatory and must be passed in order to qualify for the award of the certificate (Otunga et al, 2011).

Teacher education programmes

Teachers in Kenya are trained through pre-service and concurrent programme, and competency-based training (Shiundu and Omulando, 1992; Daresh and playko, 1995).

Pre-service and concurrent teacher education programme

Pre-service and concurrent teacher education programme is generally a fully institutionalized scheme of training in which student teachers participate on full-time basis with a curriculum consisting of subject area content, professional preparation, including principles and methodology of teaching , philosophy, sociology, curriculum theory, educational administration, planning, measurement, finance, history and psychology and teaching practice both micro and field practice. It is a concurrent form of education; simultaneously providing academic and professional studies. Students remain in college where they receive regular instruction for specified periods of time. This traditional approach to teacher education has been criticized for lack of effectiveness and efficiency.

Competency –based teacher education

This programme is also designated as performance-based teacher education. Emphasis is on objectives and assessment. Both student teachers and their tutors aim at goal realization. It is a more precise form of training because adequate performance of a given task is highly valued as well as possession of required knowledge, skills and attitudes.

The student is expected to demonstrate the specified competence to the required level and in an agreed upon manner. He/she accepts responsibility to be held accountable.

Strengthening of mathematics and science education (SMASSE) and subject seminars organized by KIE, publishing houses and other education experts are good examples of competency-based education aimed at improving teacher performance in subject areas. Kenya education staff institute (KESI) also mounts educational courses for principals, deputies and heads of department in areas of academic, human resource management, and change management. KESI has a mission of improving and maintaining quality of education by enhancing capacity of education managers through effective and efficient training, research and consultancy (KESI, 2008)

Consecutive programme of teacher education

Consecutive teacher education is mainly for general-based graduates who wish to become professional teachers and they spend an additional one academic year of further professional training. Such as a trainee will acquire a post graduate Diploma in education. Graduates with first degree of Bachelor of Science and are already teaching as untrained or wish to become teachers have been going to Kenyatta University, Moi University and University of Nairobi for this course.

Teaching practice

Micro-teaching and teaching practice are two phenomena that are mandatory in the profession. They are both used to evaluate teacher education. They give the trainers an opportunity to evaluate the outcome objectives and to assess the effectiveness of the competence-based teacher education (CBTE) offered.

McCormick and James (1983) view CBTE as the requirement of teacher institutions to specify and demonstrate what each teacher is expected to be able to do as a result of his/her training. Evaluation of outcome objectives is an evaluation of the extent to which students put the knowledge or skills he has learnt in the course into practice. They are standards against which the trainees' attainment is measured in CBTE (Nicol, 1971). Micro teaching makes evaluation of CBTE feasible. As Dove (1986) argues, for trainees to evolve personal theories of teaching, they need opportunities to practice and test out different teaching skills and styles. Micro-teaching provides a relatively non-threatening way of teaching as it deals with a small and familiar group. During teaching practice, the student teachers undertake actual teaching in school situations and they prepare professional documents necessary. This is an opportunity for trainees to develop competence, confidence and habits of self-evaluation which are vital for their performance during post qualification teaching (Dove, 1986). Teachers already in the field should actively guide and supplement the efforts of the supervisors. This is why teacher training institutions place student teachers under the jurisdiction of the school administration that is supposed to write a report about them at the end of the teaching practice session.

In-Service teacher education programme

In-service education covers those activities directed toward remediation of perceived lack of skill or understanding. It is an on-going process that promotes professional and personal growth for teachers (Daresh and playko, 1995). In-service education is necessary and appropriate when people need special training to correct deficits in their skills. It takes place anytime either as full time or part time during the potentially continuously professional life of a teacher.

A number of researchers (Lawrence, 1974; Nicholson, Joyce, Parker, & waterman, 1976; Paul, 1977; McLaughlin and Marsh, 1978; Huston, 1981) as cited in Daresh and playko, (1995) have offered useful guidelines about in-service education:

- Effective in-service education and staff development programmes are directed towards local school needs.
- In-service and staff development participants are actively involved in effective programmes.
- Effective programmes are based on participants needs.

In-service education also heavily borrows from Malcolm Knowles findings on adult education cited in Daresh and Playko (1995). Knowles is credited for coining the word Andragogy (art and science of teaching adults) as distinct from pedagogy (art and science of teaching children). He identified four critical characteristics of adults and their patterns of learning.

- As a person matures, his/her self concept moves from one of dependency to one of self direction.
- The mature person tends to accumulate a growing reservoir of experience that provides a resource for learning.

- The adults' readiness to learn becomes increasingly oriented towards the developmental tasks of his or her assigned social roles.
- The adults time perspective changes from postponed application, and accordingly his or her orientation towards learning shifts from subject – centeredness to learner – centeredness.

Apart from the traditional institutionalized in-service education, teachers are also trained through mentoring and learning relationships between two individuals who work together in the same or similar organization. It is also called peer coaching or bench-marking.

Mentoring programmes are established primarily to provide support to beginning school teachers or school administrators. It is common to see teachers and / or students from school X visiting school Y, particularly if school Y for example performs well in KCSE. Newly recruited teachers are also in-serviced by the old members of the staff into the life of the school. Daresh and Playko (1993) found that mentoring relationships can serve as strategies to promote on-going dialogue and collaboration between educators at all levels. In-service education in Kenya is on the increase at all levels.

Issues in teacher education

Developments in teacher education in Kenya have been occasioned by socio-economic and political changes and technological advancements locally and beyond. The impact of these developments on teacher education programmes, education, teaching professional and national development is worth attention. Kelly (2003) says that the status of teacher education has generated great debate among the teacher educators and teacher educationists. Recognizing that teachers are an important group of professionals who impact virtually on every sector of the economy, teacher education is considered as an indispensable driver for economic development. This realization is made real by a number of developments taking place in teacher education around the country focused on the improvement of teacher education programmes in terms of quantity and quality. Some of these developments are discussed in the following sections.

Tremendous growth of universities in Kenya

Whereas there was only one public university in 1970, currently, there are eight public universities with thirteen constituent colleges and seventeen private universities (Otunga et al, 2011). This tremendous growth of universities has presented opportunities for expanded teacher education activities. Most of the eight public universities and their constituent colleges have teacher education programmes which include Moi University, Kenyatta University, University of Nairobi, Maseno University, Egerton University, Masinde Muliro University of Science and Technology. Besides having many students in education programmes, there also many education students enrolled in module II or privately sponsored students programmes (PSSP). In addition, most of the private universities also have teacher education programmes. This scenario is a clear indication that teachers are important drivers of the economy.

Non-degree teacher education opportunities

At the time of implementation of the 8:4:4 system of education in Kenya, there were a number of non-degree teacher education opportunities both diploma and P1 certificate level. With time, some of the teacher education institutions were closed and the facilities used for other purposes. This was particularly true especially during the 1990s into 2000s and presently when institutions of higher learning have been allowed to take over teacher training colleges for purposes of expansion of their programmes. In response, the great need for teachers at this level has resulted in many private investors initiating and running many teacher education institutions at these levels across the country. Besides those that are in existence, there many more such institutions that are mushrooming in various parts of the country. The government policy on focusing on the production of graduate teachers for various levels of our schools is very attractive and noble in essence however, it is not been possible for the universities to produce the required numbers in the interim period. This situation has led to the business community cashing-in on the situation. This dynamism in teacher education serves to demonstrate the central role of teacher education in driving the economy of this country.

Conclusion and recommendations

Teachers are in charge of the educative process at all levels of education and their influence permeates all spheres of life.

It is for this reason that they are regarded as the drivers of social, economic and political development of society. Consequently, it is suggested that teacher education at all levels should be carefully managed to incorporate all socio-cultural, economic and political aspects of life for the teachers to effectively serve their roles as instructional leaders in their spheres of influence. The best approach to realizing this is for teacher education programmes to be based on relevant research findings focused on enhancement of teacher education programmes at all levels. This is the surest way for teacher education to contribute to sustainable development.

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