## Reliability of Mock Examinations for Prediction of the Kenya Certificate of Secondary Examination (KCSE) Results

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#### Abstract

Mock examination as a formative assessments criterion also acts as a fallback in case of a need to predict early university intake, or investigate any suspicions or malpractice in the final examinations. Mock therefore as an assessment tool, must meet the guidelines on examination procedures to ensure reliability. The study was conducted with the objectives of determining whether the mock examinations are reliable enough in terms of quality assurance indicators for use in predicting the results of the Kenya Certificate of Secondary Education examinations (KCSE). The research used the survey design with questionnaire as the research tool. The questionnaire was administered to a population sample of 65 secondary schools that represented all the categories and quantitative and qualitative analysis done. The study found that the quality assurance indicators that guide examinations are practiced in most schools during the preparation and administering of mock examinations. The research further found that there is high positive correlation (0.949) between the mock and KCSE examinations results. The study concluded that mock examinations are reliable but there is need to harmonize the structures for setting, moderation and invigilation to make it more stringent. JEL CLASSIFICATION: 120

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#### **1** Introduction

#### 1.1 Background

Kenya has official national examinations conducted by the Kenya National examination Council (KNEC): an official examination body appointed by an act of parliament. The Kenya National Examination Council conducts several summative examinations mainly for grading purposes. The Kenya Certificate of Secondary Education (KCSE) examinations done at the end of every year by the final secondary school candidates is one of such examinations and is used to determine the candidate's next level in the education hierarchy including the intake to foreign Universities. The Universities of high repute in Kenya and abroad are competitive and only take the best in terms of performance for the most preferred courses. This brings about a lot of competition in terms of course selection acts as a bottleneck of going to the next level of education.

Currently the credibility of the KCSE examinations is low due to some unethical practices which arise from the competition that is related to the fact that KCSE is a high stake examination. As a result, some foreign Universities have resorted to comparing a candidate's mock examination results with the KCSE results such that if there is a negative correlation between the two especially the KCSE result average being lower, then it is considered as an indication of some irregularities, a situation that has caused unnecessary embarrassment to many candidates seeking education outside the country especially to the developed world.

The emphasis being laid to mock exams has resulted in situations of school unrests that have made the officials in charge of education to ban provincial and district mock examinations. This has occurred because both the students and the relevant authorities in the education sector have not taken note of the importance of mock examinations in relation to the final national examination. Educational reports have also indicated that mock examinations have become unpopular with the students and the society at large because of the following reasons:

- 1. The prohibitive punishment which teachers impose on students who fail to do well in the mock examinations.
- 2. The high cost of conducting the provincial and the district mocks which is ideally bone by the parents.
- 3. The belief by the students that mock examinations are more difficult and unpredictable because the questions tend to cover a wider area than the final examinations.
- 4. The students' negative attitude towards the whole process of setting and marking mock examinations which in most cases is not done in a transparent manner.

The main question being asked is whether mock examinations can be made official and be used to validate the KCSE examinations in case there is a problem with the former. Teachers also depend on mock examinations to

predict the results of the main examinations and even develop the final teaching and revision strategies as a way of improving performance in the final examinations.

#### 1.2 The Role of Assessment in Education

The quality of education system is a very crucial determinant of the economic development and social stability of any nation. According to Bunyi (2001, pp 77-100) the society requires and always demands quality education to ensure quality and continuity. The definition of quality education is not complete if the quality of assessment is not factored in to the education system. Bloom etal (1971) pointed out that continuous assessment may help to pace the student learning, motivate the student to study, reveal specific areas of learning difficulties and provide feedback to the students and teachers. Continuous assessment should therefore be considered as a process that offers comprehensive assessment of the student learning in terms of assessing wide coverage of the syllabus taught, using a variety of assessment techniques and taking care of remedial work where necessary. Maria etal (2010) identifies the main criteria of quality and acceptable assessment to include the use of a published criteria, regulations and procedures that are acceptable and are consistently applied.

#### 2 Relating Instant Testing to Formative Assessment Tests

#### 2.1 The Importance of Mock Examinations

Achievement through assessment has under gone a major shift worldwide from the culture of instant testing to the culture of continuous assessment. Strong emphasis is being placed on the integration of assessment and instruction on assessing processes rather than just products used on evaluating the individual progress relative to the starting point.

Pido (2004a) correlated continuous assessment scores and the final examination scores for twenty two courses in the technical education examined by Uganda National Examination Board (UNEB) and reported a wide range of correlations which included negative correlations, low correlations and high correlations in some studies. Despite the low correlation, the conclusion was still maintained that the continuous assessment is still regarded as a very important instrument in the promotion of effective teaching and learning. It is considered as an essential component of classroom activities and could raise the standards of students' performance (Black and William, 1998). According to Blooms etal (1971, pp 177), continuous assessment may help pace the students learning, motivate the students to study, reveal specific areas of learning difficulties and provide feedback to the students and the parents. Studies have shown that if assessment is properly used either external or institutional based assessment can serve as a tool for enhancing the quality of teaching and learning. Bunza (1999) reported that integration of mock and other forms of continuous assessment into the final examinations has gained momentum in several countries within and outside Africa. The best example in Africa is South Africa and Nigeria where 25% and 30% respectively of the final mark given to a student is the continuous assessment mark.

The mock examination which is done a few months before the main national examinations as part of continuous assessment has been used as a measure or a predictor of performance in the national examinations in Kenya. Most of the teachers and schools use the mock results to gauge their students and develop more refined revision strategies. Other reasons generally given for insisting on doing mock exams before the main examinations include:

- 1. Mock examinations are used to gauge what level student are working such that any teacher who pays attention to the student should use the mock to have an idea of what the student would get in main exams.
- 2. Mock exam put students in an exam mood and emulate requirements of the main exam council conducted by the national exam council.
- 3. The methods which the students use in answering the questions give them a bearing on how they are likely to answer actual exam hence giving the teacher an idea on how to correct some of their mistakes. It also gives the students the techniques and the style of the questions.
- 4. Under special circumstances Mock exam can be used to validate the KNEC exams indicating the importance the exam body put in the Mock.
- 5. Currently most universities and colleges admit students based on their Mock results.
- 6. This is an excellent way of seeing how much information students can remember, discovering their strengths and weaknesses and practicing their exam timing. This is because for serious students trying to remember something in the Mock exam and failing provides an incentive to go back to the material and revise. This way the student is not likely to forget this again and it reduces anxiety.
- 7. Mock examinations help the students to overcome nervousness and will almost certainly ensure a higher mark in the real examination (Darrel 2008)
- 8. Mock examinations act as a springboard for the students into a longer term development process of academic skill acquisition. It is characterized by huge investments in terms of financial and human resources. It is thus expected that the learner's performance in the mock examination would promote or enhance the performance in the national examinations.

Mock examinations have been used widely to predict final examinations and even admit students to tertiary colleges in Kenya and abroad which spells the urgent need to determine its reliability and hence the justification for such applications.

One area that must be assessed when analyzing the reliability of mock examinations is the source of threats to reliability. According to Frederickson and Collins (1989), the major sources of threat to reliability in examinations include an incomplete sampling of the construct due to the temptation to avoid difficult area that would affect reliability and the existence of irrelevant variance which is caused by undesirable ways of answering questions through rot learning, coaching and use of pre examination prepared answers.

#### 2.2 Challenges in Using Mock Examinations to Predict the Final Examinations

The practice of conducting mock examinations before the main examinations is a common practice in many parts of the world but negative sentiments have always arisen from the culture of associating mock examinations with the main examinations. In most studies already reported the two examinations show no significant correlation. Studies done by Carole and Bates (2004) on the relationship between mock and main exams in the Florida dental school reported no significant association between the two. Papers presented at the Association for Educational Assessment in Africa (AEAA) annual conference in have shown concern about the low correlation between continuous assessment tests and the national examination scores. The same sentiments of low correlation were also reported by Bunza (1999) for Nigeria, Merwe (1999) for Namibia. Lewin (1997) observed that the highest scoring standards had a low correlation between the mock and the final examinations while the lowest scoring standards had a high positive correlation between the mock and the final examinations.

Survey carried out by Leonard (2004) reported that conditions under which mock exams are done in some schools in Kenya is stricter than the main examinations which are manned by external invigilators. Furthermore, most teachers try to ensure that the mock examinations cover the whole syllabus as they are used to set standards for the final examinations. A significantly high percentage of the respondents (78%) indicated that mock exam questions are more difficult than the main exam questions. The respondents complained that the emphasis put on mock examinations and the resulting deterioration of standards as well as the prohibitive punishment given due to mock failure in schools and the fact that the school strikes are often blamed on the mock examinations poses a serious challenge to educators and especially the examination assessors. The challenges associated with mock examinations have made it necessary to ban provincial and district mocks temporarily in Kenya.

Using mock examinations to predict the outcome of the main examination should be done only if the two examinations are done under the same conditions within the students and the environment. Falchikov and Goldfinch (2000) reported in their quantitative studies comparing teacher assessment and the national examinations subjected to meta analysis that the two resemble each other when judgment is based on well understood criteria rather than when marking involves assessing several individual dimensions. Franklin (2008) reported in his book that the learning achievements obtained through assessment can be affected by constraints caused by the context in which the teaching and assessment conditions occur and the unawareness of the effect that assessment has on the students themselves. He emphasizes that for two or more achievements to be compared, factors such as reliability, validity, designing plans, setting of questions, grading, assessment environment and approach must be constant. Doran etal (2007) emphasize that successful applications of measurements require comparable measurements even if they are made in differing circumstances by different methods and investigations. According to Ying and Sireci (2007) un intended factors introduce construct irrelevant variance in to the test scores and thus changes the construct that the test intended to measure. As a result, the test scores obtained from the test no longer provide an adequate basis for the kinds of inferences the test user intends to be able to make. This may bring differences and inaccuracies when comparing mock examinations and the final examinations.

#### 2.4 Reliability of Assessment

Clive and David 1997) observed that reliability is an umbrella term under which different types of score stability are assessed. She indicated that in essence, the reliability index of a test score is the indicator of its stability. This may mean the stability of test scores over time as indicated through test-retest, stability of item scores across items through internal consistency or stability of item ratings across judges or raters of a person, object, and events through internal reliability. According to de Villiers (1991), reliability is the proportion of variance attributed to the true measurement of a variable and estimates the consistency of such measurement over time. It is therefore considered as a measure of the degree to which a measurement would yield the same results or data after repeated trials. Reliability as it is typically defined and operationalized in the measurement literature provides the standardized forms of assessment (Moss, 1994). Messick (1994), states that reliability consists of important social and scientific values, the methodology for evidencing those values and has to consider issues of dependability, stability, accuracy and consistency.

Reliability scores have long been the primary condition to be met in order for any assessment procedure to be a sound measurement (Parkes, 2000). The classical test of reliability theory by Parkes (2000)

which rely on reliability coefficients, dependability coefficients, consistency, precision and standard errors of measurement is important in research. The information functions and agreement indices serve as evidence of broader social and scientific values that are critically important. The reliability coefficient is the piece of evidence that operationalizes the values of accuracy, dependability stability, consistency and precision.

Ryan (2011) defines quality Assurance as the 'administrative system' put in place, to ensure that quality control can be carried out effectively. Quality Assurance runs through staff training, administrative procedures and quality monitoring of the product at various stages to ensure the highest standard. To ensure reliability in a given activity there are certain standards that must as part of the quality assurance. The Kenyan examination system puts quality emphasis on the preparation and administration of the examinations through stringent conditions for setting, administration and marking the examinations. This whole process is supervised by the school administration in the case of mock examinations and the Kenya National Examination Council in the case of KCSE examinations.

#### 3. Research Design and Methodology

#### 3.1. Research Design

This study employed survey research design and used questionnaire and unstructured interview guide in data collection. The result of the survey was generalized to the population represented by the sample used in the study.

#### 3.2. The Target Population

The study targeted interest groups that have been and will be affected by the assessment policies in Kenya. This includes all secondary schools in the country.

#### 3.3 Sample and Sampling Procedure

Stratified random sampling was used in this study. This is because the population studied was heterogeneous with differences in terms of gender, rank level of education and the different factors that affect the different categories. Sampling was done in each of the categories in order to get representative respondents. Representative sample population was drawn from the following categories.

- 1. National Schools 15
- 2. Provincial Schools 34
- 3. District Schools -12
- 4. Private Schools 4

#### A total of 65 schools were analyzed.

#### 3.4. The Research Instrument

The main research instrument was the questionnaire which was used to collect information from the respondents from each of the categories. The questionnaire consisted of self report likert scale, categorical description and open ended questions. All the relevant data on the results of mock examinations and the corresponding final examinations for randomly sampled years were obtained either from the sampled schools or the national examination council respectively.

The questionnaire was pilot tested with two respondents from each category of the representative population. Necessary changes which arose during the validation were made where appropriate. Internal consistency coefficients for the scales in the instruments were calculated in order to meet the required standards.

#### 3.5. Test for Validity and Reliability

#### 3.5.1. Validity

Test for validity was done by face validity which is the researcher's subjective assessment of the instruments appropriateness and sampling validity which is the degree to which the statements, questions or indicators constituting the instrument adequately represents the qualities measured.

#### 3.5.2 Reliability

The reliability coefficient was calculated using the test-retest method to provide evidence that operationalizes the values of accuracy, dependability, stability, consistency and precision. The calculated reliability coefficient was 0.91; an indication that the errors were minimal.

#### 3.6. Data Collection

The questionnaire was administered to the sample population by the researcher. Each respondent was given a questionnaire and a cover letter explaining the purpose of the study. The respondents were given questionnaires to fill and most of them returned. Some of them were interviewed directly by the researcher using the questionnaire as the guide. Other data collection tools that were used where applicable include; documentaries, existing records and reports.

#### 3.7. Data Analysis

Data analysis for this study was done by SPSS (Scientific Packages for Social Sciences). Most of the data was analyzed using descriptive statistics. Correlations were used to analyze relationship between the mock and the final examination results.

#### 4 Findings

#### 4.1: Introduction

The purpose of the study was to assess the reliability of mock examinations in predicting the results of the final examinations (Kenya Certificate of Secondary Examination (KCSE)) as determined by the mock examination preparation, marking and teacher qualification as the quality assurance indicators.

#### 4.2: Mock Examination Preparation Indicators

The preparation indicators assessed included preparation and keeping of the student records and the principals' follow up to ensure the documents are prepared as required. The observations show that 98.5% of the teachers prepare and keep students records, 100% of the teachers contacted prepare and keep the records of work and schemes of work respectively while 95.4% keep past examination papers. The percentage of teachers who keep KNEC examination past papers is lower at 62.9% but is still a significantly high figure since it is more than 50%. The results are agreeable with the teaching and learning support requirements in the education sector and as a means of improving the content that is taught (Table 4.1). According to the responses received, 95.3% of the responses indicated that the principals make a follow up to ensure that the documents are prepared as required by the teachers (Table 4.2). This is in tandem with the requirements for quality assurance in teaching and learning. The follow up activity acts as the motivator for the teacher.

#### 4.3: Mock Examination Marking Indicators

The analysis of the mock marking procedure in schools considered the actual marking of the mock examinations as well as the moderation and invigilation procedures. The results showed that 87.7% of the schools use test specification while setting their mock examinations, 89.2% moderate their mock examinations before administering. However, the level of training on testing, record keeping and test construction is still very low at 43.1% against 56.9% of the teachers who are not trained on the same (Table 4.3). The majority (69%) of the mock examinations are moderated by the subject teachers of the candidate class other than the one who has done the setting. The results also indicate that in 24.1% of the cases, teachers of other classes teaching the same subject are given a chance to moderate the mock examinations. It is in very few cases that any other teacher and external invigilators are given a chance to moderate school based examinations which is accounting for 1.7% and 5.8% respectively (Figure 4.1)

On invigilation and actual marking, the results show that 70.3% of the invigilation of the mock examinations is done by other subject teachers of the candidate class but 25% of the respondents indicated that any teacher within the school can invigilate mock examinations. In the majority of cases (71.4%), the marking of the mock examinations is done by the subject teachers of the candidate class or classes. In 14.3% of the cases, the marking is done by other subject teachers within the school and external examiners (Figure 4.1)

#### 4.4: Teacher Qualification Indicators

The teacher qualification indicators were analyzed in terms of the highest professional qualification of the teachers, the experience of the teachers, the number of schools with teacher trained as KCSE examiners and number of schools with teachers who mark KCSE examinations.

The results showed that the majority of teachers are qualified to teach and examine the students as indicated by the high percentage of teachers with Bachelor of Education degree (75%) and is supported by those who have trained at Post Graduate Diploma in Education (PGDE) at (6.3%) and diploma at 9.4%. This gives an overall impression that at least 90.7% of the teachers in Secondary schools who teach the candidate classes are qualified to teach and set examinations for the students as per their training (Figure 4.2).

It appeared that the majority (60%) of the teachers who teach the candidate classes have a long teaching experience of 10 years and above. This is observed from the fact that the highest number of teachers fall in the experience category of 16-20 years at 24.6%, followed by the category of 11-15 years (20%) and those with over 20 years experience at 15.4% (Table 4.4).

The results show that only 32.3% of the schools have at least one candidate class teacher trained as a KNEC examiner while 67.7% do not. This may be a draw back to the setting, moderation and marking of mock examinations because most of the teachers may not be familiar with the requirements of the National Examination Council when it comes to the processes of setting and marking the examinations (Table 4.5). The percentage of schools with teachers who mark KCSE examinations is very low at only 24.6% against 75.4 percent who don't (Table 4.6). This is in tandem with an earlier observation that only 32.3% of the candidate class teachers are trained to mark KCSE examinations.

#### 4.5: Correlation between Mock Examinations and KCSE Examinations Results

The result of the mock examinations is the independent (explanatory) variable while the KCSE examinations results form the dependent (response) variable. The Mock examination results were plotted against the KCSE results and a scatter graph obtained. The results show a strong positive linear correlation between the mock and the KCSE examinations (Figure 4.3). Both the Pearson Correlation and the Spearman's rho correlation gave a very high positive correlation of 0.949 and 0.942 respectively and is significant at 0.01% (Table 4.7 and 4.8)

# 5 Discussion, Conclusions and Recommendations on the Reliability of Mock Examination Results *5.1: Discussion*

The discussions are based on the two objectives which include: to determine; whether the mock examinations are reliable enough to be used for predicting the results of the final KCSE examinations; whenever need arises, whether there is a correlation between the final KCSE examinations and the mock examinations 5.1.1: The Reliability of Mock Examinations

The study found that almost ninety one percent (90.7%) of teachers in secondary schools who teach candidate classes are qualified to teach and set examinations for the students as per their training. Only about nine percent (9.3%) are not qualified. The study found that those who teach candidate classes are highly experienced with a period of above ten years forming sixty percent (60%) of the total number of those who teach candidates. Those with experience of less than one year form only nine point two (9.2%) percent. James and Pedder (2006) indicated that the professional qualification and experience of the teacher affects the testing and marking values as well as the teacher's adaptation to testing and marking strategies; an indication that the majority of those testing the mock are capable of producing high quality results which are reliable enough for further use.

As for the preparation and keeping of the students records, the study found that more than ninety five percent (95%) of the teachers who teach candidate classes prepare and keep students progress records, records of work and past examination papers. However the study found that about sixty three percent (63%) prepare and keep KNEC marking schemes while about thirty seven percent (37%) do not. Keeping of records is a very important aspect of ensuring quality especially when mock examinations is considered to be part of the continuous assessment which has been described by Hog and Gregg (1994) as an ongoing process which involves systemic preparation, analysis and interpretation of the student performance for a broader appraisal of the student's knowledge.

The role the principals' play in follow ups to the teachers preparations cannot be over emphasized. The study found out that ninety five percent (95%) of the teachers indicated that the principal make follow ups however, these varies from time to time. Majority indicated that the follow up is either once in a month or once in a term. Fewer principals make frequent follow ups weekly or biweekly. According to the Ministry of Education policy on education, the follow ups are normally left at the discression of the school principal. Some school principals delegate this task to the heads of department or more recently to the deans of studies. According to Murphy etal (1986), the function of evaluation and supervision forms important linkage mechanisms in a school, especially goal setting and other forms of control.

Of the teachers interviewed it was found that very few are trained KNEC examiners (32%) while majorities (68%) are not trained. The analysis further shows that only those who are trained as examiners are allowed to mark KCSE examinations and are of varying experience ranging from 1-5 years which forms 38% of the examiners and over 10 years experience forming 33.3% of the examiners. This is an indication that those who are trained examiners and are still marking the examinations have a lot of experience. Of the trained examiners, only 25% take part in marking KCSE. The fact that only the KNEC trained examiners are allowed to mark KCSE is a KNEC policy on marking of the National Examinations but is limitation on how far the teachers can go in gaining the marking experience that they may need to conduct the setting and marking of the mock examinations. This notwithstanding, the study also found that the Ministry of Education has played an important part in training teachers on testing and marking examinations in general over and above what the teachers learnt during their training. About 60% of teachers interviewed have received special training on the test construction and record keeping offered by the Ministry of Education. Other sources of training to the teachers have been identified to include the schools, individuals, NGOs and short courses in in-service colleges which support the experience of none KNEC trained teachers when it comes to setting and marking mock examinations. Further support can be drawn from the fact that 59% of all the none KNEC trained teachers have interest in how the KNEC examination are set and marked as indicated by the fact that they prepare and keep KNEC questions and marking schemes on their subject; an activity that has contributed to the improvement of their experience. This is in contrast to the finding that only 41% of the KNEC trained examiners do the same.

The study also analyzed the aspects of examination preparation to maintain quality such as test specifications, moderation and invigilation of mock examinations. The analysis is necessary to avoid what Fredrikson and Collins (1989) referred to as the major threats to reliability in examinations which include incomplete sampling of the construct and the existence of irrelevant variance. The study found out that majority of the schools (87.7%) use test specifications while setting the mock examinations and 89% moderate their examinations before administering and among those who do this 43% have received special training on test construction and record keeping while about fifty nine point nine percent. The study found that 70% of the mock examinations are moderated, invigilated and marked by other subjected teachers of the same department other than the teacher who teach and set the examinations. This is an indicator that mock examinations pass through more than one hand before being administered to avoid inconsistencies. This is consistent with the survey by Leonard (2004) who reported that condition under which mock examinations are done is stricter than the main

examinations and that mock examination questions are more difficult than main examination questions. These facts also discount the fears by Franklin (2008) that the learning achievements obtained through assessment can be affected by constraints caused by the context in which the teaching and assessment conditions occur. It is in very few cases that any other teacher and external invigilators are given a chance to moderate the mock (or any school based) examinations.

#### **5.1.2** Correlation between the Mock and the KCSE Examinations.

The study found out that the mean of KCSE results improved and was higher than that of the mock examinations. The standard deviation that is deviations from the mean was lower in KCSE examinations than in the mock exams and indication of less spread of KCSE exams results than in the mock exams. The study found out that Pearson Correlation (product moment correlation) coefficient between the mock results and KCSE national exams at 0.01 levels (2-tailed) was highly significant at 0.949. This indicates a strong positive correlation. The spearman's rho correlation coefficient was found to be 0.942 indicating a strong positive correlation when the results of both mock and KCSE exams are ranked. It shows that as the mock examinations results improve (increase), the results of the KCSE examinations also improve and vise versa. This is an indication that mock examinations can be used to predict what a student would get in the main examinations

The study was a slight contradiction to the studies done by Pido, (2004a) on continuous assessment scores and final exams scores who found a low correlation in technical education courses examined by UNEB. The study results are also in contrast to the one done by Carole (2004) on the relationship between mock and main exams in Florida Dental School. The study reported no significant association between the two. Low correlations were also reported by Bunza (1999) of Nigeria. However, Falchikov and Goldfinch (2000) reported in their qualitative studies comparing teacher assessment and the national exams subjected to meta analysis that the two resemble each other when judgment is based on well understood criteria rather than when marking involves assessing several individual dimensions.

#### 5.2 Conclusions

It is important to note that the majority of teachers who teach the candidate classes are professionals with long experience in the field of teaching. This coupled with other forms of training such as in-service and KNEC examiners training for some of the teachers give them an upper hand and high capabilities for handling mock examinations reliably. What has been observed to be lacking in this study are the proper structures in the schools and the regions to ensure privacy and protection of the mock examination handling process.

The suggestion that mock examinations are reliable enough is supported by the fact that the other quality control aspects such as the teachers work load, the teacher pupil ratio mock setting, moderation, invigilating and marking are within the accepted ranges for the candidate classes in the majority of schools. The teachers also willingly prepare and keep records for further reference and most of the teachers have got some training on the record keeping and test construction. These give them support to set and mark mock examinations reliably with the support of principals who have been reported to be keen on following up the progress of the school work. The set back area is on the training of teachers by the KNEC which is a prerequisite to mark KNEC examinations. This is disadvantatious to the teachers who would want to use their experience from setting, moderating and invigilating KNEC examinations to improve on the same activities for the mock examinations.

There is a significant positive correlation at 0.01 levels (2-tailed) between the performance of the individual students at the mock and the KNEC examinations. This is a clear indication that the mock examinations can be used to predict the KNEC examinations for individual students as long as the judgment is based on specific structures which are well understood.

#### 5.3 Recommendations

From the findings of the study, the following recommendations have been made to be considered in the Kenyan education policy:

- 1. To improve the reliability of the exams, those who teach candidate classes should be trained teachers only. They must be made to keep all students records especially progress records, records of work and past examination papers as a guide.
- 2. The principals must make frequent following on weekly basis. This must be done directly by them or through the qualified heads of department only.
- 3. More teachers should be trained by KNEC as examiners. This can be done by KNEC or the Government, through teachers training institutions like universities or other tertiary teachers colleges.
- 4. The study observed that some of those who are trained do not attend the marking for various reasons. It should be made mandatory that once a teacher is trained, he is expected to mark at least for a period of time that would allow him to incorporate the practice in his teaching subject. To effect this, the trained examiners should sign a contract for the number of years they will mark. This should be done for planning purposes in order to avoid low turnout during the marking season and ensure that there is no waste of man power.

5. The moderation, invigilation and marking of mock examinations must meet the international standards if the mock is to be taken seriously. If possible the service of external invigilators should be incorporated.

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