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Abstract
According to UNESCO, quality education is among the six EFA goals that may not be attained by 2015. Performance of public secondary schools in the Kenya Certificate of Secondary Education examination (KCSE) in Kakamega East (4.83, C minus) and Central (5.26, C minus) was average between 2009-2013. This study investigated the factors that affected performance, the quality monitoring mechanisms in use and mitigation measures for public secondary schools in the two Sub-counties. The study population was 12 principals from Kakamega East, 10 principals from Kakamega Central and two Sub-County Quality Assurance Officers. Questionnaires and interview schedules were used to collect data. There was no significant difference between the two sub-counties on document review methods. The frequency of school visits by QASO were irregular as their work was constrained by poor road network, shortage of personnel and financial challenges. This study therefore recommended that principals enhance alternative quality management avenues such as teacher appraisal, use of internal quality assurance officers by capacity building on requisite knowledge and skills.

Key words: Evaluation, Monitoring, Quality assurance, Quality education, Standards.

1.0 Introduction
Quality assurance in secondary schools falls under the Ministry of Education. At the top is the Cabinet Secretary (CS). The structure cascades to the Directorate of Quality Assurance and Standards at the national level, County Director at County level, Sub-County QASO at Sub-County level. At school level, the principal, deputy principal and Departmental heads follow in that order (MoEST, 2004). School students’ councils are mandated to assist school administrators in carrying out duties and responsibilities that enhance quality of education for instance, collection of lesson attendance statistics. The functions of Quality Assurance and Standards Officers (QASO) include regular reporting on the general quality of education, identifying educational institutional needs for enhancement, guaranteeing that quality teaching is taking place in the institutions, monitoring and evaluation in accordance with holistic standard performance indicators, ensuring equitable
distribution of teachers according to the curriculum based establishment (CBE), regular assessment of educational institutions, advising on the suitable facilities in educational institutions, encouraging a collaborative approach to educational institutional management among the various stakeholders among others (Republic of Kenya, 2004). The performance of a sub-county in the KCSE national examinations gives a picture of the level and quality of education in the sub-county. Kakamega East sub-county and Kakamega central experienced fluctuating results in the five year period from 2009 to 2013 as indicated in Table 1. The situation, showing average and unsatisfactory academic performance in Kakamega Central and Kakamega East sub-counties as depicted in Table 1 makes the current study timely and necessary.

1.1 Statement of the problem
Performance in the Kenya Certificate of Secondary Education (KCSE) is a matter of great interest to all education stakeholders in Kenya. This milestone determines the future career of a KCSE graduate. Over a period of five years from 2009 to 2013, the KCSE mean scores in Kakamega East and Kakamega Central have stagnated below the average of 6.0 ( C plain). The situation shows that majority of form four graduates in the two sub-counties join middle level colleges for diploma courses while a few who score grade B plain and above proceed to university to pursue degree courses. The current state of affairs, in which a bigger proportion of form four graduates perform averagely in KCSE national examinations makes this study imperative.

1.2 Objectives of the study
This study was guided by the following objectives
- To comparatively assess the constraints of providing quality education.
- To comparatively assess the contribution of Quality Assurance Officers in provision of quality education.
- To recommend the intervention measures that could enhance provision of quality education.

1.3 Research questions
This study sought to answer the following questions.
- What are the constraints to the provision of quality education in Kakamega East and Kakamega Central sub-counties?
- What is the contribution of sub-county quality assurance officers in provision of quality education?
- What intervention measures could enhance provision of quality education?

2.0 Literature Review
2.1 Quality learning environment
One of the effects of the introduction Free Primary Education (FPE) in 2003 was an upsurge in pupil enrolment. Consequently, the quality of education declined due to understaffing, inadequate learning materials and crowded classrooms (MoE, 2012). Quality education is holistic and covers political, cultural and economic aspects. Quality education includes quality learners in quality
learning environment (UNESCO, 2000). Quality learners are those who are healthy, well-nourished and ready to participate in the learning process. A quality learning environment is one that is safe, protective, gender sensitive and endowed with adequate resources and facilities (UNESCO, 2000). The learning environment comprises of physical, psycho-social and service delivery elements. For instance, the classroom should have adequate space, proper ventilation and adequate lighting. Learners who study in open spaces, under trees and such areas which do not offer protection from weather elements like rain are likely to experience disruptions and difficulties in the learning process (UNESCO, 2008). Learners’ exposure to the curriculum is reduced and this affects the quality of education received by such learners. In addition, low performance could be attributed to the inadequate finances which result in inadequate supply of teaching and learning materials and equipment (Gogo, 2002). The government of Kenya introduced Free Primary Education (FPE) in 2003, fees and other levies for tuition were abolished (Sifuna, 2004). Free day Secondary Education was introduced in Kenya in 2008. However, the building of new schools has often not kept pace with the increase in the demand for secondary education. The increased enrolment in primary schools consequently spilled over to secondary schools in which facilities have not been expanded proportionately to cope with the large number of students, (Ayodo, Omukoba, & Simatwa, 2011). Thus, at secondary level the issue of crowded classrooms impacts negatively on provision of quality education. The quality of the learning environment also includes non-physical and psychological elements (UNICEF, 2001). The environment should be free from fear, harassment or intimidation to the child. A quality learning environment should be welcoming, pleasant to the child and make learning a pleasurable experience. The education sector in Kenya has also kept abreast with this situation by trying to make the school more friendly and inclusive to both sexes from different backgrounds. The UNESCO report (2000) also sites conflict in form of war, civil unrest, riots, and domestic violence as issues which affect the children’s ability to learn. In Kenya, the post-election violence of 2007/2008 greatly affected the education sector. Teachers did not feel safe in areas with tribes that appeared to antagonize them. Equally, students learning in schools outside their tribal area were affected by ethnic violence which took place. These had a negative psychological impact on the quality of education received by the child. According to Boundet (1994), the quality of principals is a relevant indicator of quality schools, and therefore underscored the importance of head teachers in school administration. To this extent, the Ministry of Education introduced a Diploma in Educational Management for head teachers and principals. The course administered by the Kenya Education Management Institute (KEMI) is meant to equip the school managers with requisite skills to manage and implement educational policies in a contemporary education sector, (MoE, 2011). According to UNESCO (2008), quality teachers need to work in quality surroundings with quality learners in order to produce high quality education. Also, quality teachers should be sufficient and well distributed. Overcrowded classrooms reduce actual contact time to address different learning abilities. Quality teachers may not perform optimally if the teaching work-load is high. This research sought to examine issues that led to such unsatisfactory performance, quality assurance methods and prospective mitigation measures for public secondary schools in Kakamega East and Kakamega Central Sub-counties. According to Grisay & Mahlck (1991), when assessing the quality of education the determinants of students’ results should be put into perspective.
Determinants of students’ results include adequacy and qualifications of teachers, physical learning infrastructure and curriculum among others. Consequently, the roots of quality of education emanate from quality of human and material resources available for teaching (inputs), quality of teaching and learning practices (process) and the quality of results (outcomes). The Kaizen Philosophy of quality management lays bare the idea of incorporating quality within the process of production. Quality at the source shifts the responsibility of ascertaining quality from the overall supervisors to the hands of the actual implementer or operator who has the requisite and adequate tools in conducive working environment (Ortiz, 2009). The idea is to ascertain quality at every stage of production instead of checking quality of the end product. At the end point, there is no way of making corrections.

2.2 Internal quality assurance approaches

Quality assurance approaches focus on the concept of monitoring and evaluation in order to provide feedback on teaching and learning practices. The Kenya Education Task Force report (2012) noted that provision of quality education in Kenya is constrained by severe shortage of teachers, inadequate learning materials, insufficient relevant training, and inadequate budgetary allocations (MoE, 2012). According to the Kenya Education Staff Institute (KESI), a body established under the Ministry of Education with the function of upgrading the core competencies of school principals, knowledge and skills of education managers, the school principal or head teacher has a vital role to play in curriculum implementation. The principal is a manager on the ground tasked with actual implementation of the curriculum as envisaged in the national goals of education (MoE, 2011). Further, the role of the school principal in quality assurance is outlined by KEMI as: mobilizing resources, overseeing preparation of professional records, subject allocation and time tabling, organizing resources to support the curriculum implementation process, assessment of curriculum implementation and curriculum supervision. Internal quality assurance in a school setting starts with the principal and cascades down to the deputy principal, departmental heads, subject heads, student and class leaders. The specialization by secondary school teachers in two teaching subjects makes it imperative for the head teacher to use other officers with specialization in the relevant subject area to enforce quality practices. For instance the head of department Science is responsible for quality enforcement and checking records in Physics, Chemistry and Biology. The student/class leaders assist in maintenance of lesson attendance forms. All the records are periodically forwarded to the school principal for final approval and corrective action. Therefore, the follow up, assessment and feed-back provide leadership to teachers’ better management of the teaching and learning process. (Clark, Clark, & Good, 1997).

2.3 External quality assurance mechanisms

Quality Assurance and Standards in Education in Kenya, is a function of the Directorate of Quality Assurance and Standards which is the professional arm of Ministry of Education. Before 2003, the directorate was formerly known as the Inspectorate Division. The rationalization of the operations of the Ministry of Education headquarters staff bore five directorates running education. These were the Directorate of Basic Education, Directorate of Policy and Planning, Directorate of Quality Assurance and Standards, Directorate of Higher Education. The officers in the field, hitherto known
as inspectors, a term that gave the negative perception of fault finding (Okumbe, 1987), were re-designated as Quality Assurance and Standards officers. The new title was to portray an image of a supportive and advisory stakeholder with aim of assisting the school managers and teachers effectively provide quality and relevant education using the available resources. An external quality assurance officer is deemed to be neutral, objective and devoid of any stereotypes, prejudice or bias that are likely to influence performance of duty. The education task force report noted that provision of quality education in Kenya was constrained by shortage of quality assurance and standards officers, insufficient relevant training, shortage of resources such as vehicles for external quality assurance officers and inadequate budgetary allocations (MoE, 2012).

3.0 Methodology
The research design which was adopted in the study was a descriptive survey. According to Lokesh (1984), descriptive research studies are designed to obtain pertinent and precise information concerning the status of phenomena and whenever possible to draw valid general conclusions from the facts discovered. The study population was all the 39 public secondary schools in Kakamega East sub-county and 35 in Kakamega Central. From this, stratified random sampling was employed to select 12 schools in Kakamega East and 10 schools in Kakamega Central. The study narrowed down to public secondary schools which had KCSE results by the time of conducting the study. The schools selected formed a sample size of 30% of the population from each sub-county. The study utilized both questionnaires and interview schedules as tools for data collection. The questionnaire was employed as a data collection tool because it offers considerable advantage in administration to large numbers of people simultaneously and provides the researcher considerable time advantage in collection of data from a big sample (Kiess & Bloomquist, 1985). The semi-structured questionnaire was designed for collecting data from principals. The questionnaire contained both open and closed ended items. A checklist of responses was provided plus space for additional responses not captured in the check list. A semi-structured interview schedule was used to interview Quality Assurance and Standards Officers. This allowed the researcher to probe responses further using follow up questions to get clarifications. The pilot study was conducted in 2 schools that were not included in the study. Piloting helped to improve the validity and content of the instruments.

4.0 Findings and Discussion
The findings from the questionnaire with the principals are summarized in Table 2.

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Table 2: Checking schemes of work, record of work, regular testing, lesson attendance statistics and class attendance registers

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The findings in table 2 show that principals in Kakamega East and Kakamega Central sub-counties mostly relied on document checking and regular testing to ascertain quality in the schools. Kakamega East recorded 12 (100%) on checking record of work, schemes of work, regular testing and checking lesson attendance statistics. Similarly, Kakamega Central recorded 10 (100%) on checking record of work, checking schemes of work, regular testing and review of lesson attendance statistics. The two sub-counties also scored highly on use of attendance registers. Eleven principals (92%) in Kakamega East and nine principals (90%) in Kakamega Central reported using attendance registers to monitor teacher performance. The heavy reliance on document checking by
principals in the two sub-counties could be attributed to the fact that these documents are easy to check at a convenient time unlike the class visits which need pre-arranged sessions according to the lesson time table. Further, checking schemes of work, records of work and attendance registers could be delegated to departmental heads and subject heads. The 100% use of lesson attendance statistics in both sub-counties could be due to the fact that it is relatively cheap to administer and can be maintained by student class leaders on a daily basis, then forwarded to the principal. The other reason for use of document review is that these documents are normally checked, per department, by external quality assurance officers. Thus, such records are mandatory during external assessments. These findings on use of document reviews to check quality agree with the findings of Mobegi, Ondigi and Oburu (2010) in the study on quality assurance challenges in secondary schools in Gucha sub-county. Regular testing was employed by all principals who participated in the study from both Kakamega East and Kakamega Central (Table 2). Schools in both sub-counties have already established systems of testing learning outcomes by use of examinations. This could be due to teachers at all levels having adequate training and skills done as part of the teacher training curriculum. The practice is widely used due to the practice of providing report cards on students’ progress at the end of each school term. All stakeholders, teachers, students, parents, guardians and sponsors, expect this document as a communication tool about the learner, on the basis of which a sponsor decides to continue to pay fees if the academic performance is satisfactory. Therefore, the demand for report cards by various educational stakeholders coupled with the school’s attempt to verify learning outcome at the end of term necessitates the use of report cards.

Class visits, internal quality assurance officer, departmental supervision and teacher appraisal.

The two sub-counties scored below par on use of class visits as a quality assurance measure. In Kakamega East two principals (17.5%) did class visitation while in Kakamega Central three principals (30%) used class visitation to ascertain quality. The class visitation was reported to have been used on teacher trainees on school attachment. Teacher trainees undergo class visitation as a mandatory requirement from the college. The observation is expected to be done by either the principal, deputy principal, head of relevant department or the collaborating subject teacher. The principals, however, rarely observed the teachers on attachment instead opting to delegate the duty. Class visitation was not used to observe the regular teachers employed by the Teachers Service Commission. Comparatively, Kakamega Central reported higher percentage on class visitation by three principals (30%) than Kakamega East with two principals (17.5%) reporting to have used class visitation. The difference could be attributed to Kakamega Central receiving more student teachers due to proximity to Masinde Muliro University of Science and Technology (MMUST). Findings from questionnaires with principals in table 2 show that internal quality assurance officers were not regularly used to check quality. In Kakamega East, for example, five principals (41%) reported using internal QASO and four principals (40%) in Kakamega Central used internal QASO. The difference in the use of internal QASO in the two sub-counties was, however, not significant. In a number of recently established mixed day schools, acute teacher shortage made principals to delegate quality assurance duties to heads of department. In Kakamega Central seven principals (70%) reported using heads of department while in Kakamega East eight principals (66%) used
heads of department. The departmental heads were tasked with checking schemes of work, checking records of work, verifying quality of examinations, lesson distribution in the department, among other routine duties. Equally, the departmental heads periodically checked students’ notes against schemes of work and record of work covered and alerted the principal of any discrepancies. This method of supervision was hindered by low morale among the departmental heads as they did not have appointment letters from the Teachers Service Commission. In schools where staffing was a challenge internal quality assurance rested with the principal.

On the issue of teacher appraisal both sub-counties indicated low application with three principals (25%) in Kakamega East and three (30%) in Kakamega Central reporting to have done it. Teacher appraisal, was, however an external requirement by the TSC for purposes of promotion rather than an internal quality monitoring mechanism. Nonetheless principals appreciated teacher appraisal as one way of monitoring teacher performance and quality of work done. Appraisal was also seen as interactive and corrective because the appraisee was an integral participant in the process.

**Frequency of visits by quality assurance officers**

Data from Principals’ questionnaires presented in table 3 indicates that the visits by the Sub-county Quality Assurance and Standards Officer to schools in Kakamega East and Kakamega Central in the period 2009 -2013 were largely irregular. In Kakamega East, three principals (25%) reported that their QASO had visited their schools regularly while nine (75%) indicated that assessment visits by QASO were not frequent. The situation was almost replicated in Kakamega Central where three principals (30%) indicated that QASO visits were regular while seven (70%) noted that the QASO visits were not regular. Therefore, a majority of principals in both Kakamega East, nine principals (75%) and seven (70%) in Kakamega Central reported that QASO visits were not regular. Consequently, a majority of schools in both sub-counties did not receive timely assessment and follow up advice on quality assurance. This situation was caused by inadequate quality assurance personnel per sub-county whereby only one quality assurance officer was designated per sub-county. One school in Kakamega East had been visited once since inception and the visit was occasioned by poor performance in KCSE nationally. Some schools in far flung, inaccessible areas were less likely to be visited as opposed to schools that were well served by means of communication. School visitation was also hampered by financial challenges ranging from limited budgetary provision and delayed disbursement of funds.

**4.1 Conclusions**

Principals in Kakamega East and Kakamega Central sub-counties mostly relied on checking schemes of work, record of work, attendance registers, lesson attendance statistics and regular testing to ascertain quality in the schools. Also, department supervision had taken root but not to optimum level. There was no significant difference between the two sub-counties on document review methods.

Principals in the two sub-counties were yet to fully embrace non-document review methods such as class visitation, use of internal quality assurance officers and teacher appraisal. Kakamega Central scored slightly higher on class visitation and teacher appraisal as compared to Kakamega East.
The frequency of visits by QASO in the two sub-counties was not regular although Kakamega Central schools experienced a slightly higher number of visits. The quality assurance and standards officers’ work was constrained by poor road network, a big number of schools to visit within a short time and financial as well as logistical challenges.

4.2 Recommendations
This study made the following recommendations, consequent upon the findings herein. Internal appointments of quality assurance officers and departmental heads should be ratified by the board of management (BOM) and forwarded to the Teacher Service Commission for substantive appointment. This would motivate teachers as well as give principals supervisory legitimacy. This study found out that internal school QASO lacked the requisite training. Therefore it is the recommendation of this study that school QASO should be inducted by organizing capacity building training to enhance their knowledge and skills on quality management in education. The sub-county QASO could develop and enforce a systematic assessment schedule with head teachers which would accord each school equal chance of assessment at least once every two years.

Tables

Table 1: KCSE mean scores from 2009 -2013

<table>
<thead>
<tr>
<th>Sub-county</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Average 2009 -2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kakamega East</td>
<td>5.42</td>
<td>4.38</td>
<td>3.56</td>
<td>5.45</td>
<td>5.35</td>
<td><strong>4.83</strong></td>
</tr>
<tr>
<td>Kakamega Central</td>
<td>5.19</td>
<td>5.38</td>
<td>5.17</td>
<td>5.20</td>
<td>5.36</td>
<td><strong>5.26</strong></td>
</tr>
</tbody>
</table>

(Sub-county Education Office, Kakamega Central and Kakamega Central, 2014).

Table 2: Approaches to quality management by principals

<table>
<thead>
<tr>
<th>Approaches</th>
<th>Frequency/12</th>
<th>Percentage</th>
<th>Frequency/10</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check record of work</td>
<td>12</td>
<td>100%</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>Schemes of work</td>
<td>12</td>
<td>100%</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>Departmental supervision</td>
<td>8</td>
<td>66%</td>
<td>7</td>
<td>70%</td>
</tr>
<tr>
<td>Use of internal quality QASO</td>
<td>5</td>
<td>41%</td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>Check on students work</td>
<td>2</td>
<td>17%</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>Regular testing</td>
<td>12</td>
<td>100%</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>Teacher appraisal</td>
<td>3</td>
<td>25%</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>Attendance registers</td>
<td>11</td>
<td>92%</td>
<td>9</td>
<td>90%</td>
</tr>
<tr>
<td>Class visits</td>
<td>2</td>
<td>17.5%</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>Lesson attendance statistics</td>
<td>12</td>
<td>100%</td>
<td>10</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Researchers, 2014.
Table 3: Schools visited by Sub-County QASO in the period 2009 – 2013.

<table>
<thead>
<tr>
<th></th>
<th>Kakamega East</th>
<th></th>
<th>Kakamega Central</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency /12</td>
<td>Percentage</td>
<td>Frequency /10</td>
<td>Percentage</td>
</tr>
<tr>
<td>1. Yes</td>
<td>3</td>
<td>25</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>2. No</td>
<td>9</td>
<td>75</td>
<td>7</td>
<td>70</td>
</tr>
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</table>

References


