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QUALITY IMPLICATIONS OF LEARNING INFRASTRUCTURE ON PERFORMANCE IN SECONDARY EDUCATION: A SMALL SCALE STUDY OF A COUNTY IN KENYA

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Abstract:
Learning infrastructure is a key base for effective teaching and learning in schools. The infrastructure forms a very important component in ensuring successful education. The purpose of the study was to evaluate quality implications of learning infrastructure on secondary education in a County in Kenya. The objective of the study was to explore the quality implications of learning infrastructure on secondary education. The study employed the Production Function Theory. The study adopted sequential explanatory design that was employed within mixed methods approach. The target population constituted of 334 principals, 334 senior teachers and 9 education officers. The sample size constituted of 181 principals 181 senior teachers selected through stratified random sampling technique and 9 education officers selected by saturated sampling technique. Instruments for data collection were questionnaires, interview schedule. Reliability was determined by piloting through the split-half method. The reliability index for the instrument was 0.826. Quantitative data for the study was analyzed using descriptive and inferential statistics. Qualitative data was analyzed using thematic analysis. On the concern about educational facilities; library had the highest Product-Moment Correlation Coefficient (PMCC) of (r = .832, p=.001), this was followed by a correlation of .800 for laboratory. This shows that they had a positive association in the model of educational facilities. Further; there were also positive correlations of .730, .716 and .715 for administration offices and water,

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administration offices and classroom, laboratory and classroom respectively. This study finding might assist in decision making to the Ministry of Education and all other stakeholders in education in implementing policies that might ensure provision of educational infrastructure for quality education. This study recommends that the Ministry of Education (MoE) and schools revisit their policies related to provision of safety measures and work towards their implementation.

Keywords: learning infrastructure, secondary education, learning outcomes, quality education, educational infrastructure, performance, county, Kenya

1. Introduction

UNICEF (2000) asserted that quality education includes learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities; school environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities; content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace; processes through which trained teachers use child-centred teaching approaches in well-managed classrooms and schools and skilful assessment to facilitate learning and reduce disparities and outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.

Bernard (1999) asserted that quality of education entails all aspects of the school and its surrounding education community, the rights of the whole child, and all children, to survival, protection, development and students' participation rates. This means that the focus is on learning which strengthens the capacities of children to act progressively on their own behalf through the acquisition of relevant knowledge, useful skills and appropriate attitudes; and which creates for children, and helps them create for themselves and others, places of safety, security and healthy interaction.

World Bank (2009) highlighted nine indicators of quality of education in the following order: libraries; instructional time; homework; textbooks; teacher subject knowledge; teacher experience; laboratories; teacher salaries; and class size.

Republic of Kenya (2012) noted that learning can occur anywhere, but the positive learning outcomes generally sought by educational systems happen in quality learning environments. Learning environments are made up of quality educational facilities. Further indicates that content refers to the intended and taught curriculum of

schools. National goals for education, and outcome statements that translate those goals into measurable objectives should provide the starting point for the development and implementation of curriculum and co-curricular activities. Educational processes entail how teachers and administrators use inputs to frame meaningful learning experiences for students.

Bray, Clarke and Stephens (2002) discovered that quality education is fruitful when there are adequate quantity and quality of physical infrastructure; and that unattractive school buildings, crowded classrooms, non-availability of playing ground and surroundings that have no aesthetic beauty can contribute to poor academic performance. To emphasize further the issue of physical facilities underscores the importance of developing adequate and appropriate physical facilities for quality of education to be realized.

Adeogun (2001) discovered a very strong positive significant relationship between instructional resources and academic performance. According to Adeogun, schools endowed with more resources performed better than schools that are less endowed. This corroborated the study by Rose (2000) that private schools performed better than public schools because of the availability and adequacy of teaching and learning resources. Adeogun (2001) discovered a low level of instructional resources available in public schools and stated that our public schools are starved of both teaching and learning resources. He expresses that effective teaching cannot take place within the classroom if basic instructional resources are not present. Republic of Kenya (2010) noted that the educational system has stipulated various activities, materials and requirements which are inadequate that need to be provided at all levels of the system in order to meet the objectives of education. The nature of the curriculum pre supposed that infrastructure, laboratories, workshops, classrooms, equipment, physical facilities and teaching aid would be provided to implement the scheme successfully.

A report from Ministry of Education, Kisii County, statistics office (2012) noted that enrolment has increased in Kisii County. The area has 72 percent public secondary schools, comprising of mixed day-secondary schools out of a total of 317 secondary schools. Kisii County Principals Association Manual (MOEST, 2013) indicates that the county had the highest dropout rate of 27.6% when compared with others and completion rate of approximately 67% for most schools. Girls had a dropout rate of 16.4% and boys 11.2%. A report released by Ministry of Education, Kisii County Quality Assurance and Standards office (2014) asserts that policies addressing matters of students' safety measures, school enrollment and retention such as re-entry, repetition and bridging of the gender gap have not been adhered to and this has a great effect on the participation rates in the public secondary schools. This scenario may pose

educational quality challenges. The report further highlight that for the years, 2011; 2012; 2013 and 2014 Public Secondary schools indicate that promotion, retention and completion levels have been noted to be high but the challenges of dropouts and repetitions still exist in varying proportions between boys and girls.

A report by Kisii County Education Conference, (2011) which brought together scholars, parents, professionals, political leaders and other players held at Kisii University Grounds indicated that there is need for research on the cause of dwindling quality education in Kisii County. It further noted that our students are not learning despite the impressive enrolment rates in the County and only further research can help establish the problem. It is against this scenario that that the study intended to explore selected predictors of quality education and their implications on public secondary schools in Kisii County.

2. Statement of the Problem

The quest to achieve Education for All (EFA) is fundamentally about ensuring that students' gain of the knowledge and skills they need to better their lives and to play a role in building more peaceful and equitable societies. As many societies strive to universalize basic education, they face the momentous challenge of providing conditions where genuine learning can take place for each learner for quality education. This is why focusing on quality education is an imperative for achieving EFA. During the past decade, much has been done globally to provide quality basic education for children, an obligation for the Convention on the Rights of the Child. In Kenya, the Directorate of Quality Assurance and Standards (DQA&S) department in the Ministry of Education (MoE) is charged with the responsibility of ensuring quality. Statistical reports from MoE on Kisii County assert that, despite the fact that major strides have been made to provide quality education through Free Secondary Education (FSE) policy, the policy seems not to be successful going by the current indicators of exhibit of low quality education. This is evidenced by inadequate educational infrastructure. This scenario has raised concern because it means that resources devoted to education are being wasted, and this may jeopardize the future of education system in Kenya as a whole and Kisii county in particular. While some studies done in Kisii have attempted to address the issue, they did not isolate and explore on the implications of inadequate educational infrastructure on quality education in public secondary schools in Kisii County, Kenya. Therefore, it is against this worrying trend that prompted the researcher to undertake a study on implications of inadequate educational infrastructure on quality education in public secondary schools in Kisii County, Kenya.

3. Objective of the Study

The following was the objective of the study: *To find out quality implications of learning infrastructure on quality in secondary education.*

4. Research Methodology

4.1 Research Design

This study adopted a mixed method research approach. The sequential explanatory design was employed within mixed methods approach. Its purpose is to use qualitative results to assist in explaining and interpreting the findings of quantitative study.

4.2 Sampling Procedures and Sample Size

The County had 334 public secondary schools against 334 principals and 344 senior teachers. Simple random sampling was used to select schools, which were sampled in each category. The lottery technique was applied where a symbol YES was placed on 181 out of 334 public secondary schools. Small pieces of paper (of equal size, colour and texture) folded into equal size and shape, were placed in a container, mixed well and then each principal was allowed to pick one piece of paper at a time in their respective categories. In this case, the schools of the 181 principals who picked a yes were automatically included in the sample.

One hundred and eighty-one public secondary schools were sampled for the study. One hundred and eighty-one principals and 181 senior teachers were used in the study, a representation of 53.6% as justified by Fisher et al. cited in Mugenda and Mugenda, (2013). Saturated random sampling was used to select nine education officers. Stratified random sampling was used to select schools for the pilot study. Krescie and Morgan's formula shown below was used to obtain the sample size for the research study.

4.3 Research Instruments

This research used questionnaires and interview schedule for Sub-county education officers, principals, and senior teachers to collect primary data for the study. A document analysis schedule was used to collect data that are not directly obtainable with other research instruments.

4. 4 Questionnaires

Questionnaires developed by the researcher were used to collect data from principals and senior teachers. Data were collected using two questionnaires. Each questionnaire

was divided into part A and B. Part A of each questionnaire had four items based on background information of the respondents. Part B of the questionnaire had test items based on the four objectives of the study. Each questionnaire had close-ended test items measured on a 5-point Likert scale. For questions with a positive stem, Strongly Agree (SA) scored highest (5), while Strongly Disagree (SD) scored lowest (1). For questions with a negative stem, Strongly Disagree (SD) scored highest (5), while Strongly Agree (SA) scored lowest (1).

4.5 Interview Schedule

The researcher administered a structured interview schedule to education officers, which contained open-ended questions based on the research objectives. An in-depth interview was deemed ideal for investigating where researchers were seeking individual interpretations and responses.

4.6 Document Analysis Schedule

The researcher examined secondary school stores records to check on availability of school CCA equipment. The information obtained was discussed with the principals with the aim of collecting data.

4.7 Validity of the Instruments

To ensure construct validity, short and straightforward close-ended questions were used. The questionnaire was made simpler and easier to understand by using short and simple sentences. They were arranged from simple to complex. They allowed the respondent to approximate the exact response as close as possible. In addition, a detailed verbal descriptions and clear instructions were provided during the group administration, which the researcher conducted personally. To ensure validity of the questionnaire, expert judgment of lecturers of the university was sought and recommendations incorporated in questionnaire.

4.8 Reliability of Instruments

The split-half method was used to ascertain the reliability of the questionnaires, using the Split-Half reliability by Spearman Brown Formula:
An SPSS output indicates a correlation coefficient ($r = 0.826$) greater than 0.6.

4.9 Data Collection Procedures

Permission to conduct the research was sought through the Director, Board of Post graduate studies, Jaramogi Oginga Odinga University of science and technology. Before

data collection was conducted, a research permit was sought from the National Commission of Science Technology and innovation (NACOSTI). Permission was further sought from the County Director of Education. Subsequently, an introductory letter from the county education office was sought. The principals of the sampled schools to be included in the study were then consulted in advance to obtain consent. Two sets of questionnaires and document analysis were administered to the principals, senior teachers whereas interview schedule was administered to sub-county education officers by the researcher. In order to ensure a high level of response, the researcher visited the individual secondary schools and, in all cases, the instruments were administered by the researcher personally. The researcher explained how to fill in the questionnaires and document analysis to the respondents. A period of two weeks was given in which to fill in the questionnaires and document analysis after which the researcher collected them. The purpose of administering the questionnaires and document analysis for two weeks was to give the respondents enough time to go through them and clearly understand the items to give the most accurate answers. They were sorted out to see if there were complete ones. The instruments were then organized and scored ready for analysis. The respondents were assured of the confidentiality of their responses. At the same time, the researcher conducted an audio taped, face-to-face interview to the education officers in their offices at different dates each lasting one hour. After the field, the data were taken for analysis.

4.10 Data Analysis

The quantitative data collected were analysed with the aid of the Statistical Package for Social Sciences while the qualitative data collected were analysed using thematic analysis.

4.10.1 Quantitative Data Analysis

Quantitative data collected were first edited and checked for completeness. During coding, the questionnaire for the principals was assigned P whereas that for senior teachers was assigned S. For section A of the questionnaire, question 1 on gender male was coded 0 and female coded 1. Those who did not specify their gender were coded 9, labelled unknown and the same code was used for those who ticked both male and female or had a missing specification. Question 2, on the level of education, diploma was coded 1, bachelor was coded 2, master was coded 3 and others were coded 9. Question 3, year of experience, below 4 years was coded 1, between 4-6 years was coded 2, 7-9 was coded 3 and 9 years and above was coded 4. The missing age was coded 999. Finally, on the staffing of schools, understaffed was coded 1, balanced was coded 2, and

overstaffed was coded 3. The missing staffing was coded 999. For section B of this questionnaire, the responses to all the questions strongly agree were coded 5, agree was coded 4, neutral was coded 3, disagree was coded 2 and strongly disagree was coded 1. The Objective consisted of one part which had a set of Likert scaled 10 test items that sought to investigate their views on CCA and its implications on quality of education in public secondary schools. The questionnaire was administered to principals and senior teachers whose responses were computed as percentages and reflected. Their responses were computed as percentage frequencies. To establish whether there was any significant relationship between educational infrastructure and quality education in public secondary schools, the research computed Pearson's Product-Moment Coefficient of correlation between the scores of the two variables. The results of the analysis were shown in descriptive statistics and correlation results.

4.10.2 Qualitative Data Analysis

Data from interview schedule was analyzed using the thematic framework and the following steps were considered; this research followed the principles of thematic analysis

5. Findings, Interpretation and Discussion

5.1 Descriptive Analysis of the Study

The study sought the views of the senior teachers and principals with respect to the likert scale pertaining to educational infrastructure of the school. Their responses were computed in frequency, percentages, total frequency, total score and mean of means in the table.

Table 1: Relationship of educational Infrastructure Parameters and Quality of Education (n=151,136)

Item		Frequency								
	R	**1**	**2**	**3**	**4**	**5**	**TF**	**TS**	**AV**	**%Score**
Administration and departmental offices are available and adequate	ST	64	30	0	21	32	147	368	2.50	50.06
	P	35	39	0	35	27	136	388	2.85	57.05
Science laboratories are adequate for learners	ST	49	49	5	19	39	161	433	2.68	53.78
	P	54	79	10	19	24	186	438	2.35	47.09
Classrooms are well maintained and adequate	ST	53	66	10	19	12	160	351	2.19	43.87
	P	20	56	9	53	13	151	436	2.88	57.74

Playground facility is adequate for use by learners	ST	56	10	5	46	28	145	415	2.86	57.24
	P	15	8	0	59	63	145	582	4.01	80.27
Library is available and well equipped for learners use	ST	65	45	13	14	14	151	320	2.11	42.38
	P	41	40	13	23	19	136	347	2.55	51.02
Water supply in school is adequate and clean	ST	60	51	11	20	9	151	320	2.11	42.38
	P	57	40	0	29	25	151	378	2.50	50.06
Teaching in school is ICT integrated during T/L activities.	ST	44	69	0	19	14	146	328	2.24	44.93
	P	78	37	5	14	16	150	303	2.02	40.40
Teachers use professional documents in T/L activities	ST	14	16	0	53	68	151	598	3.96	79.20
	P	19	16	10	67	38	150	539	3.59	71.86
Toilets are adequate in school	ST	59	36	5	16	35	151	385	2.54	50.99
	P	33	35	0	35	33	136	408	2.97	60.00
Presence of electricity in school enhances learning	ST	13	0	0	74	64	151	629	4.16	83.31
	P	9	6	10	88	73	186	768	4.12	82.58
Mean of Means		39.18	37.05	6.36	39.82	32.09	153.82	449.59	2.91	58.23

Explanation: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1), P-principals, ST-senior teachers, R- Respondents

Table 1 depicts that although 53 (34.1%) of senior teachers who took part in the study held the view that the school administration and departmental offices are available and adequate in their schools, a significant proportion [94 (57.06%)] others held the belief that the administration and departmental offices are generally inadequate. This view was shared by more than a half [74 (50.09%)] of the principals who took part in the study who indicated that the administration and departmental offices were available but are inadequate in number or size. It also emerged that most of the schools have poorly maintained classroom, as confirmed by an overwhelming majority [49(43.82%) of the Senior Teachers who vehemently negated the assertion that the classrooms are well maintained and adequate as the view was shared by [76 (57.24%)] of the principals. Lack of adequate classrooms for instance; hold their lessons outside or under trees. During bad weather, such lessons are postponed or are never held altogether and this interferes with syllabus.

The state of laboratories was not any better either; whereas only 58 (38.4%) of the senior teachers who were sampled for the study held perception that science laboratories were adequate in meeting the needs of the students in their schools, a significant majority of 65 (47.09%) of the Senior Teachers said the science laboratories are quite inadequate, as shown in Table 1.

Likewise, more than a third [66 (53.08%)] of the principals who took part in the study strongly agreed that the science laboratories are not adequate, a point of view which was also similar for the case of libraries as observed by 81(59.6%) of the principals who took part in the study. This state of inadequacy was replicated in the other teaching and learning infrastructural facilities; in library only 28 (18.6%) of the senior teachers who participated in the study alluded that the library in available and well equipped for learners use, but most [110 (72.8%)] of the Senior Teachers insisted that the libraries are far from being sufficient according to the needs of the students and teachers. Effective school libraries provide additional reading opportunities for students which in turn improve reading skills, comprehension and writing clarity of expression which in turn support students' performance in all other curriculum subjects. The size of school library should be able to accommodate the size of the school. The chief purpose of a school library is to make available to the pupil at his or her easy convenience all books, periodicals and other reproduced materials which are of interest and value which are not provided as basic or supplementary textbooks. Library occupies a central and primary place in any school system as it supports all functions of the school.

Similarly, the state of the toilets is worse off in most of the secondary schools in Kisii County; more than three out of every five [87 (50.99%)] of the senior teachers who were sampled for the study asserted that toilets are not sufficient at all. Further, it was revealed from the findings of the study that water supply in most of the schools in the county is inadequate; only 29 (19.2%) of the senior teachers were satisfied with water supply in their schools. However, nearly three out of every four [111 (73.5%)] senior teachers who were asked about the status of their water said they did not have adequate and clean water in their schools.

Good performance demanded that every learning institution be equipped with relevant and adequate text books. For effective teaching and learning, textbook and resource materials are basic tools, in absence or inadequacy makes teachers handle subjects in an abstract manner, portraying it a dry and non-exciting. Lack of laboratory facilities is a major contribution to poor performance of some schools in examinations, a predictor of quality education, because candidates could not answer questions in practical science subjects adequately.

The use of ICT is another area where the study established that there high inadequacy; it emerged that whereas only 33(21.9%) of the senior teachers who participated in the study confirmed that ICT is integrated in teaching/learning activities in their schools, an overwhelming majority of them revealed that ICT is never integrated in teaching/learning in their schools. It emerged that some areas are doing very poorly in terms of adequacy of the infrastructural facilities. For instance, the findings of the study show that use of ICT is very poor in many schools within the county. This fact was confirmed by more than four out of every five [115 (84.6%)] of the principals who participated in the study who expressed strongly that ICT is not integrated in the teaching/learning activities in their schools.

On the contrary, electricity in most of the schools is established to be available and enhances teaching/learning. This was confirmed by nearly all [138 (91.4%)] the senior teachers who part in the survey who said that their schools have electricity. On the same note, it emerged that many senior teachers confirmed that their teachers use professional documents in teaching/learning. On the contrary, when the principals were asked to comment on the use of professional documents in teaching and learning, most [109 (79.20%)] of them said that the teachers use the professional documents in teaching/learning activities. ICT can change the way teachers teach and that it is especially useful in supporting more student-centered approaches to instruction and in developing the higher order skills and promoting quality education. Given that teachers act as a change agent for technology in education, is essential that in-service and pre-service teachers have basic ICT skills and competencies. In recognition of ICT importance in teaching and learning, teachers must be given training that enables them to integrate ICTs into their teaching programs. Poor results in education relates to the amount of instructional materials allocated to it especially integration of ICT in education as they are critical instructional materials.

Further findings reveal that some of the facilities may be available but not in condition. This was attested by many 74 (57.74%) of the senior teachers who took part in the study who alluded that their schools have playground facilities but are not very conducive for use. On the contrary, the state of the playground facilities is not too badly off, this was reflected by 112 (80.27%) of the principals who asserted that playground facilities are adequate for use by the learners. Only 21 (19.37%) of the principals respondents were of the opinion that their playgrounds were still far from being adequate. It can be deduced from the findings that ach of the co-curricular activity should be adequately funded to ensure that all students have an opportunity to participate; the curriculum for teacher training should include professionalism in co-curricular activities; parents should be sensitized in identifying, nurturing and

developing their children's co-curricular talents; school administration should identify talented and gifted children be offered regularly in the school.

Table 2: Correlations on Elements of Educational Infrastructure (Zero Order Correction Matrix)

		Classroom	Water	Playground	Laboratory	Library	Latrines	Electricity	Admin offices
	Pearson Correlation	1							
Classroom	Sig. (2-tailed)								
	N	97							
	Pearson Correlation	.715**	1						
Water	Sig. (2-tailed)	.000							
	N	97	174						
	Pearson Correlation	.107	.198*	1					
Playground	Sig. (2-tailed)	.298	.017						
	N	97	145	145					
	Pearson Correlation	.559**	.516**	-.085	1				
Laboratory	Sig. (2-tailed)	.000	.000	.310					
	N	97	174	145	174				
	Pearson Correlation	-.630**	.477**	-.074	.832**	1			
Library	Sig. (2-tailed)	.000	.000	.379	.000				
	N	97	151	145	151	151			
	Pearson Correlation	-.522**	-.126	-.383**	.360**	.364**	1		
Latrines	Sig. (2-tailed)	.000	.132	.000	.000	.000			
	N	97	145	145	145	145	145		
	Pearson Correlation	.638**	.008	.067	-.172*	-.204*	-.344**	1	
Electricity	Sig. (2-tailed)	.000	.917	.424	.025	.012	.000		
	N	97	169	145	169	151	145	169	
	Pearson Correlation	.716**	.225**	.450**	.800**	.730**	.634**	-.423**	1
Administration offices	Sig. (2-tailed)	.000	.007	.000	.000	.000	.000	.000	
	N	97	142	142	142	142	142	142	142

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

From Table 2, showing the Product Moment Correlation Coefficients, all the parameters were significantly positively (PV < .05) correlated to education facilities. Most of the correlation coefficients of the parameters associated with the educational facilities, a predictor of quality education in public secondary schools in Kisii County were all fairly average but had statistical significance. From the table of correlations the parameter, library, had the highest Product-Moment of Correlation Coefficient (r = .832, p=.001), this was followed by a correlation of .800 between laboratory and; all at P-value, 0.01. This shows that they had a positive association in the model of educational facilities. Further; there was also a positive correlation of .730, .716 and .715 between administration offices and water, administration offices and classroom, laboratory and classroom respectively. They also showed a positive association of the model of educational facilities. However, there was a negative correlation of water, -.630 at a P-

value, 0.01. It was followed closely by a negative correlation of -.522 on latrines. This also explains the negative association of the parameters in the model.

5.2 The Regression Model of Educational Infrastructure

A regression model for the relationship between the educational infrastructure variable and the parameters is shown below.

In this model:

$$Y = \beta_o + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \varepsilon.$$

Where:

Y is school educational facilities

x_1 Laboratory, x_2 Playground, x_3 Library, x_4 Water, x_5 Latrines, x_6 Electricity, x_7, Administration offices, x_8 Classrooms

$= 2.862 units + 1.471 x_1 units + .842\ x_2 units + 3.063\ x_3 units + 1.374 x_4 units + .695 x_5 units + 1.184 x_6 units + .612 x_7 units + .996 x_8 units + \varepsilon$

It can be deducted from the above equation that the school educational infrastructure that contributed to quality education in Kisii County in order of importance as were factored in the model as indicated above are the following;

The parameter, library had a highest input of R = 3.063 towards school facilities; it was followed by laboratory which had an input of R = 1.471 units. The parameter, administration offices had the lowest input of R = .612 units whereas water, electricity, classroom, playground and latrines respectively had 1.37, 1.184, .996, .842, .695 units. The model is explained by 32.8 per cent, the school educational facilities variable. This means that there is moderate relationship between school educational facilities and quality education.

6. Discussion

6.1 Implications of Educational Infrastructure on Quality Education in Public Secondary Schools

The inferential analysis from the regression model equation deduced that the parameter, library had a highest input of R = 3.063 towards school facilities variable; it was followed by laboratory which had an input of R = 1.471 units. The parameter, administration offices had the lowest input of R = .612 units whereas water, electricity, classroom, playground and latrines had 1.37, 1.184, .996, .842, .695 units respectively.

The descriptive analysis indicates that a significant proportion of the respondents held the belief that the classrooms are generally inadequate. The results of the study indicated that most of the schools have poorly maintained classroom, as confirmed by an overwhelming majority of the respondents who vehemently negated the assertion that the classrooms are well maintained and adequate.

The descriptive analysis of the study indicated that a significant majority of the respondents said the science laboratories are quite inadequate. Most of the respondents insisted that the libraries are far from being sufficient according to the needs of the students and teachers. Similarly, the state of the toilets is worse off in most of the secondary schools in Kisii County; more than three out of every five of the respondents asserted that toilets are not sufficient at all. Further, the results of the study indicated that water supply in most of the schools in the county is inadequate; only of the respondents were satisfied with water supply in their schools. However, nearly three out of every four respondents who were asked about the status of their water said they did not have adequate and clean water in their schools.

The results of the study indicated that some of the facilities may be available but not in condition. This was attested by many of the respondents who took part in the study who alluded that their schools have playground facilities but are not very conducive for use. The use of ICT is another area where the study established that there high inadequacy; it emerged that whereas only of the respondents who participated in the study confirmed that ICT is integrated in teaching/learning activities in their schools, an overwhelming majority of them revealed that ICT is never integrated in teaching/learning in their schools. On the contrary, electricity in most of the schools was established to be available and enhances teaching/learning. The study revealed that nearly all the respondents who part in the survey who said that their schools have electricity.

The descriptive analysis results of the study indicated that more than a third of the respondents who took part in the study strongly agreed that the science laboratories are not adequate, a point of view which was also similar for the case of libraries as observed by of the respondents who took part in the study. In addition, more than a half of the respondents who took part in the study said the classrooms were available but inadequate in number or size. Further, it was also discovered that the available classrooms are not properly maintained.

On the contrary, the state of the playground facilities is not too badly off, this was reflected by the respondents who asserted that playground facilities are adequate for use by the learners. The results descriptive analysis of the study indicated that more than four out of every five use of ICT is very poor in many schools within the county.

Most of them said that the teachers use the professional documents in teaching / learning activities.

7. Conclusions

The conclusions are presented along the research hypotheses that guided the study.

7.1 Implications of Educational Infrastructure on Quality Education in Public Secondary Schools

It was concluded from the correlation regression model of school facilities that the parameters of education facilities contributed to quality education in order of importance as were factored in the regression model.

The parameter, library had a highest input; coefficient of determination value towards school facilities; it was followed by laboratory. The parameter, administration offices had the lowest contribution whereas water, electricity, classroom, playground and latrines respectively had their input values declining respectively. The model was explained by 32.8 per cent, the school educational facilities variable. This means that there is moderate relationship between school educational facilities and quality education.

On the issue of implications of selected predictors on quality education, school educational facilities contributed the highest coefficient of determination value. This implies that adequacy of educational facilities in a school situation contribute immensely to quality education provision.

8. Recommendations

In light of the findings about implications of educational facilities on quality education the study recommends that:

Library which had a highest contribution towards quality education should be established in terms of availability and adequacy of reference materials for teachers and learners' utilization. Further, properly equipped laboratory is also a requirement as it contributes immensely towards quality education. This enables learners to carry out practical teaching, enhancing understanding. Water, electricity, classroom, playground, administration offices and latrines are also other facilities which should be available and adequate in schools as they contribute positively to quality education provision. Principals and the Board of Management of public secondary schools should provide adequate instructional materials and learning facilities to their institutions of learning

for effective teaching and learning. Schools should also be assisted to have adequate and appropriate physical and instructional resources to enable teachers enhance their teaching methodologies. More so, the Ministry of Education should enhance and enforce regular inspection of secondary schools to ensure conformity to standard guidelines.

References

1. Abagi, O. (1997). *Public and private investment in primary Education in Kenya*: An Agenda for Action. Nairobi: IP.
2. Abagi, O., Owino, W., Sifuna, D.N., Wanga, M., and Karugu,A. (2000). *Implementing the Report of the Commission of Inquiry into the Education System of Kenya* (Koech Report).Realities, Challenges and Prospects. Nairobi: IPAR.
3. Abisaki O.; Mutsotso S.and Poipoi M. (2013). Analysis of Non-Formal Curricular Activities in Mumias Sub-County, Kenya. International Journal of Academic Research in Business and Social Sciences September, Vol. 3, No. 9 ISSN: 2222-6990. Kibabii University 595
4. Achoka J.S.K. (2006). *Female Gender Vulnerability and Challenges of HIV/AIDS to Health, Education and Development in Kenya*. Inter. J. Disaster Management and Risk Reduction. CDMHA 1:29-33.
5. Adeogun A.A. (2001). The principal and the financial management of public secondary schools in Osun State. *Journal of Educational System and Development.* 5(1), pp.10
6. Adeyemi T. O. And Adu N. E. (2012) International Journal of Academic Research in Progressive Education and Development, Vol. 1, No. 1 Department of Curriculum Studies, College of Education. Department of Educational Foundations and Management, University of Ado Ekiti, Nigeria.
7. Apida R. A. (2010). Influence of the home environment on learners' participation rates in public day secondary schools in Nairobi North district, Kenya. (Unpublished Masters project), University of Nairobi.
8. Armstrong M. (2006). *Human Resource Management Practice* (10th Ed) London: Kogan page limited.
9. Ary, D. Jacobs, C. L. & Razavieh, A. (2002). *Introduction to research in Education*. USA: Wadsworth Thompson Learning.
10. Association for the Development of Education in Africa (ADEA). (2003). *The Challenge of Learning: Improving the Quality of Basic Education in Sub-Saharan*

Africa. Discussion paper for the ADEA Biennial Meeting, Grand Baize, Mauritius, 3-6 December. Paris, Association for the Development of Education in Africa.

11. Avoke, M. (2005). *Special education needs in Ghana:* Policy, Practice and Research. Winneba: Special Education Books.
12. Bennell, P. and Akyeampong, K. (2007). *Teacher Motivation in Sub-Saharan Africa and South Asia.* DFID Department of international Development, 71.
13. Bernard, A. (1999). The child-friendly school: a summary. Paper written for UNICEF New York.
14. Bonet, (2010). *Varying co-efficient Meta analytic method for alpha reliability, method*. California Sage Publication.
15. Boyle, S., Brock, A., Mace, J., and Sibbons, M. (2002). Reaching the poor: The 'costs' of sending children to school. A six country comparative study. (Educational Papers). London: Department for International Development. Brothers.
16. Bryk, A.S. and Thum, Y.M. (1989). The Effects of high School Organization on Dropping out: an Exploratory Investigation. American Educational Research Journal, 26(3), 353- 383.
17. Bryman, A. (2004). *Social Research Method.* (2nd Edition.). Oxford: Oxford University Press. centered leadership: A conceptual foundation. East China Normal University
18. Cheng,Y.C. and Tsui, K.T. (1997). Multi-Models of Teacher Effectiveness: Implications for Research. Paper presented at the European Conference of Educational Research in Frankfurt, on September 24-27.
19. Cohen, L. Manion and Morrison, K. (2007) *Research Methods in Education*. London: Routledge: Taylor and Francis Group.
20. Coombs, P. H. (1968). *The World educational crisis*, Allahabad: A. H. Wheeler and Co. Flash Reports I, 2008-09 & 2009-010, DOE.
21. Creswell, J. and Plano Clark, V. L. (2007). *Mixed Methods Research,* (California Sage Publications)
22. Creswell, J. W. (2002). *Educational Research:* Planning, Conduction and Evaluation Quantitative and qualitative research. New Jersey: Pearson Education Inc.
23. Cronbach, L.J. (1990). *Essentials of Psychological Testings* (5th Edition).New York: Harper and Row Publishing.
24. Davis, S., Darling-Hammond, L., LaPointe, M., and Meyerson, D. (2005). School Leadership Study: Developing Successful Principals (Review of Research)

25. Deana, B.D., Ernest, L.C., and Robert, J.G.(1999). The effects of extracurricular activity, ethnic identification and perception of school student dropout rates. Hispanic Journal Behaviour Sciences.
26. Dre`ze, J. and Kingdon, G. (2001). *School Participation in Rural India*. Review of Development Economics, 5(1), 1-24.
27. Egen, F. and Kauchack, C. (1992). *Educational manpower and Economic Growth:* Strategies of Human Resource Development. New York: McGraw Hill Book Company. Financial Sector Deepening Trust. (2009). FinAccess Survey 2009, Nairobi, Kenya.
28. Fortune R. D. (2013). A Study of the Effect of Co-Curricular Courses on Student Attendance, Composite Act Score and Student Dropout Rate. The Department of Professional Education Faculty Northwest Missouri State University Missouri Department of Professional Education College of Education and Human Services Maryville, MO 64468 683 Research Paper
29. Fraenkel, J.R. and Wallen, N.E. (2003). How to Design and Evaluate Research in Education (4th Edition).San Fransisco: McGraw-Hill Inc.
30. Fuller, B. and Dellagnelo, L. (1999). *How to raise children's literature*. The influence of family, teacher and classroom in North East Brazil. Comparative education review. Context of schools. http://portal.org/education
31. Gall, M. D. J. P. and Borg. W. R. (2007) *Educational research*: An introduction. (8th Edition.). Pearson Education Inc., Boston.
32. Gituma S. K.; Aden I. N. and Musyoka J. M. (2013) *International Review of Management and Business Research Vol. 2 Issue. 3* Walking the Talk in Strategy and Policy Implementation: A Survey of Secondary Schools in Meru Central District. ISSN: 2306- 9007.
33. Glennerster, R. Kremer, K., Mbiti, I. and Takavarasha, K. (2011). *Access and Quality in the Kenyan Education System:* A Review of the Progress, Challenges and Potential Solutions. Office of the Prime Minister of Kenya. Nairobi, Kenya.
34. Gray, J. & Hackling, M. (2009). Wellbeing and Retention: A Senior Secondary Student Perspective. The Australian Educational Researcher, 36(2), 119-145.
35. Griffins G., (1994) *Straight talk about Boarding School Management in Kenya.* School Master: Nairobi: Lectern Publications,
36. Habegger, S. (2008). *The principal's role in successful schools: creating a positive school culture.* Educational Leadership, 88(1), 42-46. Performances in National Examinations. Government Printers.

37. Hanushek, E; Neto, J.B.G and Harbison, R.W. (1996).*Efficiency Enhancing Investment in School Quality in Opportunity Foregone*. Washington D. C: John Hopkins University Press.
38. Holford, K. (2010). *God's Little Book for Parents.* Thailand: Autumn House Publishing (Europe).
39. Howell, D. (2002). *Statistical Methods for Psychology*. Pacific Grove, CA: Duxbury.
40. http://www.simplypsychology.org/qualitative-quantitative In Busiro County Secondary Schools, Wakiso District. Makerere University Institutions in Pakistan. International Researcher Volume No.1 Issue No. 4 MC High School IER Punjab University (Pakistan)
41. Huang, F.L. *&* Moon, T.R. (2009) Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools *Educ Asse Eval Acc* 21:209–234
42. Ikagami, H. (2000) *Character and Personality changes in the Athletes*. In G.N. Kenyan (Ed.) Contemporary Psychology of sports. Chicago: athletic institute.
43. Institute of Policy *Analysis and Research.* (2007). Making Public Secondary Education Affordable: IPAR Policy View Issue 3: Institute of Policy Analysis and Research. Nairobi. Kenya.
44. International Journal of Sociology and Anthropology Vol. 4(1), pp. 23-30,(2012). Available: Research Paper Resource utilization and predictors in Nigerian 10.5897/IJSA11.035ISSN Journal/August 2007
45. Israel T., Maphosa W. and Beginner M. (2012). The Influence of Learners' Participation in School Co-curricular Activities on Academic Performance: Assessment of Educators' Perceptions; University, Department of Education and South Africa University of Venda, Centre for Higher Education Teaching and Learning
46. Kasomo. D. (2006) Research Methods in Humanities and Education. Egerton
47. KIPPRA (2007), Policy Review Issue No. 3, 2007. Making Public Secondary Education Affordable. Bursary Scheme Implementation and Challenges. IPAR.
48. Kiriyana I. N. Maphosa W. and Mapurunga R. (2014). Students' Co-Curricular Participation perception and Academic Performance in Kenyan Secondary Schools**.** *Journal of Educational Policy and Entrepreneurial Research (JEPER).* ISSN: 2408-6231Vol.1, No.3, http://www.iiste.org/journals/index.php/jeper
49. Kirui, R. K, Mbugua, Z.K and Sang, A. K. (2011).Challenges facing Head-teachers in Security Management in Public Secondary Schools in Kisii County, Kenya. International journal of Humanities and Social Sciences Vol. 1 No.15.

50. Kisii County Government, (2014). Enhancing Quality Education for Development in line with vision 2030. Unpublished information booklet, Kisii County Government.
51. Kombo, D.K. and Tromp, D.L.A. (2006). *Proposal and Thesis writing*. An introduction. Paulines publications Africa. Nairobi.
52. Lai, E.R. (2011) Collaboration www.pearsonassessments.com/hai/images/.../collaboration-review.pdf
53. Lazaro A. and Anney V. N. (2016). Rethinking the Role of Co-Curricular Activities in Developing Students' Talents in Secondary Schools in Tanzania; Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 7(2): 152-166 © Scholarlink Research Institute Journals, (ISSN: 2141-6990) Mkwawa University College of Education' Faculty of Education, University of Dar es Salaam. School of Education.
54. Lloyd, C. B. (2001. *Determinants of educational attainment among adolescents in Egypt*: does school quality make a difference? Population Policy Research Division Working Papers. No. 150. Population Council, New York.
55. Maphosa, C, and Mammen, J.K. (2011*). How chaotic and unmanageable classrooms have become:* Insights into prevalent forms of learner indiscipline in South African Schools. Howard College Campus, Durban 4441, South Africa.
56. Masibo, K. and Kiragu, K. (2007).*Where Many School Girls miss School over old, Harmful Ritual;* High rise of Female Circumcision in Rift Valley Worries Experts as, Pupils are married off quickly. Nairobi: Government Press.
57. Mbilingi M. and Mbughimi, K. (1991). *Education in Tanzania with a gender perspective summary report.* Sweden International Development Authority. Education Document No. 53.
58. Mcgowen, R. S. (2007). *The Impact of Co-curricular activities on Student Achievement, Attendance, Behaviour, Completion rate and Teacher Turnover rate in Selected Texas School:* America; Texas.
59. Ministry of Education (2014). Quality assurance and standards office http://www.kisii.go.ke/index.php/socio-economics/item/1650-tsc-%09%09kisii-county-branch
60. Ministry of Education, (2005) *Kenya Education Sector Support Programme* (KESSP) (2005 – 2010).Ministry of Education. Kenya Nairobi.
61. Ministry of Education. (2007). *Secondary Education Strategy*. Nairobi: Ministry of Education.
62. Ministry of Education. (2010). *Educational Statistical Booklet 2003-2007*, Government Printers, Nairobi, Kenya.

63. Ministry of Education. (2012) Statistics office https://www.tsc.go.ke/.../27-county-director-kisii-county
64. MOEST(1996) An Overview on Human Development through Education and Training in Kenya-Policies and Programme Priorities. A consultative meeting between the Ministry of Education and other partners in Education Development. Nairobi: Government printer.
65. MOEST (2008). *Safety Standards Manual for Schools in Kenya*: Schools as Safety Zones. Nairobi: Church World Service.
66. MOEST (2001). *Education for All*. A National Handbook for 2000 and Beyond. Nairobi: Government Printer.
67. MOEST (2005). *Delivering Quality Equitable Education and Training to all Kenyans.* KESSP; Nairobi: Government Printer.
68. MOEST (2011). Kisii County Education Conference. Action and Progress to Improve Quality of Education. Allafrica Publishers.
69. Mohammed S. I. (2013) *Transformational Leadership and Teacher Commitment in Secondary Schools of Sarawak University of Malaya (*UM University of Malaya (UM) 2013 International Journal of Independent Research and Studies, 2(2), 51-65.2013)
70. Mugenda, M. and Mugenda, G. (2013) *Research methods.* Quantitative and qualitative Approaches, Nairobi, Acts Press.
71. Muhammad D., Tahir N. and Ali H., Iqra I. (*2012).* The Effect of Co-Curricular Activities on the Academic Performances of the Students: A Case Study of the Islamia University of Bahawalpur, Pakistan. *Bulgarian Journal of Science and Education Policy (BJSEP), Volume 6, Islamia University of Bahawalpur & University of Sargodha, Pakistan*
72. Murnane, R. J. (1996). *The Impact of School Resources on the Learning of Inner-city children.* Cambridge, MA: Ballinger.
73. Mutegi T. (2014). Factors Affecting Coverage of Syllabus in Secondary Schools in Kenya: A Case Study of Langata District Schools in Nairobi County; A Research Project Submitted to the School of Management and Leadership in Partial Fulfillment of the Requirements for The Award of The Degree of Executive Master of Business Administration of the Management University of Africa.
74. Mwisukha, Njororai and Onywera, (2003). The student development task and lifestyle inventory: An approach to measuring student's psycho sociological development. Journal of College Student Development, 31, 108-120.
75. Ngwacho, Theodore, Ayodo and Chemwei (2015). Effects of Hidden Costs in Free Secondary Education on Transition and Completion Rates in Public Boarding Schools in Kisii County, Kenya. Kabarak University. ISSN NO. 2074 -

5400 *Kenya Journal of Educational Planning, Economics & Management.* Volume 9, Issue 1

76. Njagi J. (2010, 19th October). Two students burnt to death in suspected arson attack on dormitory. Daily Nation Newspaper P. 5.
77. Nyagesiba, B (2010, October 11th). Schools to give learners Mandatory Safety tips. Daily Nation Newspaper page 8.
78. Ochieng, A. (2010, October 19th). New Rules on building of hostels to be issued. The standard Newspaper page 20.
79. OECD (1994) *Quality in Teaching*. OECD, Paris of Technology in Kenya. Njoro, Egerton University.
80. Ogochg I. and Ruth T.; (2013). An Evaluation of the Effectiveness of Co-curricular Policy in Developing Talent among the Youth in Secondary Schools in Transmara West Sub-county, Kenya. Journal of Education and Practice www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.4, No.26.
81. Ohba, A. (2011). The abolition of secondary schools fees in Kenya: Responses by poor International Journal of Educational Development, Vol. 31(2011), p. 402-408.
82. Omolo, O.D. and Simatwa, W.M.E (2010). An assessment of the implementation of safety Policies in public secondary schools in Kisumu East and West Districts, Kenya Educational Research (ISSN: 2141-5161) Vol. 1 (11) pp 637-649.
83. Omolo, O.D. and Simatwa, W.M.E (2010). An assessment of the implementation of safety Policies in public secondary schools in Kisumu East and West Districts, Kenya Educational Research (ISSN: 2141-5161) Vol. 1 (11) pp 637-649.
84. Onen D. (2007) The management and the predictors of private secondary schools in Uganda, http://hdl.handle.net/10570/2583
85. Orodho, A.J. (2005). *Statistics made user Friendly for Educational and Social Science Research.* Nairobi: Masola Publisher.
86. Orodho, J. A. (2005) *Techniques of writing Research Proposals and reports in Education and Social Sciences 2nd Edition.* Nairobi: Harlifax Printers.
87. Oso, W. and Onen, D. (2008). *General guide to writing thesis and report:* A hand book for beginners 2nd Edition. Kampala: Makerere University. Printer.
88. Otieno, W. (2003b).*Gender and Education; the challenge of Educating Girls in Kenya*. Report prepared for Action Aid. Nairobi: Elimu Yetu Coalition.
89. Owoeye, J. S. & Yara, P. O. (2011) School Location and Academic Achievement of Secondary School in Ekiti State, Nigeria *Asian Social Science* Vol. 7, No. 5;pp 170-175
90. Patroba, E. O. (1986*) Curriculum Development: Alternatives in Educational Theory and Practice.* Nairobi: Lake Publishers and Enterprises.

91. Pelt, N.V. (2009).*Parenting teens.* Thailand: Autumn House Publishing, Grantham, Licontrishire.
92. Performance at Kenya Certificate of Secondary Education in Teso South Primary Schools of Moyale District Marsabit County. University of Nairobi. Principal Challenge: Leading and Managing Schools in an Era of Accountability. Quantitative approaches. Nairobi: ACTS press. Research. Vol. 3, pp 77-101.
93. Rahel G. (2012) *Factors in Practice of Co-curricular Activities and how they Build Students' Talent.* Addis Ababa University School of Graduate Studies; Institute of Educational Research Practice of Co-curricular Activities and How They Develop Students' Talent in Preparatory Schools in Addis Ababa Addis Ababa Practice; Addis Ababa Education Bureau.
94. Republic of Kenya (2000). Commission of Inquiry into Education System in Kenya (The Koech Report) Nairobi: Government printer.
95. Republic of Kenya (2015). Sessional Paper No.14 of 2012 on realigning education and training to the Constitution of Kenya 2010 and Vision 2030 and beyond. Ministry of Education Science and Technology. Nairobi. Kenya.
96. Republic of Kenya (2005) Sessional paper No. 1 on A Policy Framework for Education, Training and Research. Nairobi: Government printer.
97. Republic of Kenya (2008). *Safety Standard Manual for Schools in Kenya*. Nairobi: Government printer.
98. Republic of Kenya, *(2005*a). Sessional Paper number I of 2005. A policy framework for education Training and Research; Meeting the Challenges of Education Training and Research in Kenya. Nairobi: Government Printer.
99. Republic of Kenya and UNICEF. (2012*). Education for All (EFA) End of Decade Assessment (2001-2010).* Ministry of Education and UNICEF. Nairobi.
100. Republic of Kenya, MOEST (2001) Causes, Effects and Remedies of Indiscipline in Secondary School in Central Province. Nairobi: Government Printer
101. Republic of Kenya. (2005). Sessional Paper No. 1 of 2005 on a Policy Framework for Education: Training and Research: Government Printer. Nairobi. Kenya.
102. Republic of Kenya. (2008). Education Sector Report-Nairobi: Ministry of Education. Government Printers, Nairobi, Kenya
103. Richardson, A. R. (2008) An Examination of Teacher Qualifications and Student Achievement in Mathematics.
104. Rivers, C. & Sanders, M. (2002) *Statewide Class-size Studies Prime Time and Star, Tennessee's Project Star;*Dallas Texas

105. Rose, L.C. (2000). The 32nd Phi Delta Kappa/Gallup poll concludes the extra-curricular Activity must be equal in importance to academic subjects. Phi Delta Kappan.

106. Ross, Mueller and Richard, E. (2008).The Effects of Family Income, Parental Education and Other Background Factors on Access to Post-Secondary Education in Canada. Canadian Education Project: Queen's University School of Policy Studies. Canada: Millennium. Scholarship Foundation.

107. Rumberger, R. W. and Thomas, S. L. (2000). *The distribution of drop outs and turnover rates among urban and Suburban High schools*. Sociology of Education.

108. Russell, N.C., Peter, C., Donald, F.D. and Robert, C.R. (2000). Extracurricular involvement in high school produces honesty and fair play needed to prevent delinquency and crime. Education. Chula vista 121.

109. Ruth, J.F., (May 2005). *The Role of Teachers Self-Efficacy in Increasing Children's Physical Activity.* (Dissertation) Graduate Faculty, Louisiana State University of Agriculture and Mechanical College.

110. Samer A.S. (2003) Financing primary education for all: public expenditure and School Business Affairs, 69(1), 38-40. School Teachers; Journal of Educational Administration Vol. 43(4), 402-416. Schools in Malawi:

111. Sava, L. A. and Orodho, A. J. (2014). Selected Critical Socio-Economic Factors Influencing Pupils' Access to Education in Kibera Informal Settlement in Nairobi County, Kenya. Department of Educational Management, Policy and Curriculum Studies, School of Education, Kenyatta University. Kenya.

112. Shiundu, J.S. and Omolando, S.l. (1992) *Curriculum Theory and Practice in Kenya.* Nairobi: Oxford University Press

113. Singleton, R. A. (1993). *Approaches to Social Research. New York*. Oxford U.P. Sources of Funds. Washington D.C.: World Bank Institute South Africa. The study to investigate the impact of the cost sharing policy in Southern Africa Department.

114. Soomeren, P. (2002). Preventing a Crime in and Around High Schools: Lessons implementation. A paper presented at the conference on the role of schools in crime prevention. 30th September to 1st October 2002. Melbourne, Australia.

115. Suliman, E. A. and El-Kogali, S. E. (2003). Why are the children out of school? Factors Affecting Children's Education in Egypt. A Paper for the ERF 9th annual conference. Sussex Brighton BN1 9RE United Kingdom.

116. Sunita C. (2011). *Dropout in Secondary Education*: A Study of Children Living in Slums of Delhi; National University of Educational Planning and Administration 17-B, Sri Aurobindo Marg, New Delhi- 110016. India.

117. Tapper, D. (1995). *Swimming Upstream:* The First-Year Experience of Teachers Working in New York City Public Schools. Educational Priorities: New Kenya.

118. Tye, B.B. and O'Brien, L. (2002). "Why is Experienced Teachers Leaving the Profession" Phi Delta Kappan 84(1):24-32.

119. UNESCO (2006). *Learning Treasure within Paris*: UNESCO University Press.

120. UNESCO. (2007). *Education for all, global monitoring report*. The quality imperative Paris: UNESCO.

121. UNESCO. (2012). Youth and Skills: Putting Education to work. EFA Monitoring Report. UNESCO.

122. UNICEF (2000*).Defining Quality in Education.* A paper presented by UNICEF at the meeting of The International Working Group on Education Florence, Italy June 2000: A publication of UNICEF Programme Division**;** UNICEF New York.

123. UNICEF. (2007). Progress for children: a world fit for children statistical review.
http://www.unicef.org/progressforchildren/2007n6/index_41797.htm

124. United Nations. (2014).*The Universal Declaration of Human Rights*. Retrieved from http://www.un.org/en/documents/udhr/history.shtml

125. Valgas, M and Agalar, L. (2004). *Gender Makes the Difference*. IUCN. Geneva. 2P

126. Verspoor, A. (2008). *At the Cross Roads:* Choices for Secondary Education in Sub-Saharan Africa, Washington, D. C: World Bank.

127. Wasal K. and Mohammad I. (2014). Role of Co-Curricular Activities in School Effectiveness. Middle-East Journal of Scientific Research 21 (11): 2169-2176, Sarhad University of Science and Information Technology, Peshawar, Khyber Pakhtunkhwa, Pakistan ISSN 1990-923. IDOSI Publications.

128. Weerdt. J. D. (2006). *Health and Development Survey,* Basic information Documents; Mimeo. World Bank. Washington D.C.

129. Winkler, D. and Sondergaard, L. (2008).*The Efficiency of Public Education in Uganda*. Kampala: The Planning Department, MoES.

130. World Bank (2005).*Priorities and Strategies for Education*. A World Bank Review. Washington. D.C: The World Bank.

131. World Bank. (2009). Worthen B.R. and Sanders, R.S. (1987). *Educational Evaluation:* Alternative Approaches and Practice Guidelines, Longman, August 1, 1987.

132. Zahida H (2012). Role of Co-Curricular Activities for the Performance of Students at Primary Level In Schools. Interdisciplinary Journal of Contemporary Research in Business. Institute of Interdisciplinary Business Research VOL 3, NO 9; Principal, Govt. Junior Model School, Samanabad, Lahore-Pakistan

133. *Zulu, B.M (2004). Violence as an impediment to a culture of teaching and learning in some South African Schools. South African Journal of Education, 24 (2): 170-17*