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RESEARCH ARTICLE

TOWARDS ENHANCED TEACHER QUALITY IN KENYA FOR THE 21ST CENTURY LEARNER

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ABSTRACT

Education is the chief determinant of social, political and economic development of a country. Achievement of the Kenya Vision 2030 relies on teacher quality. Teacher quality is critical in determining quality of education of any country and research shows that good teaching matters. In countries like Israel, a teacher must be a holder of a post graduate degree and then train to teach in their area of interest. This paper seeks to answer the research question: Is Kenya developing teachers for the 21st century? The methodology employed was document analysis. Literature on what constitutes a profession was explored; teacher quality and teacher classroom practice in Kenya were reviewed. The findings revealed that the quality of teacher training is considered poor owing to low entry requirement into teacher training institutions, observed transmission approach in classroom teaching, and general perception about the teaching career. It was concluded that Kenya needs to enhance teacher quality. Teachers of all levels should hold at least a first degree and should have chosen teaching as their first choice. In addition, teacher training should be improved.

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INTRODUCTION

Teacher quality is critical in any country and research shows that good teaching matters. Research in education has clearly established that a country's quality of education reflects the quality of its teachers. Wayne & Youngs (2009) aptly asserted that to improve education an enduring approach is to focus on teachers. Achievement of school children largely depends on the teacher they are assigned to (Wayne & Youngs; 2009). Researchers also argued that teachers are the education system's principal resource worth investing in at any cost. UNESCO (2007) stated that quality teachers are the single greatest determinants of students' achievement. No other intervention can make a difference but a knowledgeable, skilful teacher can make in the learning process (Darling-Hammond, 1997). Kelly (2008) argued that in all successful curriculum development and implementation, the teacher is the crucial element. Effective teachers are capable of inspiring significantly greater learning gains in their students as compared to their weaker colleagues (Sawchuck, 2009). Scholars agree that teacher quality is the most significant school based factor affecting achievement (Sawchuck, 2009). The Kenya Vision 2030 (Republic of Kenya, 2007) aptly captures the demands anticipated in the 21st century. The realization of the Vision however relies on quality teaching and quality education. Teaching can no longer be business as usual and the country achieves the well thought out and high sounding Vision). In the Vision, the education and training sector is charged with the task of creating a knowledge based society that upholds justice, democracy and issue based political engagements.

The Vision also emphasizes Knowledge Based Economy (KBE) and stresses application of Science Technology, Innovation (STI) and Knowledge based skills. The United Nations Millennium Development Goals (MDGs) to which Kenya is a signatory (Republic of Kenya, 2007) are embedded in the Vision and their realization hinged on quality education. Teaching therefore is deemed to become more challenging in the era of knowledge explosion and high technology in a global village. Perceptions of challenges of education of the 21st century need to be taken into account and prepare teachers to address 21st century learning needs which can no longer take the banking concept (Freire, 1972) teaching approach. Shift from teaching to learning in the constructivist and critical curriculum theory, integrating cognitive with affective facilitated by professional knowledgeable teachers is the required intervention to improve learner achievement. Quality teaching is worth investing in. This study conceptualizes the purpose of education as to enable individuals to discover and exploit their full potential as human beings, individually and as members of a society beyond academic scores, for self and societal development. Education therefore should aim at educating the 'whole child', the 'whole person'. The false concept that the purpose of education is to pass the national examinations may have no place in the 21st century and calls for change. The best teacher should be perceived as the one who facilitates learners to explore their full potential and pursue them to the fullest to make themselves productive to themselves, society and globally.

Teacher Quality Determinants

Determinants of teacher quality have been recorded by some researchers as teacher certification in the specific subject to

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teach, teacher verbal ability, pedagogic skills and teacher experience, (Wayne & Youngs, 2009). This is quite in agreement with Schulman (1986) who came up with the Pedagogic Content Knowledge (CPK). A teacher should acquire deep content knowledge and skills to break down that content and present it in a form that students best understand. Darling Hammond (2000) reported that measures of teacher and certification are by far the strongest correlate of student achievement in reading and mathematics. Teachers should deeply master the content to teach and develop pedagogical skills to enable them communicate the content to the learners in the manner the learners best understand the content. Experience makes the content and pedagogical skills deepen. The preferred pedagogy is critical Pedagogy that raises consciousness on the conditions in life and society, and equips learners with the necessary skills and knowledge to bring about change and construct knowledge and become innovative (Kellner & Douglas 2008). The learner then perceives that a situation can be changed, reflects, discovers possibilities acts on them to bring about change, constructs knowledge and upholds democratic views (Kellner & Douglas 2008).

Quality teachers engage students and get them to look at issues in a variety of ways and come up with creative ideas. They create a strong relationship with their students and demonstrate that they care about them. In relating to students quality teachers are warm, accessible, enthusiastic and caring. They exhibit expertise mastery of their subject content and have good classroom management skills. The teachers then present material in an enthusiastic manner that instills a strong desire in students to learn more on their own and get prepared for life challenges (McEwan & Elaine 1999). Gordon (2005) asserted that a quality teacher is confident, patient, understanding, open minded and democratic, dedicated to excellence, dedicated to students and passionate about teaching. A quality teacher therefore realizes that the affect plays a great role in cognitive achievements and incorporates it in teaching. The learners are facilitated to construct knowledge and solve day to day challenges in an innovative approach rather than memorize facts

Background of Teacher Education in Kenya

Formal education in Kenya was introduced by European missionaries and the colonial government (Sifuna, 1975). The education was stratified. The Africans were assigned the lowest level equivalent to workers class in western classification of education hence they received practical technical education to teach them skills useful in the farm. Sifuna (1975) reported that the Whites perceived Africans as savages, representative of a lower homo-sapiens as compared to the Anglo-Saxons. The colonial government did not care about quality of African education. Kenya seems to be perpetuating the trend. The Kenya Government is most concerned about meeting the Millennium Development Goals (MDGs) and EFA and tend to emphasize access at the expense of education quality as is evidenced in provision of free education without much planning for its implementation and for resources required and teacher preparation.

The statement of the problem

The problem that stirred this study was report from very recent studies by Gathumbi, (2010); Otieno, (2010); Oriedo, (2010)

and KNEC, (2010) which revealed that some teachers of primary schools tend to be challenged in content mastery and pedagogic skills. Other studies have also established that teaching in schools adapts transmission of information (Hardman 2009; KNEC, 2010). In addition there is the observed tendency of Kenyans obsession with high national examination results. Teachers tend to be preparing learners for the examinations and not for life which calls for great concern as the country braves for the Kenya Vision 2030 and challenges of the 21st millennium. At every level including university education seems to be wanting. Further the observed trend of life by the current generation that is deeply engrossed in technology and seems to have hypertext, technological mind makes a clear statement that the teacher should be equal to the education challenge for the 21st century and the worry whether Kenya is preparing teachers for that challenge. The study was driven by the questions. Is Kenya preparing quality teachers for the 21st century challenges? What is the academic ability of those trained as teachers?

Objectives of the study

The study objectives were to:

1. Establish academic requirements for entry to teaching profession
2. Determine teacher classroom performance
3. Find out values and attitudes of the society and their impact on teaching
4. Establish the 21st century learner status

THEORETICAL FRAMEWORK

The study was guided by Schulman (1986) Pedagogic Content Knowledge (CPK) theory. Schulman (1986) explains that pedagogic content knowledge (PCK) is the knowledge on how to combine pedagogy and content and make a subject more understandable. Mastery of subject matter and pedagogical skills is the frequently used analytical variables to explain why some teachers are more effective than others (Leitherwood, 1992). It enables a teacher to enrich a learning environment and acts as the basis for instruction. It plays a great role in enhancing teacher's self efficacy that greatly determines a teacher's classroom performance. The theory is appropriate in this study because it takes cognizance of the fact that a teacher should have deep content knowledge of the subject they teach and develop the right pedagogic skills to be able to break up the content and deliver it to a learner of any level in a manner that the learner understands most. The theory is appropriate for both pre- service and in service teacher training. Rice (2003) too advocates for teacher preparation in both pedagogy and subject content. Anybody who dares to teach should first have acquired deep content knowledge and then pedagogical skills to enable the teacher teach content in different ways to learners of varied abilities, learning styles and natures. This appears to be a challenge in Kenya.

MATERIALS AND METHODS

Research Design

Document analysis was employed as the study set out to establish academic ability of teachers on entry to teacher training institutions. This was found to be the most appropriate approach because much of the information is on record in print. The preschool, primary and secondary teacher education

syllabuses were analyzed specifically to identify the entry requirements to the course and the mode of training. As regards pre school, the following syllabuses were reviewed: The MOE (2006) Teacher Certificate Early Childhood Development Education syllabus and the MOE (2006) Diploma in Early Childhood Development and Education syllabus. In primary school the syllabus reviewed was the Primary Teacher Education (PTE) syllabus. The secondary MOE (2008) Diploma teacher education syllabus was studied and Sessional Paper No. 1 of 2005 on education and training policy guidelines. Newspaper reports were also reviewed for society's view about education in Kenya and its impact on the teacher. The web was also browsed to establish the education landscape of the 21st century learner. Research reports were also reviewed. The study was mainly qualitative. Data were organized and presented under themes and mostly in words and few figures.

RESULTS AND DISCUSSION

Academic Requirements for Entry to Teaching Institutions

The entry requirement for Early Childhood Development (ECD) certificate teacher training course is mean D+ in Kenya Certificate of Secondary Education (KCSE) where grade 'A' is the highest and grade 'E' the lowest. As an alternative the candidate could hold a Kenya Certificate of Primary Education (KCPE) and teaching experience of 3 years. The puzzle is that the teacher trainees are supposed to learn challenging content such as: Child Growth and Development; child psychology; Health and nutrition; Early Childhood Development Education Curriculum besides their subject areas (MOE, 2006). One wonders how such level of competence is able to conceptualize such content. The entry requirement to a diploma course in Early Childhood Education is Kenya Certificate of Secondary Education (KCSE) mean grade C (plain) (MOE, 2006). These are low grades for the course. The main grade for a course such as medicine and engineering is KCSE mean grade 'A' (plain) yet teachers are entrusted to the delicate role of molding the life of individuals. In addition the Sessional Paper No.1 of 2005 on Education and Training (Republic of Kenya, 2005) reported that only 40% of Early Childhood Development (ECD) teachers were trained by 2005, meaning that an overwhelming majority 60% were not trained which means that untrained teachers were assigned responsibility of teaching children at that critical developmental stage. Early Childhood is a crucial time for development of mental functions of children (Bowman, Donovan, & Burns 2001). The development is greatly influenced by factors such as educational environment to which the child is exposed to during the first 6 to 8 years of life. Studies link ECD to school readiness for primary school which is a predictor of early school achievement and that ECD could produce sizeable improvement in school success (Bowman, Donovan, & Burns 2001). Children also develop social skills and motivation which play a significant role in ones learning and future life. In countries like Israel, a pre school teacher must hold a master or a doctorate degree and then undergo training in early childhood pedagogy (MOE, State of Israel, 2000). Kenya could emulate good practices from other countries. The primary teacher training, Primary Teacher One (P1) certificate course entry requirement is KCSE mean grade of C (plain) (MOE, 2004) which is only average performance. The course takes two years and the

trainees take both professional and academic subjects concurrently. They specialize in either science or Arts subjects but teach all subjects when posted to schools due to shortage of teachers. To worsen the situation the PI teacher trainers were trained to teach secondary schools students and not to train teachers; in fact they are untrained in teacher training.

The secondary education teacher entry requirement is also average performance. The secondary education diploma course takes mean grade of 'C+' (plus) and in area of specialization C+, mathematics 'C' for those taking science and mathematics 'D+' for those taking humanities. In English all candidates should have scored 'C' plain (MOE, 2008). The students study professional academic and support subjects such as education courses and the academic in the area of their specialization concurrently. They are trained by teachers trained to teach secondary school students but not to train teachers. The secondary teachers are also trained for first degree in University. The entry requirement for the course is a minimum of 'C+' at the KCSE and the course takes four years. The course is also concurrent; the trainees study both the academic and professional courses at the same time. Some of the lecturers are not trained teachers. There is no programme of inducting newly recruited teachers to the teaching profession. The scenario in education is made gloomier by report from studies that the mandated Teacher Advisory Centres (TACs) were derailed from teacher professional development to performing administrative duties and there seems to be a gap in teacher professional development at primary level (DFID,1999). Teacher professional development is critical for teacher quality teaching. At secondary level, the teacher centres are diminishing (Mattson, 2006). The school based Teacher professional development training, the Key Resource Teachers in primary schools are doing a commendable job as could be concluded from improvement in science and mathematics scores in 2011 KCPE but they may get overwhelmed and sustainability is needed.

Prevailing Teacher Classroom Performance

Hardman (2009) reported that in class teaching approach was teacher centred and used transmission approach. About 95% of the teachers' questions tended to be closed, requiring recall of information this was in agreement with Kisirkoi (2011) who also found that the dominant teaching method in teaching in primary school was lecture which took 80% of a 30 and 35 minutes lesson; question and answer 12%, group work 4%, 'individual work 2%, discussion and others like role play 2% of the lesson time and encouraged memorization of facts. At secondary level teaching mainly takes the lecture approach. At universities the subsequent tutorials that followed a lecture are long dead and learning is much like taking the lecturers notes and reproducing them verbatim during examinations. That ii the kind of teaching Freire (1970) called the banking concept which he said domesticates the learners instead of liberating them. This study agrees with Freire that teaching does not mean transferring knowledge but creating opportunities for producing and constructing knowledge. In teaching learners should be facilitated to construct knowledge. Another study carried out in Kenya by Gathumbi (2010) reported that an overall of over 40% of the pre-service teacher trainees did not attain the desired competence level in a test administered to

them. They were particularly poor in: speaking, grammar, punctuation, self expression and in composition writing. About 35.7% of the teacher trainees could barely handle the work that requires them to teach listening and writing skills in primary schools. In composition writing, 92.86% of the teacher trainees did not attain desired competency level and 50% of the trainees lacked adequate ability to teach grammar and vocabulary. Otieno (2010) also revealed that some teachers were not competent to teach the subjects they are assigned to teach in primary schools and that a teacher scored 17% in a test set for students in the subject the teacher teaches. The practice is in conflict with theories advanced by teacher education researchers such as Schulman (1986) who stress that teachers should have deep mastery of the content they teach and pedagogic skills.

Societal Values and Attitudes Effect on Teaching

Teachers work in society and the societal views and attitudes towards teachers, teaching and education tend to affect teachers' method of teaching, their performance and learner achievement. The purpose of education in Kenya tends to be to pass examinations and schools can do anything, including examination cheating, for the candidates to garner high scores in the break neck examination results competition. Education system and the assessment procedures clearly frustrate children whom they are supposed to serve. The examination results of 2011 KCPE led two students and a head teacher to commit suicide (Wachira, 2012; Barasa, 2012). Some teachers were threatened with loss of jobs or transfer to regions considered unfavourable and others were harassed by parents because of the schools' poor results. High scores tend to be a ticket to highly performing secondary schools and entry to university which does not necessarily end up with securing a job (Wachira, 2012; Barasa, 2012). Even those who scored way above average such as 398 out of possible 500 marks were ready to repeat to score marks to enable them score higher marks and gain entry to the few national schools (Wachira, 2012). Wrong concepts on purpose of education and examination pressure could be an impediment to quality teaching in Kenya. Given that scenario the option for the teacher tend to be to prepare students to pass examinations and the surest method is transmission, rote learning which encourages memory work without conceptualization.

The 21st Century Learners' Educational Landscape

The 21st century learners live in a technological global village. Their lives have been immersed in the media culture. Some of them literary explore the entire world through use of the computers- the cell phones, gaming devices and television. Young people (ages 8-18) get literally screwed on electronic media for more than six hours a day, on average (Oblinger, October, 2004). Many are multitasking – listening to music while surfing the Web or messaging friends while playing a video game (Oblinger October, 2004). Even toddlers utilize multimedia devices and the Internet with tools such as video games or play with toy cellular phones. They intensely enjoy watching cartoons. To them computer is not technology but a way of life. The youth tend to have hypertext mind and are good at reading visual images. They tend to have strong visual spatial skills and look for fast response time which leads to short attention span (Oblinger, October, 2004). Olingo (2012) reported in Kenya of a teenager, Imani Imanyara, who secured

a job with the international, Twitter Company. The boy's passion for technology had started when he was aged only 7. He had intense interest with computers. Though he had scored a C- at KCSE and considered a failure, he pursued the area of his passion and emerged successful. In the era of information explosion, teachers will go slow on dictating lecture notes to solitary learners and give more weight to information management, making connections, thinking through issues and problem solving. The teacher will have to take the role of a mentor to facilitate learners explore their own interest. Evaluation will be in form of projects for group activities and continuous assessment (Oblinger, October, 2004). Teachers should promote in the learners critical thinking and problem solving skills and the Kenyan teacher's style of preparing learner for examinations will have very insignificant place in the 21st century. Constructivism and teaching strategies based on critical pedagogy might be the way to go.

CONCLUSION

It appears that teacher education is not accorded a professional status and clearly teacher quality is questionable. Recruiting candidates to teaching profession low marks result in people who fail to get the courses of their choice taking teaching which recruit low marks. No wonder it is reported that trainees and practicing teachers are incompetent (Gathumbi, 2010; Oriedo, 2010, Otieno, 2010). Deep content knowledge as a prerequisite for pedagogic skills is ignored. The training period of 2-4 years is insufficient. Content mastery and pedagogic skills are developed concurrently which is not effective because a teacher has to take the deep content and transform it to a form that the learners understand. Teacher trainers at all levels are not trained to train teachers. Transmission approach kills creativity and innovativeness necessary for Vision 2030 and the 21st century technological needs. This does not auger well to the quality of education because teaching and learning touches on the affective, the feelings. Brain research reveals that the brain can not operate effectively when threatened (Jensen, 1998) and this is true for both the teacher and the student who may not give their best under threat and pressure to produce excellent results. No wonder teaching is reported to be teacher centred with transmission approach (Hardman, 2009; DFID, 1999; KNEC, 2010; MOE, 1997). After all most of the teachers who prepared the trainees to teach were not competent professional teachers because they were not trained teacher trainers. Transmission approach is inappropriate for the 21st century learners who are used to interactive, innovative technology as a way of life. They are bound to find school boring. Technology integration in education is only glanced at. At P1, ICT is taught as a subject and at University it is taught theoretically, hence teacher trainees are not prepared to integrate ICT to education. Education for preparation for examination is inappropriate as proved by Imani Imanyara (Olingo 2012) who had scored C- in KCPE and ended up securing a coveted job with Twitter. Teachers should facilitate learners to discover and exploit their full potential. It is clear that teacher quality is low and teachers are not prepared for 21st century challenging learners' needs. A profession among other things requires long exacting formal training as is the case with courses like Medicine and Law and high scores at recruitment. In general there is need for reconceptualization of teacher education to allow for construction of quality teachers who are technology compliant, reflective, democratic,

innovative, critical minded, capable of addressing challenges of the 21st century which require construction of knowledge. A shift from teaching to learning in the constructivist and critical curriculum theory, integrating cognitive with affective facilitated by professional knowledgeable teachers is part of the required intervention to teaching in the 21st century.

RECOMMENDATION

The following were the recommendations arrived at:

1. Entry requirement for teaching courses at all levels should be raised to a minimum of B+ KCSE mean grade
2. Duration for teacher training should be raised to six years and consecutive- three years to be committed to academic studies and three years for trainees to concentrate on pedagogy which should be internship for teachers
3. Minimum requirement for teaching at the lowest level should be at least a first degree
4. All teacher trainers, including university lecturers, should be trained as teacher trainers
5. Whoever dares to teach should only teach area of their specialization.
6. Those recruited to teaching should have chosen teaching as their first choice
7. There should induction course for beginning teachers
8. Constructivism, reflective and critical pedagogy teaching approach should be the most practiced teaching approach.
9. Teachers should continuously participate in continuous teacher professional development activities that address identified teacher professional needs.
10. Teaching should be accorded full professional status like all other professions.
11. All teachers should be trained to integrate ICT in education and practice it in teaching
12. Teachers, parents, learners and all education stakeholders should work harmoniously towards quality education.
13. More study on classroom practice of teachers should be conducted to identify teacher training needs which should be addressed with urgency.

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