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Abstract
Kenya’s education sector has achieved many milestones since independence. However due to challenges of high population and unsustainable utilization of resources, Kenya is faced with many challenges that require urgent reforms to be able to sustain the ever increasing demand for education: free and compulsory education; and education for industrialization in line with the vision 2030 and Constitution 2010. The objectives of this paper are to identify the challenges facing education system in Kenya; establish some reform proposals and recommend strategies to mitigate the challenges. The purpose of this study is to understand the challenges facing education system arising from new needs and expectations. The findings show government has proposed development of a new education policy and legal framework to allow for accessible, efficient, effective and quality education for all children by the year 2015. Some of the reforms arising from the constitution include; free and compulsory basic education for all children; integrating pre-primary education in all existing primary schools; setting up of talent and career options for secondary school students and streamlining adult and continuing education to reduce levels of illiteracy. The government has focused on special education needs of disabled and children and those from marginalized communities, to ensure equal access to quality education. Girl child education is at the centre stage in enabling a fifty percent enrollment, retention, completion and transition of girls from primary to secondary schools. This paper discusses current challenges, presents government proposals for reform and recommends way forward towards achieving an enabling education sector that supports industrialization by the year 2030, thus making Kenya a middle income nation.

Keywords: education access, education structure, education rights, education quality.

INTRODUCTION
All major policy and strategic developments in the education sector have since independence been framed through the work of successive commissions, committees, working parties and task forces. After independence, the government appointed a committee of eminent Kenyans chaired by Prof. Ominde in 1964 (Gachukia, 2003) to collect views from the people and reform the education sector to be more responsive to the needs of independent Kenya. They recommended a system that will foster national unity; create human resources and development (sessional paper no. 1 2005:2).

The Mackay report of 1984 recommended the establishment of a second public university and retained the eight national goals of education and training articulated by Ominde report. These are; foster nationalism, patriotism and promote national unity; promote the socio-economic, technological and industrial skills for the country’s development; promote individual development and self-fulfilment; promote sound moral and religious values; promote social equality and responsibility; promote respect for and development of Kenya’s rich and varied cultures; promote international consciousness and foster positive attitudes towards other nations; and to promote positive attitudes towards good health and environmental protection. The Koech report (2000), recommended integration of total quality in education and training; this became too expensive to implement. The government managed only to rationalize the curriculum in line with national needs and international markets.

A major policy intervention was the introduction of free primary education in January 2003 by the government. Thereafter a national education conference was organised in November 2003 and their recommendations led to the development of sessional paper number 1 of 2005 which forms the current education, training and research policy. The sessional has introduced some reforms including free day secondary education introduced in 2008 (Kamunge report, 2008). This has enabled Kenya to make significant progress towards attaining the education for all (Jomtien declaration, 1990) and millennium development goals (universal free primary education) (2000). Currently, the main focus is on improving levels of access, retention,
completion, equity, quality, relevance, transition and efficiency of the education sector. Following the launch of Kenya Vision 2030 in 2007 and the promulgation of the new constitution in August 2010 it has become necessary to re-align the education sector to comply with the new developments. The study is significant because it enables the scholars and readers to understand the importance of streamlining the education sector; for industrial development. The paper discusses some challenges facing the education sector; key reform proposals and recommendations to make education accessible, equitable, efficient and effective for the 21 century needs and demands.

METHODS AND MATERIALS
This is an exploratory study and we utilised the following methods of data collection. One was to review existing relevant documents from the ministry of education such ministry of education reports; commissions and committees reports; policy papers; and legal documents. The study reviewed good practices reports from countries that operate two tier system of government (national and county); internationally and regional to understand how education is managed. The study collected primary data using stakeholder group discussions and individual key informants from key ministry institutions and memoranda submitted to the committee by individuals. The findings were submitted to a national education conference for validation and reliability. Data was analysed using qualitatively techniques and presented using tables and description.

RESULTS AND DISCUSSIONS
For Kenya to be internationally competitive and economically viable, the Republic of Kenya requires an education system that will produce citizens who are able to engage in lifelong learning, learn new skills quickly, perform more non-routine tasks, capable of more complex problem-solving, take more decisions, understand more about what they are working on, require less supervision, assume more responsibility, have more vital tools, have better reading culture, quantitative analysis, reasoning and expository skills.

The Implications of Constitution 2010 on Education Sector
The new constitution has many implications for the education sector. Articles 20 35, 42, and 43; states that ‘every person has the right to education’. If the state claims that it does not have the resources to implement this right, a court, tribunal, or other authority shall be guided by the principle that it is the responsibility of the State to show that the resources are not available to meet that constitutional right. The State will give priority to factoring in access to vulnerable groups or individuals (women, older

members of society, persons with disabilities, children, youth, members of minority or marginalised communities, and members of particular ethnic, religious or cultural communities).

Articles 53, 54, 55, 56, 57, and 59 have provisions on children’s right to free and compulsory basic education, including quality services, and to access educational institutions and facilities for persons with disabilities that are integrated into society, to the extent compatible with the interests of the person. This includes the use of sign language, braille or other appropriate means of communication, and access to materials and devices to overcome constraints arising from the person’s disability. There are also provisions on access for youth to relevant education and training; access to employment; participation and representation of minorities and marginalised groups in governance and other spheres of life, special opportunities in educational and economic fields, and special opportunities for access to employment.

Articles 62, 63, 66 refers to public land which will be vested in and held by both the nations/and county government in trust for the people resident in the Country, and shall be administered on their behalf by the national land commission; unregistered community land to be held in trust by county governments on behalf of the communities for which it is held. The articles are relevant since educational infrastructure is constructed on public or community land.

Article 237 accords special status to the teachers’ service commission whereas article seven provides for official language and national language. The national government is responsible for all education, training and research except on matters of pre-primary education and village polytechnics that have been assigned to county governments.

Kenya Vision 2030 Implications for Education Sector
Kenya vision 2030 is based on three pillars; economic, social and political. This programme plan has come after the successful implementation of the economic recovery strategy for wealth and employment creation that saw the country’s GDP grow from 0.6% in 2002 to 6.1% in 2006. The social pillar seeks to build a just and cohesive society with social equity in a clean and health environment. The pillar aims to transform eight key social sectors including; education and training, health, water and sanitation, environment, housing and urbanization. Education and training aims to provide a globally competitive quality education, training and research for development. The overall goal for 2012 is to reduce illiteracy by increasing access to education, improving the transition rate from primary to
secondary schools and raising the quality and relevance of education. The specific social strategies include: integrating early childhood education into primary education; reforming secondary education curricula; modernizing teacher training and integrate all special needs education into learning and training institutions.

The vision places great emphasis on the link between education and the labour market; the need to create entrepreneurial skills and competences; and the need to strengthen partnerships with the private sector. This has considerable importance for the structure and focus of the education system and curriculum. It also has considerable relevance to teacher education. Consequently this has been given consideration towards changing the structure of education; the introduction of technical talent; general academic curriculum pathways; the centrality of ICT to teaching and learning and its application on day to day life. Vision 2030 also recognises the need for a literate citizenry and sets targets for enhancing adult literacy from the current 61.5% to 80% by 2012. Student net enrolment is envisaged to increase to 95% whereas transition rates from secondary to technical institutions to rise from 3% to 8%.

**The implications of Bill of Rights to Education Sector**

Chapter four of the constitution embodies the bill of rights and affirms the right of all Kenyans to education. Article 21 recognises the fundamental duty of the state and every state organ to observe, respect, protect, promote and fulfil the rights and fundamental freedoms outlined in the bill of rights. The right to education includes both duties and obligations which are to be realised immediately and those which are subject to progressive realisation. The obligation to ensure free and compulsory primary education and the prohibition of discrimination in education are, for instance, immediate obligations. These are also qualified as ‘minimum core obligations’ which apply regardless of available resources. On the other hand, most of the obligations relating to the right to education are to be realised progressively according to the maximum available resources of a state.

Whilst the detailed implications of this rights approach to free and compulsory education and related services will need to be determined, it is clear that the people will increasingly demand their rights through a more empowered civil society. The provisions of Article 46 (1 a, b) are important as they grant consumers the right to goods and services of reasonable quality and to information necessary for them to gain full benefit from goods and services. Education as a service, therefore, must meet minimum quality standards which suggest there will be an increase in pressure for improved services, with comparison of indicators and results between counties.

**Current Enrolments, Transition and Completion of Primary and Secondary Education**

The main challenges facing the education sector in Kenya have been issues of access, equity, quality, relevance and efficiency in the management of educational resources. The sessonal paper number 1 of 2005 policy framework outlined short, medium and long term sector targets which included the attainment of universal primary education by 2005 and education for all by 2015. Other specific targets were set as; primary school net enrolment rate (NER) of 100 % by 2015; completion rate of 100 % by 2010; achievement of a transition rate of 70 % from primary to secondary school level from by 2008; a 50% NER in Early Childhood Education (ECDE) by 2010; gender parity at primary and secondary by 2015; and achievement of a 50% improvement in levels of adult literacy by 2010.

**Early Child Development Education, Primary and Secondary School Education**

Table 1.0: Shows status of enrolment at ECDE level 2004 - 2010

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<tr>
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<tbody>
<tr>
<td>ECDE Enrolments</td>
<td>1,643,175</td>
<td>2,162,095</td>
<td>2,193,071</td>
</tr>
<tr>
<td>ECDE GER Total</td>
<td>57.9%</td>
<td>Boys-59.6% Girls-56.2%</td>
<td>ECDE GER 60%</td>
</tr>
</tbody>
</table>

Source: MoE Statistics department 2009

The data (table 1.0) indicates that the projections were surpassed in both ECDE and adult education enrolments. The total numbers of pupils who are eligible for ECDE (4-5 years) are approximately three million. Completion rates of primary education (6-14 years) improved from 78.4 in 2004 to 83.2 in 2009; however there was a drop to 76.8 in 2010. Transition rate from primary to secondary increased marginally from 59.6 % (56.5 % male and 63.2 % female) in 2007 to 64.1 % (61.3 % male and 67.3 % female) in 2008, further increasing to 66.9 % (64.1 % male and 69.1 % female) in 2009 and to 72% in 2010. These results show achievement of the target for 2008, but the sector is yet to achieve vision 2030 target of 95% enrolment. The completion rate is on course, but should now focus on 100% completion. The gender disparity in primary education indicates equitable access for both boys and girls (Figure 1.0).
The number of secondary schools has increased from a total of 6,566 secondary schools in 2008 to 7,308 in 2009 against 26,666 primary schools over the same period. Enrolment grew from 1.18 million students in 2007 (639,393 boys and 540,874 girls) to 1,328,964 (735,680 boys and 593,284 girls) students in 2008 and further to 1,500,105 (804,119 boys and 695,896 girls) students in 2009. Figure 1.1 shows the GER for secondary increased from 27.3 % (28.8% boys and 25.7% girls) in 1999 to 47.8 % (50.9% boys and 46.3% girls) in 2010. The NER recorded an increase from 28.9 % (29.8 % male and 27.9 % female) in 2008 to 35.8 % (36.5 % boys and 35.1 % girls) in 2010 having progressively improved from13.7 % in 1999. The gender disparity index as at 2009 stood at 0.96% thus indicating 1:1 ratio of boys to girls.

Student transition rate from primary to secondary increased marginally from 59.6 % (56.5 % male and 63.2 % female) in 2007 to 64.1 % (61.3 % male and 67.3 % female) in 2008. This further increased from 66.9 % (64.1 % for male and 69.1 % for female) in 2009 to 72% in 2010.

In 2008, 924,192 primary school children representing 10.8% of total enrolled were being educated in the private sector while 171,097 secondary school children representing 12.31% of total enrolled were being educated in the private sector. Enrolment in private secondary schools rose from 83,733 students to 171,097 in 2008, whilst the growth in the number of private secondary schools is far greater than that of public secondary schools in any province. For example, in Nairobi the number of private and public secondary schools is almost the same (47:48) (EMIS, 2009). However, fast growth in numbers of private secondary schools has been restricted by shortage of affordable land.

**Education Reforms Necessary to Align Education Sector with Constitution 2010 and Vision 2030 and Bill of Rights**

Under the Constitution, the cabinet will be limited to 22 members from the current 40, which inevitably entails a new structure of management. It is strongly expected that the ministry of education and the ministry of higher education, science and technology will merge into one. This raises questions about the size of the new education ministry and the roles and responsibilities of possible new directorates. Some of the functions remaining at the national level include: policy and planning, standards and regulations, information technology, research. Whereas the process of merging ministries could bring about efficiency, there is also the possibility that gained achievements in education could be lost. For this reason there should be an agreed percentage of the education funds targeting specific units thus; pre-primary, primary, secondary, polytechnics, teacher training and special education.
The challenge with the separation of roles is that the 47 county governments may develop different strategies to manage pre-primary education thus affecting quality. On the structure of education, we analyzed responses from the key stakeholders and it came out that the current system did not include early childhood care, development and education. In view of this, it is recommended that a more flexible and comprehensive structure be introduced that integrates ECDE (2 years of pre-primary, 6 years of primary and 6 years secondary education. Kenya’s education should be aligned with the East African, Africa and international Countries including: South Africa, Ghana, South Korea and Malaysia. The new system of education should emphasize on 100% transition from primary to secondary schools and promote sciences by embracing technical education for development. The overall goal should be to provide fourteen years of learning, hence meeting the constitutional requirements.

The pre-primary education is important to the overall development in education in Kenya, because it is the crucial to a child’s intellectual development. Currently, the government has proposed that pre-primary education be transferred to the national government for quality assurance control and be integrated to primary education. Their training should be on emotional, cognitive, social, physical and moral development. Communication and manipulation skills and awareness of the surrounding environment are critical.

The primary education is divided into lower and upper primary (3 years each). The lower primary is the foundation stage in learning (ages 6-8 years). The curriculum should contain learning experiences that provide the basics for communication, numeracy and life skills through play. It will also form a foundation for moral and attitudinal development of the learners. The upper primary (ages 9-11 years) provides opportunities for further development of knowledge gained in lower primary. The content remains broad and general in nature, with a focus on developing core cognitive building blocks. The learner will develop an increasing appreciation and awareness of the environment both nationally, regionally and internationally. Knowledge and skills to be acquired include: literacy, numeracy, life skills, technological. It will also provide an opportunity for development of positive moral values and attitudes.

Secondary education will be divided into junior and senior to enable learners adapt to the changes in both curricular and physical development. Junior secondary is a transition between primary and senior secondary schools for children (12 -14 years). This phase will offer an opportunity for learners to identify areas of interest and growth and upon completion; learners will be able to join any of the four options offered at senior secondary. Besides academics, emphasis will be on technology and the identification of talents, development of life skills, moral and attitudinal skills. The senior secondary education (ages 15-17 years) will focus on specialized fields of study; technical, talent, vocational and academic. Senior schools will provide opportunities to the learners to specialise and focus on further education and the world of work. The curriculum will include development of moral and attitudinal skills, language skills, and communication skills, scientific and technological skills.

Teacher Training Education
Kenya currently has six public universities offering teacher training degree and post-graduate courses. There are 21 public teacher training colleges offering certificate training for primary teaching and 3 public teacher training colleges offering diploma training. There are 13 private universities offering teacher education degrees, 19 offering diplomas and 98 offering certificate training. A major problem with training in private colleges is that quality of entry grades are low thus affecting the output of trained teachers. Quality at public colleges is controlled by the ministry of education (Kisirkoi and Kadenyi, 2012).

Pre-primary teacher training focuses on pedagogy and subject knowledge content whereas primary teacher training focus more on subject knowledge content. Teacher trainees take thirteen subjects with no specialization. They are exposed to teaching practice for three months split into one month per term during their last year of study. Duration of training varies from two years for certificate and three years for diploma. Secondary teacher training specialises on subject knowledge in two subject areas, which they teach thereafter. Teacher trainees’ degree levels undertake a teaching practice of three (3) months once during their four years training. In addition students are required to take courses in education theory, and pedagogy. Teacher educators in TTCs are graduate teachers posted by TSC to perform these duties. In Kenya the number of public teacher training colleges has reduced from 47 in 2006 to 21 in 2010, while the private institutions increased from 16 in 2006 to 194 in 2010; due to universities taking - over TTCs as constituent colleges.

Arising out of Vision 2030, the following skills and competencies are required for learners and teachers: literacy, numeracy, and enquiry skills; thinking skills; communication skills; observation and investigative skills. Application and transferable skills; social and ethical skills; and entrepreneurial skills. Teacher education curriculum which is both academic and value based should be introduced to encourage intuitive and creative thinking. Consequently, the school curriculum should ensure that these skills and
competencies are developed in an incremental way across all subjects, taking into consideration the age of the learner, irrespective of how the curriculum is constructed and what subjects are being taught. Further, in any scheme of work and series of lessons, teachers should be able to assess the extent to which activities included in lessons are designed to develop reading, listening, comprehending, problem-solving, writing, communicating, speaking, investigating, making, doing and practising. The current teacher curriculum for primary school teachers has to be reviewed and incorporate emotional, ethics, moral values, skills attitude development and expanded to three years of study.

The link between teacher training colleges and universities should be improved. University graduate teachers posted by TSC to teach in teacher training colleges should undertake post graduate course and a mentoring programme under an experienced teacher trainer for a period of six months. It is recommended that Primary one (P1) teacher training be replaced with diploma training for primary school teachers; and teaching practice be expanded to twenty five percent (25%) of the training period for all teacher training programmes.

**Institutional Management and Governance**

The finding established that school head teachers lack a clear scheme of service for promotion and responsibility remuneration. This has caused discrepancies in their leadership skills and expectations. The study recommends the ministry to develop scheme of services for institutional managers/ head teachers. There is need to establish staffing norms; decentralize the appointment of institutions Board of Management (BOM) to the county level and expand the capacity and programmes of education institutions to provide in-service training to all staff.

It is recommended that all heads of institutions and members of BOMs will be held personally and collectively liable for any loss, misuse or embezzlement of funds under their docket either from parents, donors or government. In case of any malpractice, credible investigations will be carried out by relevant authorities, and those found guilty or culpable will not only be held to account, but will also be forced to repay back all the lost funds to the Ministry. Research methods should be introduced as a discipline and management tool at all levels of education to encourage critical, independent and investigative thinking. The paper recommends institutionalizing research in TTCs for enhance knowledge creation.

**Information Communication Technologies in Education Sector**

Education sector should be provided with the necessary ICT infrastructure, equipment and tools in order to achieve their targets as per Vision 2030. Access to power, computers and links to major education information sources is necessary. The ministry of education should provide server and web based applications that allow easy communication and collaboration; allow easy and efficient transaction of business processes both at desktop and mobile.

It of significant importance to ensure all school managers acquire the necessary skills to work efficiently with ICT equipment/tools and server/web applications in their daily activities. Provide the necessary back office technical systems and structures for digital business processing and activate e-government. The capacity of all teachers should be enhanced to be ICT compliant for effective integration of ICT into their teaching process (subject integration) and mainstreaming ICT into the entire teaching and learning process. Training of teachers on digital content development in all subjects at all levels of education will ensure equal access for learners through open, distant and E-learning (ODeL) mode of study. This will promote education access to marginalised areas.

**National Qualification Framework**

A national qualification framework (NQF) is a system for determining and assessing the level of achievement and competencies of learners who have been using different learning systems or different education structures. The system sets standards and benchmarks to be used to assess learner achievements comparatively. These benchmarks are then used to compare the achievements of a learner or the grade the learner is to be placed within the education systems in Kenya and in the world of work.

Currently, the government does not have an established NQF for evaluating students from other East Africa, Africa and globally. The Kenya national examination council (KNEC) conducts evaluations and assessment of foreign certificates and learners that have used different learning systems at the pre-university level. The paper recommends the development of a NQF for the entire education system in Kenya and an accreditation system for
Quality Assurance in Education Sector

Quality in education is the degree to which education can be said to be of high standard, satisfies basic learning needs, and enriches the lives of learners and their overall experience of living (UNESCO, 2000). During the World Education Forum that was held in Dakar in the year 2000, participants committed themselves to improving all aspects of the quality education. Currently, the Ministry of Education has a Directorate of Quality Assurance and Standards mandated by the Education Act of the Laws of Kenya Cap 211 to undertake issues of quality and standards through independent assessment/inspection. The directorate’s functions include establishing, maintaining, improving quality and standards in all educational and training institutions whether public or private. The challenge here is the fact that QA is done in-house thus, making it difficult to deal with quality defaulters.

Evidence gathered from stakeholder discussions indicates that the Directorate Quality Assurance and Standards (DQAS) is underfunded and unable to fulfill these functions. Reports from district education officers’ show that the situation is poor and the formerly effective Teacher Advisor Centres (TAC) have collapsed due to lack of resources. As a result, schools are not being inspected, most affected are the primary schools. This paper recommends the establishment of an independent Education Standards and Quality Assurance Commission (ESQAC) in the Ministry of Education. The commission’s role will be to ensure standards and quality of delivery, assessment and evaluation of education service. However, for effective implementation of SQA, more funding and resources should be made available to this commission.

Financing Reforms in the Education Sector

The main source of funding in support of education is central government which currently spends 30% of the GDP on education sector alone. The proposed reforms in the sector will cost more approximately 360 billion Kenya shillings. The government occasionally gets support from partners and donors, but only for specific budget items such as books and ICT infrastructure. This support is accompanied by certain conditions which to some extend derail the progress in providing access to education. Non-governmental organisations provide minimal support through sponsoring children from poor and marginalised communities. Parents will carry responsibilities in indirect costs of education such as school uniforms, food, health and shelter. Parents will also be required support school infrastructure such as buildings, desks and chairs. An important concept is the recommendation for establishing public- private sector arrangements to support education sector. This could be organised at national and at county levels. This is already happening at tertiary and university education sectors, but it is yet to pick up at pre-primary, primary, secondary and teacher training colleges.

CONCLUSION

The education system in Kenya is in dire need of urgent reforms to meet the objectives of Constitution 2010, Vision 2030 and Bill of rights. The government is working out formulae for devolving education service to all the 47 counties and will establish mechanisms for equal access to quality education. This process will require substantive resource investments that will be mobilized by stakeholders and other development partners. The communities and parents will meet indirect costs of education while government will meet all direct costs arising from teachers, instructional materials and examinations.

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REFERENCES

Ministry of Education (2006): Strategic Plan

Millenium Development Goals (2000)

