

Evaluation of Secondary School Principals' Views on the Use of Untrained Teachers in Lesson Delivery in a Free Secondary Education System Era in Kenya

Andrew Makori^{1*} Henry Onderi²

1. Reading Gap International CIC, 35 Ambrook Road, Reading, Berkshire, RG2 8SL, United Kingdom.
2. Jaramogi Oginga Odinga University of Science and Technology, Kenya

*Corresponding author: E-mail: andrewmakori@hotmail.co.uk

Abstract

This article reports on the findings from a quantitative research study on the views of secondary school principals regarding the teaching competences of untrained teachers in free secondary schools in Kenya. *Aim:* To investigate the views of secondary school principals' views on the qualifications and teaching skills of untrained teachers. *Study Design:* The study adopted a quantitative survey design and took place in Nyamira County. The study was conducted for six months. *Methodology:* The study is a quantitative survey involving 81 secondary school principals (70 % Men and 30 % Women). Just fewer than two-fifths had been in principalship position for less than five years, a third between five and ten years and another a third over ten years. 42% were in their first headship, 38% second headship and 12 % third headship. 83% work in rural schools and 89 % public schools. *Result:* One quarter of the schools employed Board of Governors (BOGs) teachers who have neither formal teaching qualifications nor pedagogical skills. There are also issues of inadequate syllabus coverage and overworking or overloading of qualified teachers associated with that. The study also highlights issues linked to recruitment of staff, for instance, corruption, clanism and nepotism practices among BOGs. *Conclusion:* Unqualified teachers experience limitations in necessary competences in delivering lessons effectively and therefore negatively impacting on the quality of teaching and learning.

Keywords: Free secondary education, quality education, Kenya, untrained teachers, pedagogical skills and teachers' qualification.

Introduction

In both developed and developing countries, shortage of trained and/or qualified teachers constitutes serious challenges to the provision of quality education. Abdou (2012) observes that Sub-Saharan countries are unable to provide sufficient quality and quantity of teachers. Silverman (2013) also reports that fully qualified teachers are a minority in some English schools in the United Kingdom. For instance, at least 30 per cent of teachers are not fully qualified in 41 primary and 12 secondary schools (Silverman, 2013). The use of unqualified teachers is likely to be widespread among academies in the UK under the new contract which gives them automatic freedom to hire staff without qualified teachers' status (QTS) Ross (2012). Use of unqualified teachers has also been reported in the United States, Gambia and India (Futernick, 2003; Sterling, 2004; VSO, 2011; Muralidharan and Sundaraman, 2010; Atherton and Kingdon, n.d; Wamukuru, 2011). For instance, Futernick (2003) reports that in the United States, the government issues emergency permits and waivers allowing thousands of people to teach with virtually no professional training, no classroom experience, and little or no knowledge of the subjects they have been asked to teach. Information on the use of unqualified teachers in Kenya is scanty. Shortage of teachers is underpinned by number of factors, among them, recruitment and distribution issues (Makori and Onderi, 2013; Mobegi and Ondigi, 2011). In a study conducted by VSO (2011) in Gambia involving school level teacher managers and qualified teachers identified lack of pedagogical skills as a serious challenge that limits the effectiveness of unqualified teachers. This article reports on the views of secondary school principals regarding the qualifications and pedagogical skills of teachers in a county in Kenya. Principals provide direct or indirect leadership in schools that significantly contribute to students' academic performance in general (Mwangi, 2009). Principals have also been recognised as a driving force behind innovations in schools (Mwangi, 2009). For that reason their views on teacher qualifications and pedagogical skills are important in this study.

Understanding the provision of free education in Kenya

Since independence the Kenya government has had a series of free education initiatives (KEPRO, 2010; Oketch and Somerset, 2010). Kenya currently operates free primary and secondary education systems.

Free primary education

The first free primary education initiative was decreed by President Jomo Kenyatta in 1971 resulting in abolition of tuition fees for economically marginal districts such as Marsabit, Mandera, West Pokot, Wajir, Tana River, Turkana, Samburu, Garissa and Lamu (KEPRO, 2010). President Jomo Kenyatta also made another decree in

1973 in which primary education classes 1-4 was made free throughout the country (KENPRO, 2010). However, this particular presidential decree has been described as ‘dramatic political pronouncement’ for it took both the planners and the public off-guard (KENPRO, 2010), suggesting that it might have lacked prior consultation, preparation and planning. The positive effect of the decree is that it resulted in increase in access in primary schools by 1 million from 1.8 million in 1973 to 2.8 million in January 1974 (KENPRO, 2010). It was followed by another free primary education initiative launched in 1979 by President Moi shortly after he took office following President Kenyatta’s death (Oketch & Somerset, 2010). The initiative also resulted in massive increase in enrolment in primary schools. The growth in enrolment placed overwhelming pressure on resources such as teachers, desks, textbooks and classrooms, among others (Oketch & Somerset, 2010).

Amidst all these the International Monetary Fund (IMF) and The World Bank introduced structural adjustment programme (SAP) in 1998 (Kiveu & Mayio, 2009; Kinuthia, 2009). The outcome of SAP was an end to free primary education, introduction of cost sharing policy in education and freezing hiring of new teachers by Teachers Service Commission (TSC) (Kiveu & Mayio, 2009). Cost sharing policy meant that parents and the community had to shoulder a substantial proportion of financial responsibilities of schooling such as development expenditure, erecting and maintaining physical infrastructure such as classrooms, libraries and workshops, among others (Kiveu & Mayio, 2009). These changes meant that for the very poorest and most vulnerable households’ education still remained out of reach. The freezing of hiring of teachers resulted in substantial shortage of teachers in both primary and secondary schools in Kenya (Kinuthia, 2009) which last year stood at 80,000 – 100,000 (Siringi, 2012).

The current free primary education initiative launched by President Kibaki in January 2003, less than a month after assuming office, marked a dramatic departure from the IMF and World Bank SAP policies (Oketch & Somerset, 2010; Itunga, 2011). This initiative has however, been described by Oketch and Somerset (2010) as ‘fulfilling of one of its major election pledges’. Similar view is also expressed by Burnett (2012) that Kenya’s free schools were “a matter of political expediency... not adequately planned and resourced.” Burnett (2012) argues further that the outcome of such political practices has been more dropouts and a falling quality of education. However, the initiative led to an increase of nearly 50% from 5.9 million to 8.8 million pupils based on the Kenya Economic Survey 2010 (Itunga, 2011). But also widespread issues and challenges affecting free primary education have been reported. For instance, the shortage of teachers that has led to overcrowded classes and higher pupil- teacher ratio; lack of textbooks, inadequate infrastructure in many schools for the pupils’ population and lack of adequate and quality sanitation facilities (Itunga, 2011; Glennerster et al., 2011). There are also issues of high rate of inflation, delay and inadequate disbursement of government funds to schools which have consequently forced schools to charge much higher levies thus pushing many children from poor and vulnerable families into educational periphery (Glennerster et al., 2011). Glennerster et al. (2011) further note that ancillary costs such as school uniforms continue to hinder access, participation and educational attainment of many children. All these factors militate against the provision of quality teaching and learning process (Itunga, 2011). Therefore it can be argued that the provision of quality free primary education remains a huge challenge (Glennerster et al. (2011).

Free secondary education

Secondary education in Kenya caters for students aged 14- 17 years (Njoroge & Ole Kerei, 2010). Ngware et al. (2006) underscores the importance of secondary education arguing that “it plays a key role in providing the youths with opportunities to acquire human capital necessary for them to pursue higher education and to improve their skills leading to higher labour market production.” There are 4169- 6500 secondary schools in Kenya against 26,000 primary schools (Chabari, 2010; Ohba, 2009; Oyaro, 2013).

Public secondary schools in Kenya are arranged in three tiers, namely national (top), provincial (middle) and district (bottom) (Oyaro, 2013; Oketch & Somerset, 2010). National schools in the country are the minority and considered elite and most prestigious secondary schools. They are considered to have better facilities, better teachers and offer variety of subjects and provide a higher quality peer-group compared with others (Oyaro, 2013; Oketch & Somerset, 2010). National schools select their students from the whole country on district quota basis. Competition for access is quite steep (Oyaro, 2013; Oketch & Somerset, 2010). Provincial schools limit their selection of candidates to primary schools located in the same province. There are about 1000 provincial schools in the whole country. District schools select their students from the local catchment. Some offer boarding facilities, while others offer day schooling for students living locally (Oketch & Somerset, 2010). There are about 3000 district schools in the country and a majority of them were initially established by local community as self- help Harambee schools but slowly absorbed into public secondary schools system with the government meeting salary and other recurrent costs (Oyaro, 2013; Oketch & Somerset, 2010). Oyaro (2013) observes that the difference in performance across these three types of schools is attributed to differences in facilities, teachers, and other resources and, also differences in the levels of academic preparation of students in these schools. Oketch & Somerset (2010) provides further details on how students are selected into these

secondary schools.

The current free secondary education is the first initiative at this level since independence and came into existence in early 2008 just five years after the introduction of free primary education discussed earlier. It was launched by President Kibaki during early part of his 2nd term presidency. It is also regarded as a second free education initiative of president Kibaki. However, one wonders whether the president learnt any lessons from the free primary education project prior to launching the secondary one. In both projects evidence of any rigorous planning and preparation is clearly absent in the literature reviewed. Free secondary education was introduced on the assumption that it would address illiteracy, low quality education, low completion rates at the secondary level, high cost of education and poor community participation (Republic of Kenya, 2005 as cited in Chabari (2010). The government reduced fees at public schools to make education available to all school age children (Burnett, 2012). Under the current free secondary education dispensation, the government contributes Ksh. 10,265 per student per year, while the parents are required to meet other requirements like lunch, transport, boarding fees, development projects and other ancillary costs. With these entire costs involved, one is compelled to wonder whether public secondary education in Kenya is actually free. One wonders whether a government subsidy of Ksh 10,265 makes secondary education provision free. Njoroge & Ole kirei (2010) make reference of free day secondary schools. Oketch and Sommerset (2010) however, describe the government annual capitation grant of Ksh 10,625 as far inadequate. But even in day secondary schools, other costs are involved, which makes the provision less free. Ohba (2009) adds that free secondary education is still a challenge to vulnerable households. Challenges associated with free secondary education include, limited infrastructure, shortage of qualified teachers; congested classrooms; high teacher: pupil ratio and delays in disbursing of funds to support free secondary education (KENPRO, 2010). Ohba (2009) observes that the fees or levy charged in schools are major obstacles to children accessing and participating in secondary education and thereby affecting the transition rates.

Professional training of teachers

According to Cooper and Alvarado (2006, p.6):

Better prepared teachers are more academically able, are rated as more effective by principals, supervisors and colleagues and enter and remain teaching in greater number. In contrast, less well prepared teachers have more difficulties, are rated less effective by evaluators and colleagues and leave at much higher rates at earlier points in their careers. Whether prepared in traditional or alternative teachers' education programmes, well prepared teachers are the foundation for ensuring that high quality teachers are working in all classrooms.

Leu and Ginsburg (2011) also note that teacher and quality of teaching combine to contribute to the quality of education.

Secondary teachers training or preparations programmes vary across countries in the world influenced by economic, political and social factors (Cooper & Alvarado, 2006). Studies have identified four teacher preparation programmes used in various countries and include school-based teacher education, pre-service education, in-service professional development and continuing professional development (Mulkeen et al. (2007); Yadav, 2011; Toh et al., n.d). Each of them has strengths and weaknesses, for example, the strengths of school-based includes less expensive, more relevant to classroom needs and offers effective pedagogical training; however, its weakness is that it does not contribute towards the student teachers' basic subject knowledge development, a component that is crucial to secondary teachers (Mulkeen et al., 2007). Also school-based teacher education has only been experimented in primary teachers' preparation where it has been used as a form of initial teacher preparation to train unqualified but experienced teachers (Mulkeen et al. 2007).

Pre-service teacher education programme seems to be the most common form of preparation programmes for secondary teachers in both developing and developed countries (Yadav, 2011). This is evident in India, Bangladesh, Pakistan and Sri-Lanka (Yadav, 2011). But there are variations in the programme in terms of duration, implementation, regulation and maintenance of standards, among others (Yadav, 2011). The current pre-service teacher training programme is constraint by a number of factors including limited spaces in teacher training institutions; the length of time required to train teachers, especially specialised secondary education teachers and the high cost of running teachers training institutions, among others (Moore et al., 2008). Zhou et al (2011) also report about unsuccessful attempts to integrate Information and Communication Technology (ICT) into teaching and learning. Research has demonstrated that ICT integration enhances teaching and learning outcomes (Zhou et al (2011), for instance, in Mathematics it improves conceptual understanding, problem solving and teamwork skills.

Cooper and Alvarado (2006) have identified four important components that contribute to effective teacher preparation programmes and include:

- High standards of entry;
- Strong content (subject matter) preparation;
- Substantial pedagogical training;
- Supervised clinical experiences.

On the standard of entry, Toh et al. (n.d) report that pre-service teachers usually enter teacher education programme with narrow conceptions of mathematics a set of rules and connections. However, to ensure subject matter and pedagogical expertise, in the United States and several other countries many programmes are being redesigned such that students obtain a degree in a subject matter area, followed by a pedagogical course in a graduate or masters' degree programme (Cooper & Alvarado, 2006).

In that connection, Shulman (1987) as cited in Bunyi et al. (2011) also identify three types of knowledge which combine to produce effective teaching which are acquired through effective teacher preparation programmes:

- Knowledge about the subject matter (content knowledge);
- Knowledge of how to engage with the learners and manage classrooms (pedagogical knowledge);
- Knowledge of how to represent and formulate content knowledge to make it understandable to students (pedagogical content knowledge).

The three types of knowledge identified are very important in effective teaching and are linked to high quality teacher preparation programme. This is partly reinforced through a statement by Bunyi et al. (2011, p.1) that "... good teaching is the result of the teacher integrating different types of knowledge to create teaching scenarios that make what they teach comprehensive to their students."

Therefore high quality professional teacher training contributes significantly to a teachers' effectiveness. Professional training equips teachers to respond to the evolving challenges of knowledge in society, take an active role and prepare learners to be autonomous lifelong learners. It also enables teachers to reflect on the process of teaching and learning by engaging with subject knowledge, curriculum content, pedagogical innovations, research and the social and cultural dimensions of education (European Commission, n.d). Effective training makes a teacher good or high quality and makes him or her most positive determinant factor in students' academic achievement or performance. Abdou (2012) observes that effective teachers are the backbone of any effective educational system. Effective training also makes a teacher effective in educational reform (Abdou, 2012). Abdou (2012) further underscores the importance of effective teachers arguing that, "every morning a nation's future is born inside a classroom. It is only at the hands of a 'good' teacher that this newborn's future gets to shape... and reach its full potential." Khurshid (2008) also notes that "... No system of education can be better than its teachers. The teacher is the king pin in the educational set up." He argues further that, "Qualification of a teacher plays an important role in teaching but professional education or training is more important in teaching because a trained teacher can teach better than untrained teachers." It can therefore be argued that a professionally trained teacher knows well how to teach effectively and that effective teaching contributes significantly to effective learning (Khurshid, 2008).

Fakeye (2012) has also identified two teachers' qualities or characteristics that significantly contribute to students' academic performance. Two factors that contribute to the students' academic performance include:

- The teacher's mastery of subject matter;
- The teachers' teaching qualification and experience.

Kimani and Mwita (2010) identify four factors that contribute to the effectiveness of a teacher. They include teaching experience, training (including in-service training), attitude to the subject and teaching as a profession, and teacher subject knowledge. However, the forgoing authors have not identified pedagogical knowledge as an important factor in teaching effectiveness. It is increasingly clear in the literature reviewed that a good knowledge of pedagogy is an important factor in teachers' effectiveness in teaching.

However, an administration of standardised mathematics test to a sample of teachers in Kenya revealed a serious subject matter knowledge gap among teachers. The result revealed that no teacher in the sample had a complete mastery of the subject. The mean score was 60.5%; the lowest score was 17% while the highest score was 94% (Kimani and Mwita, 2010). Therefore there is a serious need to provide teachers of mathematics with on-going training (in-service training) to increase the subject matter knowledge, which is critical in terms of improving student performance. This underscores the importance of in-service training programme that is tailored to the needs of the teachers.

Recruitment and distribution of teachers

Shortage of qualified teachers is a serious challenge affecting both developed and developing countries. Shortage of teachers is associated with the following factors (Moore et al., 2008):-

- Issues linked to teacher preparation system;
- High attrition caused by low salaries and poor working conditions. As a result a number of teachers leave the profession within 1- 3 years of joining and schools in rural setting seem to be the most

- affected;
- Difficulties in attracting teachers in hard to reach areas schools. Factors associated with these include: lack of incentives; poor working conditions; lack of professional development opportunities; lack of incentive system to encourage teachers to remain in the teaching field; lack of professional support and supervision, and lack of professional growth.
- Lack of teachers in specific subjects such as mathematics and sciences.

The challenge of teachers' shortage has forced many schools in various countries to employ unqualified teachers to deliver lessons, for instance, some States in India, Gambia employs unqualified teachers because there are not enough qualified teachers to meet the demands of the rapid expansion of access to universal primary education (VSO, 2010; Muralidharan and Sundararaman, 2010; Wamukuru, 2011; Atherton and Kingdon, n.d). The contract teachers in India are known as Para-teachers or contract teachers (Muralidharan and Sundararaman, 2010). There were 543, 671 contract teachers in India between 2008 and 2009 (Atherton and Kingdon, n.d). In the United States there is a serious shortage of science and mathematics teachers (Sterling, 2004), consequently, many schools are hiring under-qualified teachers some of whom have a bachelor's degree in science or mathematics but lack teaching experience or education coursework (Sterling, 2004). Sterling (2004) further reports that the growing shortage of teachers is contributing to an increased number of under-prepared teachers join the profession for instance, more than 12 per cent of new hires begin teaching without any formal pedagogical training and 26 per cent of new hires do not meet the licensing requirements in various states. Similar views are also expressed by Futernick (2003), who notes that the critical shortage of teachers throughout the United States has forced many districts to hire people who do not meet licensing requirements for teachers. Many of such teachers have not demonstrated subject matter competence, they do not have formal training as teachers and many do not have prior experience in teaching children (Futernick, 2003). This continues to happen despite 'The No Child Left Behind Act (NCLBA)' which prohibits schools from employing teachers who are not fully certified (Futernick, 2003). The Use of unqualified teachers has also been observed in the United Kingdom (Silverman, 2013; Ross, 2012). VSO (2010) has identified a number of challenges facing unqualified teachers, namely, limited by their lack of qualifications, lack teaching methods and pedagogical skills. All these factors limit their effectiveness in teaching.

The shortage of teachers' situation in a number of contexts has led to overcrowded classrooms (Oyaro, 2013) and high teacher: student ratio (KENPRO, 2010) in others. In Kenya recruitment and deployment of teachers in public schools has been the preserve of the teachers service commission (TSC) since 1967 when it was set up under the 1967 TSC Act (Aloo et al., 2011). The Act empowers TSC to recruit and employ public secondary school teachers. It operated a supply-based recruitment policy. Aloo et al. (2011) have highlighted some of the issues associated with the supply-based recruitment policy, for instance, teachers being posted haphazardly with no regard to their areas of interest or the interest of the schools resulting in disparity in teacher distribution and retention in the country. However, in 2001, the Kenya government decentralised the selection and recruitment process and in so doing departed from the supply driven teacher recruitment policy to a school- based demand driven teacher recruitment policy (Aloo, et al., 2011; Abdou, 2012; Makori and Onderi, 2013). The move was intended to enhance teacher retention, equity in teacher distribution and efficiency in teacher recruitment practices in public secondary schools. The move was also intended to assist the policy makers to improve the delivery of service to schools (Aloo, et al., 2011). The school- based procedure is regulated by a set of guidelines in the TSC policy on teacher recruitment and selection (Abdou, 2012). Besides, to ensure transparency and fairness of the selection process, the government has also provided scoring guide to the interviews. The score obtained on the basis of the guidelines together with the professional certificates constitutes the selection criteria (Abdou, 2012). Under the new teacher recruitment dispensation, Board of Governors (BOGs) and the principal as the secretary constitute the selection and recruitment interview panel. Therefore BOGs are involved in delegated roles provided for by the TSC Act (1967) and the Education Act 1980 (Aloo et al., 2011). The Education Act empowers BOGs to run public schools in delegated authority capacity (Aloo et al., 2011) on behalf of TSC and the ministry of education in general. Also under this new arrangement, all vacancies for secondary schools are advertised by TSC and interested candidates apply to respective schools' board of governors and all eligible candidates are shortlisted for interview (Aloo, et al., 2011).

While the new procedure has been applauded for improving distribution of teachers and teacher retention rates especially in school in the hardship or hard- to reach areas (e.g. Nyando district) in Kenya, a number of concerns have been raised regarding the competence and behaviours of some BOGs as well as the efficiency of TSC. Regarding BOGs, issues of biases, nepotism, tribalism, favouritism and bribery have been reported, resulting in BOGs ignoring qualified candidates in order to hire an 'identified' one (Abdou, 2012; Sang & Sang, 2011), meaning people of their own choice based on tribe and clan. Also BOGs' competence skills on the whole selection and recruitment process including screening and deciding on the effective prospective teachers have been seriously questioned (Abdou, 2012). Kipsoi and Sang (2008), comment that BOG members may not be able

to interpret and implement the guidelines correctly as a number of them are ignorant and limited in knowledge on professional matters linked to education. In a study teachers and their principals argue that political, religious and clan leanings take overtone among BOGs and affect their capacity to make sound and honest or transparent decisions (Kipsoi & Sang, 2008). Also there have been claims that the recruitment exercise has been marred by irregularities and local intrigues therefore affecting its efficiency (Aloo et al., 2011). Aloo et al. (2011) also report that teacher recruitment exercise is an issue in rural public secondary schools in Kenya. There are also reports of manipulation of the recruitment exercise to suit certain people in the society which is achieved by, for instance, not providing equal opportunities to the applicants, refusing to shortlist qualified applicants who may pose a threat to their 'identified' candidates and/or concealing interview dates (Aloo et al., 2012). Other concerns include interference from sponsors, the community and politicians which posed a challenge to the principals in terms of recruiting and selecting teaching and support staff (Wichenje et al., 2012). Also cases of numerous conflicts between principals and BOG in the management of schools have been reported (Sang & Sang, 2011). The conflicts are attributable to lack of clearly defined role and responsibilities (Sang & Sang, 2011).

Therefore there has been a call from the general public for the review of the school based teacher recruitment policy (Ramani, 2003). Also some teachers lack confidence in the BOG involvement in the teacher recruitment exercise arguing that TSC should take over (Kipsoi and Sang, 2008). However, Abdou (2012) observes that the process of selecting and recruiting teachers is effective and meaningful when schools are involved. But Wichenje et al. (2012) argue that successful recruitment and selection requires a competent and experienced panel. Therefore the Kenya government is challenged to find a better ways of improving the school based teachers recruitment policy, including developing and improving the capacity and skills of BOGs who are heavily involved in the recruitment exercise. The efficiency of TSC has also been attacked on a number of fronts, for instance, TSC tends to ignore under- enrolled schools and/or new schools; slow in replacing teachers who have left schools due to natural attrition as well as those who have been promoted to deputy principalship; replacement of teachers is done only once a year so some schools have to wait for a year upon the exit of a teacher and principals in a study felt that TSC was less efficient in posting teachers already selected by the board (Aloo et al., 2011).

Tensions have also been reported in the four states in the United States (California, Florida, Massachusetts and Michigan) which operate a decentralised teacher hiring process for new teachers; a rivalry do exist between centralised and decentralised hiring procedures (Abdou, 2012). This rivalry is between the schools' principals and the district central education office and the nature of the conflict is such that on the one the hand, the school principals want to select candidates who best fit their particular schools, on the other hand the central authority need to ensure that schools are managed efficiently and that the uniform standards are maintained across the district (Abdou, 2012).

Quality teachers as a key determinant of students' academic performance

It has been widely acknowledged in the literature reviewed that a well-qualified and professional teacher constitutes a key factor in the provision of quality education (Owolabi, 2012; Mobegi & Ondigi, 2011; Mpokosa & Ndarunutse, 2008; Abdou, 2012; Haycook, 1998; Lai, et al., 2009; Fakeye, 2012; Haar, 2007). For instance, Adiniyi (1993) as cited in Owolabi (2012) observes that: "the country's manpower development depends on the quality of her well-qualified teachers." The importance of teachers in the development of human capital of a country is underscored by Owolabi (2012) and Educational International (2007). Quality teachers are a key factor in any meaningful teaching and learning process; they provide learners with personal fulfilment, better social skills and more diverse employment opportunities (European Commission, n.d).

The importance of effective teachers is also underscored by the Centre for Public Education (2009) that "Of all the things schools can give students to help them succeed, effective teachers are the best bet." It is also noted that when an effective teacher is in classroom, scores rise and positive impact can be dramatic even to the habitual low achieving children (Centre for Public Education, 2009). Lai et al. (2009) also note that "better outcomes come from schools with better teachers." But then who are these quality teachers? The Educational International (2007) describes them as professionally trained teachers who have a deep understanding of both subject matter and teaching pedagogies. Quality teachers are those who bring about 'student learning' (Berliner 1987, 2005) as cited in Zuzovsky (n.d). Effective teachers are also considered as 'successful' teachers (Fenstermacher and Richardson, 2005) as cited in Zuzovsky (n.d). Quality teachers also positively influence student's learning and make a significant difference in their academic achievements (Cooper & Alvarodo, 2006). Ajayi (2009) as cited in Owolabi (2012) identifies important characteristics of a professional teacher:

- Mastery of the subject matter;
- Sense of organisation;
- Ability to motivate students;
- Good imagination;

- Ability to involve the students in meaningful activities throughout the period of teaching;
- Management of the details of learning;
- Frequent monitoring of students' progress through tests, formal and informal, written and oral quizzes.

According to Umar-Ud-Din, et al. (2010), teaching is an art which can be refined by training and practice. Mpokosa & Ndarunutse (2008) also observes that the quality of teacher training dictates the quality of teaching. It can therefore be argued that quality training is important and equips a teacher with technical knowhow and makes him or her competent in the teaching- learning process. Mobegi and Ondigi (2011) observe that a better trained workforce is important in providing quality education. This is also underscored in the UNESCO and OECD (2001) joint publication (as cited in Mobegi & Ondigi, 2011) that "a better trained teaching force is an important factor in educational quality." UNESCO and OECD also observe that "teachers' subject matter expertise must be complemented by pedagogical competence." (Mobegi & Ondigi, 2011).

Haycock (1998) distinguishes between a good and bad teacher, effective and ineffective or least effective teacher based on the outcomes, arguing that even poor and minority youngsters will achieve at the same high levels as other students if they are taught at those levels. For instance, using the Tennessee data he demonstrates that high-achieving students gain an average of only 2 points under the direction of least-effective teachers but gain an average of 25 points under the guidance of most effective teachers. Also middle achievers gain a mere 10 points with least effective teachers but realised point gains in the mid-30s with most effective teachers (Haycock, 1998). Fakeye (2012) also reflecting on the poor performance of English language among students in Nigeria since 1960, observes that "it takes a competent teacher to be able to teach the language skills effectively and to make them competent users of English language".

Study Site

Nyamira is one of the 47 counties in Kenya (Onderi and Makori, 2013). The number of counties is based on the number of districts created under the provinces and Districts Act of 1992 (Tisa, n.d). The county constitutes the second level governance after the national one (Soft Kenya, n.d). Therefore counties of Kenya are geographical units for devolved government based on the 2010 constitution of Kenya (Onderi and Makori, 2013). Nyamira County is located in Nyanza province and is made up of three districts, namely, Manga, Nyamira and Borabu (Kenya Open Data Project, 2011). According to the new constitution (2010) county government were to replace the provincial and local government administration system which has been existence since independence (Omari, 2011). Nyamira district, part of Nyamira County has been noted for its poor performance in mathematics (Yara and Wanjohi, 2011). Yara and Wanjohi (2011) observe that a student's performance in mathematics is underpinned by the type of school he or she attends, because some schools have qualified and experienced mathematics teachers and good learning environment than others, and this could be true for other subjects as well. However, literature on the use of unqualified teachers in the County is limited. There are 143 secondary schools in Nyamira County with a total student population of 49,800.

Methodology

The study reported in this article adopted a quantitative design and was conducted to increase knowledge and understanding about the complex nature of the challenges that confront school heads (Principals) as they execute their roles. The focus is on teachers' qualifications and pedagogical skills. The study findings would contribute to an understanding of the kind of challenges linked to teachers' qualification and teaching skills, and in relation to examination performance as perceived by the school principals. The quantitative study design involved eighty one secondary school principals who were purposively sampled from eighty one schools. Initially one hundred schools were sampled and contacted for the study, but in the end only eighty one responded representing a response rate of 81%. It suffices to say that both the county and the principals were purposively selected for the study.

Prior to data collection, following the sampling of schools, the researchers contacted school principals and invited them in writing to take part in the study. In the letter the researchers introduced themselves, described the purpose of the study and explained what the participants were expected to do. The letter also indicated that the participants had a choice to opt out of the study at any time without any negative consequences on their part, assured them of confidentiality and therefore undertook to keep their personal details strictly confidential and use them only for the purpose of research. At the end of the letter, respondents were requested to sign a declaration of informed consent form in which they confirmed their understanding of the research project and their voluntary participation. The study employed a survey technique to collect data. Questionnaires were used as the main tool for collecting data. Questionnaire format consisted of closed, open-ended and rating scale items. This was necessary to diversity responses as well as reduces what Watson and Coombes (2009) in Onderi and Makori (2012) call 'question fatigue'. The first part of the questionnaire (closed- ended) collected demographic or background information, for instance, gender, years in headship, headship, school size, school setting whether

rural or urban, whether mixed or single sex, denominational orientation, relationship with PTA and BOG and secondary school tier whether national, provincial or district among others, while the second part collected information on the issues and challenges facing school principals, for instance, the use of unqualified teachers to deliver lessons.. The open-ended section offered the respondents an opportunity to make a comment, expand or clarify some information on their responses and thus help the researchers gain some insight of their views on challenges affecting their roles and responsibilities in educational institutions and especially in relation to qualifications and pedagogical skills. The open-ended comments or responses yielded qualitative data which was analysed into emerging themes or categories. The resulting quantitative data was analysed using the statistical package for social science (SPSS) producing descriptive data.

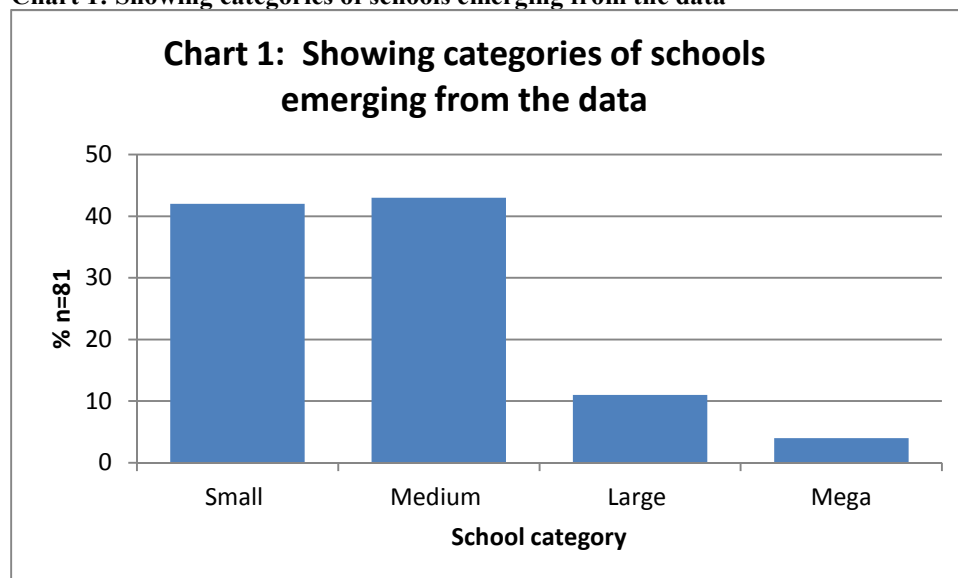
Results

Participants' characteristics

The participants were mainly secondary school principals and were 81 in number. 70% of them were males while thirty per cent 30% were females. This perhaps suggests something about females' representation in the educational leadership or decisions making positions. Just fewer than two-fifths had been in principalship position for less than five years, a third between five and ten years and another a third over ten years. Combining those that had between five and ten years of headship experience and those that had over ten years gives two-thirds thus suggesting that a significant number of principals had substantial leadership and/or management experience in secondary school. 42% were in their first headship, 38%, in their second headship and 12%, in their third headship. So combining those who were in their second headship, those in their third headship and those beyond third headship gives fifty eight per cent, suggesting that over half of them had significant experience of working in more than one secondary school.

42% worked in small secondary schools, 43% in medium school, 11% in large school and 4% in mega secondary school (See chart 1). 83% worked in secondary schools which were located in rural settings. 89% worked in public schools. 68% worked in a faith or church sponsored schools. 64% of the schools were district schools; 27% were provincial and 9% were national schools. 46% were mixed schools; 21% (n=81) were mixed day; 15%; girls boarding and 7% were boys boarding. A majority (90%) of the principals rates their relationship with PTA as good or excellent. Also A majority of them (85%) rates their relation with BOG as good or excellent. Just fewer than 100% felt that PTA was still relevant in the face of free secondary education and fewer than 80% felt that the role of PTA as not changed. Therefore suggesting that a majority of the principals had positive relationship with BOGs and PTAs, which is very important in a teaching and learning environment.

Chart 1: Showing categories of schools emerging from the data



Based on Chart 1 two-fifths of the schools are within the small schools category.

Teachers' Qualifications

Participants were asked if they were satisfied with their staff qualifications. 75% indicated to the affirmative and 25% indicated 'no'. Those who indicated 'no' gave the following comments which have been grouped into four themes or categories.

Employing BOG teachers and other unqualified teachers

Schools resorted to using BOG staff due to financial constraints. Inadequate funds make it difficult for schools to employ TSC teachers who are qualified. BOG staff may or may not be qualified. BOG teachers range from 'O' level school leavers with A-C grades perhaps awaiting to join college or universities for further studies; graduates /qualified teachers but who are paid poor salaries or underpaid to under-graduates who may only be used during vacations.

-“There is only one qualified TSC teacher and one qualified underpaid BOG teacher. The rest are '0'- level graduates with C (plain) to A (plain), yet to join tertiary institutions”

Use of Unqualified teachers contribute to poor syllabus coverage

Schools that are understaffed resort to using unqualified staff - resulting in inadequate syllabus coverage. Also understaffing may lead to overworking or overloading qualified staff thus affecting their effectiveness in education delivery.-“Qualified teachers are not enough and this leads to the stretch of meagre resources and inadequate syllabus coverage”

Factors associated with the size of the school and examinations performance

Sometimes the size of the school and its performance in national examinations matters when it comes to receiving government support through TSC teachers. The respondents seem to suggest that staff recruitment in public schools is influenced by the size of the school and its performance in national examinations. If it is a small school and its performance in national is poor then the chances of receiving TSC teacher is slim.

-“Since the school is small and has not performed well, the government hasn't given us enough and qualified teachers”

Some subjects lack qualified teachers

In some secondary schools some subjects are being handled or covered by teachers who are limited in qualifications. This may further suggest that such teachers lack the necessary knowledge and teaching skills.

-“Some staff are not well qualified to teach in their subjects”

Teachers' pedagogical skills

Respondents were asked if teachers had sufficient or appropriate pedagogical skills. 75 per cent indicated to the affirmative, while 25 per cent indicated partial or no. Those that indicated partial or no gave the following comments which link pedagogical skills to training, qualifications and experience. Some of the comments below seem to suggest that trained and/or qualified teachers have the necessary pedagogical skills to deliver quality education. However, from the comments made it is evident that in some schools a significant number of teachers were not trained. Some respondents made references to the TSC teachers who are considered qualified to teach in secondary schools.

-“Some of the teachers are untrained hence may not be having the necessary skills and TSC has only deployed 3 teachers to the school”. Also “most of them are not trained.”

Just over 90% of the respondents felt that there was a direct link between examination performance and teachers having appropriate pedagogical skills. Quality of teachers in schools is affected by the recruitment policy and practices.

On recruitment of staff, respondents were asked four related questions:

- Are you satisfied with the way the school recruits staff? 75% indicated to the affirmative
- Does the school have a staff recruitment policy? 77% indicated to the affirmative
- How do you rate the staff recruitment policy? 65% rated the policy as excellent
- When asked to identify issues associated with the recruitment of staff, a total of 65 comments were made which relates to the involvement and practices of BOGs in staff recruitment process. Further analysis revealed that even those who rated the policy as good or excellent made negative comments about BOGs practices. The result is illustrated on Table1 below.

Table1: Principals' views on the practices of BOGs in recruitment of teachers

BOGs' Practices	(%, n= 81)	(%, n=65)
Nepotism	21	26
BOG wants their own people regardless of qualifications or competence	20	25
Corruption	7	9
Less focus on qualification than clanism	21	26
Negative influence	7	9
Results in ineffective staff	4	5
No response	20	0

Participants were also asked to identify factors that contribute to poor examination (Average and below) performance. Their comments were analysed further and the result illustrated in chart 2 below:

Chart 2: Factors contributing to poor examination performance (Average and below)

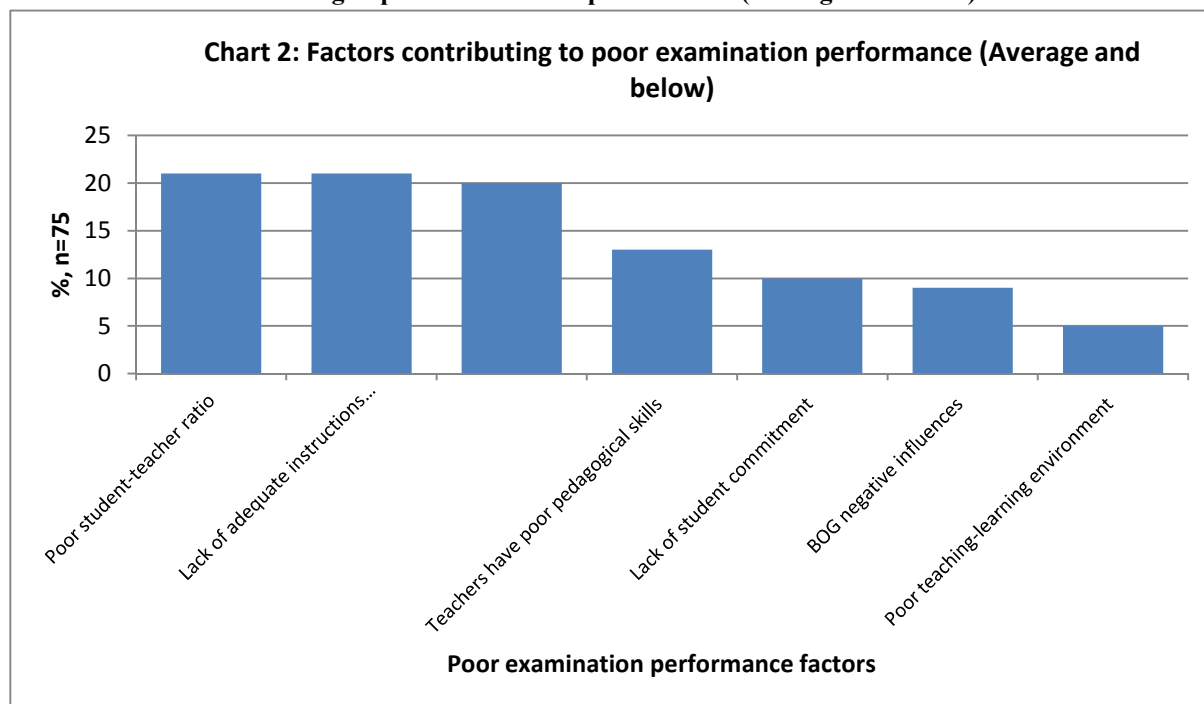


Chart 2 indicates that teachers' poor pedagogical skills are among the factors that contribute to poor examination performance among the schools that took part in the study.

DISCUSSION

This study set out to investigate secondary schools principals' perception on the qualifications and pedagogical skills of secondary schools teachers, and therefore their effectiveness in delivering lessons in an area in Kenya. The empirical study reveals that some secondary schools in Nyamira County employ two types of teachers namely, Teachers Service Commission (TSC) teachers and Board of Governors (BOG) ones. TSC teachers are university and/or college graduate teachers, who have received initial teacher education preparation and therefore considered qualified, with substantial subject matter knowledge, pedagogical knowledge and pedagogical content knowledge (Bunyi et al., 2011) to teach in secondary schools. BOG teachers on the other hand exist in a continuum ranging from qualified teachers who are lowly paid to 'O' level or Form IV leavers with A-C grades and perhaps awaiting to join higher institutions for further studies. Also some of the BOG teacher could be undergraduate students on long vacation. O level and undergraduate students may lack the necessary teaching experience, sufficient subject matter knowledge, pedagogical knowledge and pedagogical content knowledge (Bunyi et al., 2011; Kimani and Mwita, 2010), necessary in improving student learning and achievement. Jaworski and Gellert (2003) as cited in Toh et al. (n.d) observe that: "knowledge acquired during their school days as students could be limited because it is based mainly on their limited experience as students." According to Umar-Ud-Din et al (2010) "teaching is an art, it can be refined by training and practice". It can therefore be argued that professional training equips or empowers teachers to deliver quality teaching. It can further be argued that professionally trained teachers know well how to teach effectively and that effective teaching contributes significantly to effective learning (Khurshid, 2008). It is important that teachers have mastery of the subject matter and necessary teaching qualification and experience in order to deliver quality education. Teachers have to use their subjects' knowledge in teaching, in terms of identifying a range of solutions and subject connections when they are teaching students, planning lessons and evaluating students work.

It is also evident from the study that some of the schools have more BOG teachers than TSC ones. Schools that employ BOG teachers do so for two main reasons, namely, lack of adequate finance to employ qualified teachers and TSC has not been able to staff all schools appropriately. Some school principals claimed that TSC deployed teachers to schools on the basis of the size of the school (see Chart 1) and the school's performance in national examinations, arguing that small schools that performed poorly in national examination were the most disadvantaged. The principals also claimed that BOG teachers who were not trained lack the necessary pedagogical skills to deliver quality education. Poor pedagogical skills have been associated with poor

examination performance (*see* Chart2). They therefore claim that such teachers have neither professional training nor classroom experience. Some may also be having limited knowledge of the subject matter. It is assumed that TSC teachers have received quality initial (pre-service) training. The study findings also linked lack of teaching qualification and techniques to poor syllabus coverage. Poor syllabus coverage may in turn contribute to poor examination performance in a majority of the schools because of lack of syllabus completion.

Nyamira County is not alone in employing unqualified teachers; Sterling (2004) observes that with the growing shortage of teachers and especially Science and Mathematics ones, there are a growing number of under-prepared teachers entering the profession in the United States. The study findings are also in agreement with the findings of other international literature reviewed i.e. employment of teachers with neither professional qualification nor teaching skills to deliver lessons in schools. In some States in India, they employ contract teachers or Para-teachers, high school graduates but with no teaching qualifications (Muralidharan and Sundararaman, 2010). The use under-qualified and untrained teachers is a situation that affects both developed and developing countries (Futernick, 2003; Sterling, 2004; Silverman, 2003; VSO, 2010). This is attributable to serious shortages of qualified teachers (Futernick, 2003). Abdou (2012) observes that sufficient quality and quantity of qualified teachers are lacking in Sub-Saharan Africa as well.

Perhaps the difference between BOG teachers in Nyamira County and those unqualified ones employed in the United States schools and elsewhere is that the ones in the United States schools and elsewhere have a bachelor's degree in sciences and mathematics perhaps suggesting better subject matter knowledge but lack pedagogical knowledge and pedagogical content knowledge (Bunyi et al. 2011), crucial components in quality teaching.

According to the European commission (n.d), the teachers' pedagogical skills should empower them to build and manage learning environment and retain intellectual freedom to make choices over the delivery of education. Important characteristics of a professional teacher include (Ajayi (2009) as cited in Owolabi (2012): motivating students, and continuous assessment and evaluation of students, among others. Besides subject matter knowledge teachers ought to have certain abilities to deliver lessons effectively. Kimani et al. (2013) have identified factors which contribute to student achievement and include the number of teachers on post, teacher pupil ratio, teacher qualifications and the personal characteristics of the individual teacher. Personal characteristics include academic qualifications, pedagogical training, content training aptitude and years of service or experience (Kimani et al. 2013).

Other study findings reveal serious issues related to the recruitment of teachers. For instance, the BOGs were found to practice nepotism, corruption and clanism in the recruitment process. Such practices adversely affect the outcome of the recruitment process, resulting in unsuitable teachers. Similar issues have also been reported by Abdou (2012 and Sang and Sang (2011). Their findings reveal practices such as biasness, nepotism, tribalism, favouritism and bribery, involving BOGs. Under the demand driven teacher recruitment policy in Kenya, board of governors and the school principal as secretary constitute the selection and recruitment interview panel (Abdou, 2012). Therefore BOGs are involved in important delegated roles provided for by the TSC Act (1967) and the Education Act 1980(Aloo et al., 2011). The Education Act empowers the BOGs to run public schools in delegated authority capacity on behalf of TSC and the ministry of education in general (Aloo et al.; 2011). Therefore their practices in the recruitment process raise serious concerns.

CONCLUSIONS

The study findings reveal that in Nyamira County a number of secondary schools involved in the study employ untrained and/or unqualified form IV school leavers to deliver lessons. The fact that these teachers are not trained suggests that they lack the necessary teaching qualifications and techniques or know how (pedagogical skills), which are necessary for quality teaching. It is possible that some of the untrained teachers may have a certain level of subject knowledge but lack the necessary skills (pedagogical content knowledge) to impart that knowledge to students. Their teaching is based on their limited experience as students. It is also possible that the fact they are not trained suggest that they may lack the necessary skills to create a positive learning environment in a classroom i.e. effective classroom management. There have also been issues of inadequate syllabus coverage in schools that are employing unqualified teachers. Therefore providing quality education in some schools with the free secondary education era is still a serious challenge. It emerged in the study that schools that employ untrained teachers do so due to financial reasons; they lack sufficient funds to employ TSC qualified teachers. Use of unqualified teachers in schools is not confined to Nyamira County alone but it is a widespread concern in both developed and developing countries as identified within the literature reviewed.

RECOMMENDATIONS

This study makes two recommendations. First, there is a need to establish how widespread the use of unqualified or contract teachers is in secondary schools in Kenya and its impact in the delivery of quality education. Second, it important to evaluate subject content knowledge of secondary school teachers in Nyamira County initially and

perhaps rolls it out to other counties with the aim of setting up an appropriate in-service training programme to boost their subject content knowledge.

REFERENCES

- Abdou, A. (2012) Teachers recruitment and selection practices with different schooling system in Egypt. MA Dissertation: American University in Cairo: School of Graduate Education. [www.amiraabodouthesisALLDONE.pdf-windows/internetexplorer(Accessed on 02/01/2013).
- Aloo, J.; Simatwa, E.; Nyang'ori, R. (2011) Impact of the school based teacher recruitment policy on the distribution and retention of teachers in public secondary schools in Kenya: A case of study of Nyando District. *Educational Research*, 2(3), pp. 1006-1020.
- Atherton, P. and Kingdon, G. (n.d). The relative effectiveness and costs of contract and regular teachers in India. [<http://2010.economicsofeducation.com/user/pdfsessions/036.pdf> (Accessed on 12/10/2013)]
- Bunyi, G; Wangia, J; Magoma, C; Limboro, C. and Akeampong, K. (2011) Learning to teach reading and mathematics and influences on practice: A study of teacher education in Kenya. Teacher preparation and continuing professional development in Africa (TPA). University of Sussex: Centre for International Education. [<http://www.sussex.ac.uk/webteam/gateway/file.php?name=report-kenya-1july2011.pdf&site=20> (Accessed on 13/10/2013)]
- Burnett, J. (2012) Kenya's free secondary schools bring a torrent of students. [<http://www.npr.org/2012/07/16/156840540541/kenyans-free-schools-bring-an-torrent-of-students> (Accessed on 02/01/2012)].
- Chebari, E. (2010) Challenges facing effective implementation of free secondary education in public secondary schools in Kagundo District, Kenya. MA Thesis (Unpublished). [<http://www.cnc.ac.ke/sites/default/files/downloads/paper/chabarithesis.pdf>(Accessed on 31/12/2012)].
- Centre for Public Education (2009). Does highly qualified mean highly effective? [<http://www.centerforpubliceducation.org/main-menu/staffingstudents/How-good-are-your-teachers-trying-to-define-teachers-quality/Does-highly-qualified-mean-highly-effectice.html> (Accessed on 20/12/2012)].
- Cooper, J. & Alvarodo, A. (2006). Preparation, recruitment and retention of teachers. Education policy series: International Academy of Education: International Institute of Education Planning(IIEP): UNESCO:PARIS. [<http://www.unesco.org/iiep/PDF/Edpo/5.pdf> (Accessed on 14/10/2013)]
- Educational International (2007) Teacher supply, recruitment and retention in six Anglophone Sub-Saharan African countries. The Gambia, Kenya, Lesotho, Tanzania, Uganda and Zambia.[<http://download.cie.org/docs/IRISDOCUMENTS/Research%20Website%20Documents/2009-0003801-E.pdf> (Accessed)].
- European Commission (n.d.) Common European principles for Teachers competencies and qualifications. Directorate- General Education and Culture. [http://ec.europa.eu/education/policies/2010/doc/principles_en.pdf (Accessed on 20/12/2012)]
- Fakeye, D. (2012) Teacher's qualifications and subject mastery as predictors of achievement in English Language in Ibara Papa Division of Oyo State. *Global Journal of Human Social Science*, 12(3).[https://globaljournals.org/GJHSS_volume12/1-Teacher-Qualification-and-subject-Mastery.pdf (Accessed on 16/12/2012)].
- Futernick, K. (2003) Why teacher quality and teaching credential matter. [http://www.edfordemocracy.org/tqi/TQI-Quality_matters.htm (accessed on 14/05/2013)].
- Haar, J. (2007) Returning experienced qualified teachers: The prinicipal's Role. [<http://www.ruraleducator.net/archive/28-2/28-2-Haar.pdf> (Accessed on 19/12/2012)]
- Haycock, K. (1998). Good teaching matters: How well-qualified teacher can close the Gap. The Education Trust. [http://www.millenuschools.co.uk/_user/X/S/U/K/S/Good_teaching.matters.pdf (Accessed on 16/12/2012)].
- Glennerster, R.; Kremer, M.; Mbiti, I; Takovarasha, K.; Lalif, A. (2011) Access and quality in the Kenyan Education system: A review of the progress, challenges and potential solutions. Prepared for the office of the Prime Minister of Kenya. [<http://www.povertyactionlab.org/publication/access-and-quality-kenyan-education-system>(Accessed on 02/01/2013)].
- Itunga, A. (2011) The threat to free primary education in Kenya. Build Africa. [<http://www.build-africa.org/news.php/69/the-threat-to-free-primary-education-in-kenya>(Accessed on 02/01/2013)].
- KEPRO (2013) challenge facing implementation of Free Primary Education in Kenya. KENPRO online papers portal.[www.kenpro.org/papers (Accessed on the 12/02/2013)]
- Kenya Open Data Project (2011) Country Data Sheet. [<https://opendata.go.ke/facet/counties/Nyamira?tags=schools> (Accessed on the 06/10/2012)]
- Khurshid, K. (2008). A study of the relationship between the professional qualifications of teachers and academic performance of their students at secondary school level. *International Journal of Human and Social Sciences*, 3(6). [<https://www.waset.org/journals/ijhss/v3/v3-6-57.pdf> (Accessed on 20/12/2012)]

- Kimani, G; Kara, A; Njagi N. (2013) Teacher factors influencing students' academic achievement in secondary schools in Nyandarua County, Kenya. *International Journal of Education and Research*, Vol.1 (3), March 2013. [<http://www.Ijern.com/images/march-2013/23.pdf> (Accessed on 26/05/2013)]
- Kimani, J. and Mwita, C. (2010). Improving mathematics performance in Kenya: How better teacher subject knowledge contributes to academic attainment. African population and Health Research Center, Policy Brief No.18. [<http://www.dellchallenge.org/sites/default/files/groups/29156/documents/policy%20Brief%20ImprovementsInternetExplorerPro> (Accessed on 10/10/2013)]
- Kinuthia, W. (2009) Educational development in Kenya and the role of information and communication technology. Georgia State University, USA. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*. 5(2) 6-20. [<http://www.Ijedict.dec.uni.edu/include/getdoc.php?id=4372&articles=740...>(Accessed on 09/12/2012)].
- Kipsoi, E. & Sang, A. (2008) Teacher recruitment in secondary schools: Policy and practice in Kenya. Paper presented at CCEAM Conference (8th -12th Sep.2008). Theme: Think Globally Act Locally: A challenge to education leaders. [www.emesa.co.za/files/full/E.Kipsoi&S.Anthony.pdf (Accessed on 26/12/2012)]
- Kiveu, N. & Mayio, J. (2009) The impact of cost sharing on internal efficiency of public secondary schools in Ndivisi Division Bungoma District, Kenya. *Educational Research and Review*, 4(5) 272-284, May 2009. [<http://www.academicjournals.org/ERR> (Accessed on 03/12/2012).
- Leu, E and Ginsburg, M. (2011) First principles: Designing effective education programmes for in-service teacher professional development: USAID. [http://www.equip123.net/docs/E1-FP_In-sve_TPD_Digest.pdf (Accessed on 16/10/2013)]
- Lai, F; Sadoulet, E; Janvry, A. (2009). The contribution of school quality and teacher qualification to student performance: Evidence from a national experiment in Beijing Middle Schools. Forthcoming in *Journal of Human Resources* [<http://are.berkeley.edu/~esadoulet/papers/SchoolEffectsJHR.pdf> (Accessed on 29/12/2012)].
- Makori, A. & Onderi, H. (2013) Challenges in achieving effective recruitment of secondary school teachers in Kenya. *International Journal of Advanced Research in Management and Social Sciences*, Vol. 2 (3), March 2013. [www.garph.co.uk (Accessed on 20/04/2013)]
- Mpokosa, C. ; Ndarunutse, S.; (2008). Managing teachers: the centrality of teachers management to quality education. Lessons from developing countries. CfBT. [[http://www.cfbt.com/evidenceforeducation/pdf/mt%20\(v4\).pdf](http://www.cfbt.com/evidenceforeducation/pdf/mt%20(v4).pdf)(Accessed on 29/12/2012).
- Mobegi, F. & Ondigi, B. (2011). Coping with quality assurance challenges faced by secondary schools head teachers in Gucha District, Kenya. *Educational Research and Reviews*, 6(2), pp746- 752, Sep. 2011. [<http://www.academicjournals.org/ERR> (Accessed on 29/12/2012)].
- Moore, A; Destefano, J; Jerway, A; Balwanz, D. (2008). The expansion of secondary education and the need for teachers. How big is the gap? Working paper. USAID: Educational quality improvement programme. [<http://www.epdc.org/sites/default/files/documents/Expansion%20the%20Need%20Teachers.pdf> (Accessed on 16/10/2013)].
- Mulkeen, A; Chapman, D; DeJaeghere, J and Leu, E. (2007). Recruiting, retaining and retraining secondary school teachers and principals in Sub-Saharan African Africa. World Bank working paper No.99. [<http://siteresources.worldbank.org/INTAFRREGTOPSEIA/Resources/No.4Teachers.pdf> (Accessed on 13/10/2013)]
- Muralidharan, K and Sundararaman, V. (2010). Contract teachers: Experimental evidence from India. Working draft. [<http://www.fas.nus.edu.sg/ecs/events/seminar-papers/31Aug10.pdf> (Accessed on 10/10/2013)]
- Mwangi, R. (2009). The role of school leadership in student achievement in Kenya: Submitted in partial fulfilment of the requirements for the qualitative research paper in the Executive Director of management programme. Case Western Reserve University: Weatherhead School of management. [<http://www.digitalcase.case.edu:900/fedora/get/ksl:weaedm358/weaedm358.pdf> (Accessed on 26/05/2013)]
- Ngware, M.; Onsomu, E.; Muthaka, D; & Manda, D(2006) Improving access to secondary education in Kenya: What can be done? www.emeraldinsight.com/0261-0159.htm(Accessed on 04/01/2013)].
- Njoroje, J. & Ole Kerei, K. (2010) Free day secondary schooling in Kenya: An audit from cost perspective. *International Journal of Current Research*. [<http://www.lournalcra.com/?q=node/1265>(Accessed on 02/01/2013)]
- Ohba, A. (2009). The immediate assessment of the introduction of free secondary education in Kenya: emerging issues. Centre for International Education. University of Sussex, 15-17 Sep. 2009. Oxford. [<http://www.Create.rpc.org/pdf-documents/UKFIETasayoohba.pdf>(Accessed on 02/01/2013)].
- Oketch, M. & Somerset, A. (2010) Free Primary Education and after in Kenya: Enrolment impact, quality, effects, and the transition to secondary school. Create (Consortium for Research on Educational Access, Transition and Equity). Research Monograph No. 37. [http://www.create-rpc.org/pdf_documents/PTA37.pdf (Accessed on 20/01/2013)]
- Onderi, H and Makori, A. (2013) Secondary school principals in Nyamira County in Kenya: Issues and

- challenges. *Educational Research International*, Vol. 1 (1), February 2013. www.erint.sava.org.pk (Accessed on 10/06/2013)].
- Onderi, H and Makori, A. (2012) Differential perceptions, challenges, conflicts and tensions in the role of Board of Governors (BOG) and Parent-Teacher Association (PTA) in Sub-Saharan Africa: A case of Kenyan Secondary Schools. *Educational Research*, Vol. 3(1), January, 2012. [<http://www.interestjournals.org/ER/>] (Accessed on 12/01/2013).
- Owolabi, T. (2012) Effect of Teacher's qualification on the performance of senior secondary school students: Implications on technology in Nigeria. *English Language Teaching*, 5(6), June, 2012. [www.ccsenet.org/elt] (Accessed on 04/01/2013).
- Oyaro, K. (2013) Free secondary schooling policy faces testing times. Inter press service (IPS) News Agency. [<http://www.ipsnews.net/2008/03/kenya-freessecondary-schooling-policy-faces-testing-times/>] (Accessed on 02/01/2013)].
- Romani, K. (2003) Kenya: TSC is cornered over teacher recruitment: The Standard: All Africa. [<http://allafrica.com/stories/200308220775.html>] (Accessed on 03/01/2013)].
- Ross, T. (2012) Academies given powers to hire unqualified teachers. The Telegraph. [<http://www.telegraph.co.uk/education/9433002/Academies-given-power-to-hire-unqualified-teachers.html>] (Accessed on 24/10/2013)]
- Sang J. & Sang A. (2011) Decentralisation of school management to board of governors in secondary schools in Kenya: A case of Trans-Nzoia County. *Journal of Humanity and Social Sciences*, 3(2). [www.ajol.onfo/index.php/ijhss/article/viewFile/74140/64800] (Accessed on 20/12/2012)].
- Silverman, R. (2013) Unqualified teachers are a majority of staff in some schools. The Telegraph. [<http://www.telegraph.co.uk/education/educationnews/9798578/unqualified-teachers-are-majority-of-staff-in-some-schools.html>] (Accessed on 26/05/2013)]
- Siringi, S. (2012) TSC issues new rules to guide teacher hiring. Sunday Nation Dec. 30, 2012. [[Http://www.nation.co.ke/News/TSC-issues-new-rules-to-guide-teacher-hiring-/-/1056/1464108/-/04c8cuz/-/index.html](http://www.nation.co.ke/News/TSC-issues-new-rules-to-guide-teacher-hiring-/-/1056/1464108/-/04c8cuz/-/index.html)] (Accessed on 23/12/2012)]
- Soft Kenya (nd). Country- counties in Kenya. [<http://www.Soft.com/county/>] (Accessed on 05/10/2013)]
- Sterling, R. (2004). The teacher shortage: national trends for science and mathematics and science: collaborative exploration, Vol. 7 (2004) 85- 96. [<http://www.math.vcu.edu/g1/journal/journal7/part%sterling.html>] (accessed on 12/05/2013)]
- Tisa (n.d.) Kenya's 47 Counties. www.tisa.or.ke/countdown-counties/kenyas-47-counties/ (Accessed on 05/10/2012)]
- Toh, L; Kaur, B; Koay, L (n.d). Singapore pre-service secondary mathematics teachers' content knowledge: Finding from an international comparative study. Nanyang Technological University of Education. [<http://www.cimt.plymouth.ac.uk/journal/toh.pdf>] (Accessed on 14/10/2013)]
- Umar-Ud-Din; Khan, M. and Mohamood, S. (2010). Effects of teachers' academic qualification on students' L2 performance at the secondary level. *Strength for Today and Bright Hope for Tomorrow*, 10(7), July 2010. [<http://www.languageinindia.com/july2010/teachersqualification.pdf>] (Accessed on 02/01/2013)].
- Wamukuru, D. (2011) Selected factors determining secondary school teacher demand in Kenya: trends, effects and projections. Egerton University: PhD thesis (unpublished). [<http://208.100.23.11/images/downloads/Agri/SELECTED%20SCHOOL-windowsInternetExploerPro>] (Accessed on 12/10/2013)]
- Wichnje, K.; Simatwa, E.; Okuom, H.; Kegode, (2012) Human resource management: challenges for head teachers in public secondary schools in Kenya: A case study of Kakamega East District, *Educational Research* 3(2), pp. 159-171.
- VSO (2011) Qualifying for quality: unqualified teachers and qualified teacher shortage in The Gambia. [http://nsagm.weebly.com/uploads/1/2/0/3/12030125/gabia_teacher_shortages_vso.pdf] (Accessed on 24/10/2013)]
- Yadav, S. (2011). A comparative study of pre-service teacher education programme at secondary stage in Bangladesh, India, Pakistan and Sri- Lanka. *Indian Educational Review*, Vol. 48(1), 96- 110. [http://www.teindia.nic.in/Files/Research_on_TE/A_comparative_study.pdf] (Accessed on 14/10/2013)]
- Zhou, G; Zhang, Z and Li Y.(2011) Are secondary pre-service teachers well prepared to teach with technology? A case study from China. *Australia Journal of Educational Technology*, 27(6), 943-960.[<http://www.ascilite.org.au/ajet/ajet27/zhou.pdf>] (Accessed on 14/10/2013)]
- Zuzovsky, R. (n.d.) Teacher's qualifications and their impact on student achievement: finding from TIMSS 2003 data for Israel. Center for Science and Technology Education, Tel Aviv University, Tel Aviv Israel. [http://www.ieristitute.org/fileadmin/Documents/IERI_monograph/IERI_Monograph_volume_02_chapter_02_pdf] (Accessed on 15/12/2012)]

Biographical Notes

Andrew Makori, PhD, a research coordinator at Reading Gap International CIC Limited, UK. He also serves as school governor of a junior school in the UK. He is a member of the Common Wealth Council of Education Administration and Management (CCEAM). He received his Doctorate from The University of Reading, UK. His research interests include school leadership, management and governance. He also has interest in the current issues in education in both primary and secondary education in Sub-Saharan Africa.

Henry Onderi, PhD, a senior Lecturer, Dean school of Education and Director, Kisii Learning Centre of Jaramogi Oginga Odinga University of Science and Technology, Kenya. He holds a Doctorate and Master's degrees in Education, specialising in Planning and Economics of Education from The University of Reading, UK. He graduated from Kenyatta University with Bachelor of Education Degree in Economics and Business Studies. He is widely published in teacher professional development. His research interest is in school improvement and effectiveness and teacher effectiveness.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> The IISTE editorial team promises to review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Recent conferences: <http://www.iiste.org/conference/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

