Influences of Scope and Coverage of the Syllabus On Implementation of the Curriculum for Physics for Secondary Schools in Kenya

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DOI: 10.29322/IJSRP.9.05.2019.p89108
http://dx.doi.org/10.29322/IJSRP.9.05.2019.p89108

Abstract- Kenya in the vision 2030 endeavor to expand her development in infrastructure and industry; leading to urbanization and middle level economy (Republic of Kenya, 2010). If the Kenyan government is to meet her goal by the year 2030 then she must expand her Education in science and technology by improving efficacy in curriculum implementation in order to produce the required human resource. In contrast over the years students' performance in Physics at Kenya Certificate of Secondary Education (KCSE) has been low coupled with low students' enrollment. Little was known regarding influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics. The purpose of this study was to determine the influence of scope and coverage of the syllabus on implementation of the curriculum for Physics for secondary schools. This study was guided by cognitive constructivism theory of learning and adopted pragmatism research paradigm, mixed method approach and triangulation design. This study targeted 224 teachers of Physics and 4140 Form three Physics students in 283 public a secondary schools in Bungoma County. Stratified and simple random techniques were used to select 22 schools. The Head of Subject (HOS) were purposively sampled from each selected school. The sample size was 22 teachers and 393 students making a total of 415 respondents. Data was collected between September and October, 2017 using Teacher Questionnaire (TQ), Student Questionnaire (SQ), Lesson Observation Schedule (LOS) and Observation Checklists (OC). Data was presented using frequency tables, figures and photographs and analyzed using both descriptive and inferential statistics. Descriptive statistics used to analyze quantitative data include; percentages and means while the inferential statistics used include; Chi-square and Pearson Product-Moment correlation. Qualitative data was analyzed thematically. Statistical Package for Social Sciences (SPSS) version 20 was used to compute the analysis at $\alpha = 0.05$ level of significance. Both quantitative and qualitative results showed that a wide scope of the syllabus leads to failure to cover the syllabus in time hence influenced the implementation of the curriculum for Physics. The study concluded that the scope of the syllabus be covered in-depth and timely. The study recommended that the syllabus for Physics should be revised. The study findings provide an opportunity for teachers to improve on their classroom practices.

Index Terms- Influence, implementation of curriculum, scope, coverage, Kenya

I. Introduction

The 8-4-4 education system in the Kenyan curriculum has Physics as one of the three science subjects offered at the secondary school level. The physics syllabus is divided into four years of study; Form One, Two, Three, and Four (KICD, 2002). It can be noted that the Physics Syllabus at secondary school level in Kenya has a total of forty one (41) topics to be covered by the learner in a period of four years (KICD, 2002).

An evaluation of the Kenyan education system by UNESCO (2010) found out that the secondary school curriculum objectives have not been fully achieved as envisaged in 2002 syllabus. The evaluation revealed that some subjects have difficult and broad content; some schools have inadequate instructional materials; and inadequate number of teachers. The scope of the Physics syllabus is said to be overloaded given the time allocated in the syllabus for each topic (UNESCO, 2010).

Studies like; Mkandawire (2010) and World Bank (2008), showed that an overloaded curriculum influence implementation of the curriculum in science subjects. The scope of the syllabus should be proportional to the allocated time for effective implementation (World Bank, 2008). The matter of instructional time in Sub-Saharan Africa (SSA) deserves high attention. The length of instruction time is a matter of considerable significance and a strong indicator of students' access to learning opportunities. The World Bank (2008) showed a positive correlation between instructional time and students' achievements and appears to be even stronger in developing countries. Intended instructional time is not the same as the actual learning time. Time allocated for some of the topics like; Waves II, circular motion, cathode rays and electronics is less than the expected (SMASSE, 2005)

Shikuku (2012) in the study on "Effect of syllabus coverage on secondary school students' performance in Mathematics in Kenya" established that this factor does not directly contribute to poor performance in mathematics. Instead, late or non-coverage of the mathematics syllabus contribute to poor performance. In the study Shikuku (2012), suggested that:

"In an attempt to improve performance, some parents arrange and pay for extra tuition for their children, so that they cover all topics within the syllabus (P.31)."

The study by Shikuku indicated a positive relationship between syllabus coverage and students performance. In addition, it was also observed that; students' who cover the syllabus early in the year and spend more time on revision, have an even better mean score than those who cover the syllabus just before KCSE examinations.

To cover the syllabus early in the year, both students and teachers have to put in extra time for which the parents pay handsomely (Shikuku, 2012). Some schools use team teaching to ensure all topics in the syllabus are understood by all students. They also ensure both teachers and students are present in school and actually attend lessons. Other schools expel slow learners, and have a minimum mark that a pupil must obtain at Kenya Certificate of Primary Education (KCPE) for admission in Form One class (Ibid).

While the intended annual instructional time for Sub-Saharan Africa (SSA) at junior secondary level seem to be the highest in the world, the time-on task seem to be significantly reduced for a number of different reasons (World Bank, 2008). Such reasons like; low allocation of teachers' working-time, late coming of students or teachers, teacher and learner absenteeism for a variety of reasons; classroom shortages, lack of learning materials and extra-curricular activities (ibid). According to the World Bank (2008) most of the time is spent on administrative and non-administrative tasks by teachers. Teachers' workloads are also perceived to increase significantly due to the extra tasks outside classroom.

Poor time management by school administrators and teachers is another factor posing a challenge to the implementation of curriculum (Sadie, 2011). Curriculum implementation is also hindered by what goes on in schools. Students' learning time is mismanaged by administrators and the class teachers for instance in most schools, a lot of time is taken up by activities such as assemblies, games activities, meetings held by visiting government officials, health talks, variety shows held during lesson time, teacher in-service programs such as; Head of Department (HOD) workshops, subject workshops organized by Sub-County, and County Education offices.

The poor working conditions for the teacher poses another challenge (Mkandawire, 2010) to curriculum implementation. In the same vein, poor salaries, housing and general poor service also demoralize the teacher who may resort to go into private commercial enterprises to supplement meager salaries.

The Kenyan education sector has had regular teachers' strikes due to poor remuneration (Ayiro, 2015). These strikes indicate that the level of motivation of Kenyan teachers is low. The teachers' strikes also reduce learning time hence hinder effective curriculum implementation in schools. If various educational policies and programs are to be effectively implemented, teachers ought to be adequately trained and motivated. After pre-service training which provides foundation for professional service, teachers need to keep a breast with new development in the system through in-service training (SMASSE, 1998). Other professional support staffs such as laboratory technicians and librarians also need to be in-serviced in order to give sound support to the teaching staff in the implementation of the curriculum.

The government of Kenya has invested a lot of resources in the curriculum implementation process through free secondary Education and Strengthening Mathematics and Sciences in Secondary Education (SMASSE) project. Yet students' performance and enrolment in Physics KCSE remains alarmingly low at 39.0 and 26.6 percent respectively over the years 2011 to 2015. Enrollment in Physics declined from 39.15% to 24.83% within the same period (KCSE, 2014).

This study therefore endeavored to investigate the influence of scope of syllabus on implementation of Physics curriculum for secondary schools with a view of making implementation of the curriculum for Physics in secondary schools effective.

II. II. OBJECTIVES OF THE STUDY

The objective of this study was to:

1. Find out the influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics for secondary schools in Kenya.

III. RESEARCH HYPOTHESIS

The following was the research hypothesis:

HO_1: Scope and coverage of the syllabus does not influence implementation of the curriculum for Physics for secondary schools in Kenya

IV. THEORETICAL FRAMEWORK

This study was guided by the cognitive constructivism theory of learning developed by Jean piaget (1967). Constructivism theory emerged in the late 1980s, although its roots are much older. The basic belief of constructivism is that knowledge is actively constructed by learners rather than transmitted by the teacher (Hirumi, 2002; Liaw, 2004). Therefore, learning is considered as an internal cognitive activity. Although varying constructivist theories exist, there is agreement between the theories "that learning is a process of constructing meaning, it is how people make sense of their experience" (Jonessen, 1991). Cognitive constructivists think that learners build knowledge actively through the interactions in the teaching-learning activities within the learning environmental. The constructivist learning methods involves educators implementing curriculum using experiences of their learners who are active in the learning process. Cognitive and social learning constructivist theories give strong support to the design of pedagogical and social activities, respectively. The activities cause stimuli for learning. In addition, teachers are facilitators in a constructivist learning environment; the pedagogical design must enable teachers to provide various learning resources and learning activities to be employed within the available time (Qiyun, 2008).

The instructor is responsible for making sure the information is in a format the students can comprehend. In agreement with constructivist theory this study sought to determine the influence

of scope of the syllabus on the implementation of the curriculum for Physics.

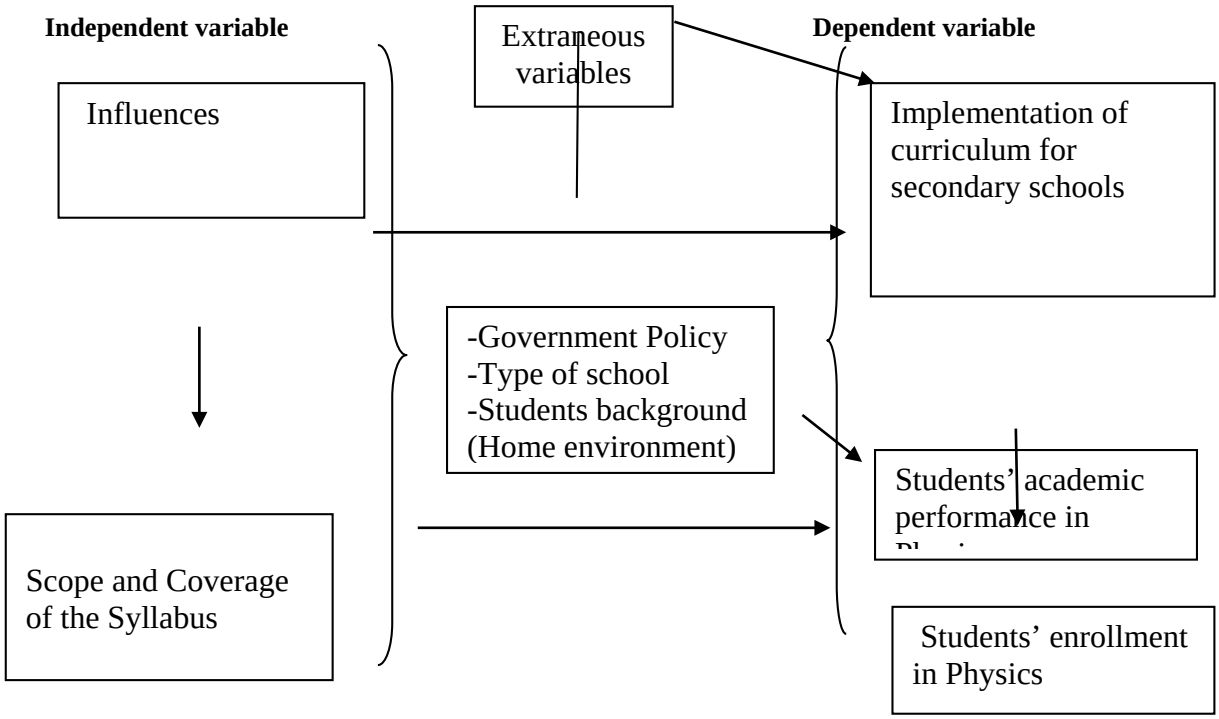
Based on cognitive constructivism, pedagogical design must support and satisfy the needs and learning intentions of individual learners. Therefore, the scope of the syllabus should not be a rigid frame to be covered in a specific period of time because unplanned knowledge can be acquired in the process. When applying this theory to independent learning, it was essential to understand that individual learners can construct different knowledge even given the same condition Jonessen (1991). In relation to constructionist theory, this study sought to find out the influence of scope of syllabus on the implementation of the curriculum for Physics for secondary schools in Kenya.

Therefore, cognitive constructivist theory was relevant to guide this study. It emphasize on a flexible scope of the syllabus. In relation to constructivist theory, this study sought to find out the influence of scope and coverage of the syllabus on implementation of the curriculum for Physics for secondary schools in Kenya.

CONCEPTUAL FRAMEWORK

This study was guided by a schematic model. In this model research variables and the relationship between them is shown diagrammatically. Independent variables (IVs) are placed on the left and dependent variables (DVs) on the right separated by the intervening variables at the middle. The conceptual framework is shown in figure 1.

Figure 1. A Conceptual Framework for the Relationship between Scope and coverage of syllabus and Implementation of the curriculum for Physics.



Source: Researcher (2015)

The conceptual framework in Figure 1, scope and coverage of the syllabus are hypothesized to influence implementation of the curriculum for Physics. The framework postulates that scope and coverage of the syllabus directly influenced students' academic performance and students' enrollment in Physics. However, this relationship may be modified by government policy, type of school and family background from which the student comes.

VI. RESEARCH METHODOLOGY

Research design

This study adopted a descriptive survey design, which involved the use of questionnaire and observation methods of data collection. Descriptive survey design provides numeric descriptions of some part of the population (Miles & Huberman, 1994). In this design the researcher describes and explains events as they are, as they were or as they will be. Descriptive survey design enabled the researcher to have a rapid data collection and ability to understand a population from a part of it (Creswell, 2009). Descriptive survey design was deemed appropriate for this study since research seeks to develop relevant true statements, ones that can serve to explain the situation that is of concern or that describe the casual relationship of interest (Neuendorf, 2002).

Population and Sample

The study population comprised all students and teachers in 283 public secondary schools secondary schools in Bungoma County. The sample consisted of Form 3 students of Physics in the sampled schools, assumed to represent the student population

because they had selected the subject, as well as accurately report on the matter under study. The schools were stratified as mixed and single gender schools. A stratified random sample of 22(10%) schools participated out of 283 public secondary schools in the County. Stratified sampling technique was used to ensured that the three categories of the schools (boys, girls and mixed) were represented in the sample in the proportion in which they appear in the population (Silverman, 2003). The use of this technique helped to improve representativeness and also to bring on board any differences that may exist between the school categories (Tuckman, 1978). Thus, the sample comprised seven boys' schools, seven girls' schools and eight mixed schools. One teacher for Physics was selected from each sampled school. A simple random of 10, 15 or 20 respondent from each single streamed, double streamed or a three and more streamed schools respectively participated in the study. In total, the study involved 415 respondents, 22 teachers (16 male and 6 female) and 393 students (236 boys and 157 girls).

Research instruments

This study employed questionnaires, lesson observation guide and observation checklist as instruments to collect data. The selection of these tools was guided by the nature of data to be collected, the time available as well as the objectives of the study (Bergman, 2008). This study was mainly concerned with teachers' and students' views, opinions, and attitudes about implementation of the curriculum for Physics for secondary schools in Kenya. Such data could best be collected through the use of questionnaire, lesson observation and observation checklist (Kothari, 2009).

Questionnaires

This study employed two sets of questionnaires: Teachers' Questionnaire (TQ) and Students' Questionnaire (SQ). Both questionnaires were structured to incorporate closed-ended and open-ended questions. This was to bring balance between the quality and quantity of data collected (Bergman, 2008). But on the other hand, provide more information. This study adapted some items from standardized and validated item from Fiske and Taylor (2008). Some of the items were modified to fit the present study. There were five questions on scope and coverage of the syllabus. The respondents were asked "Rate the following statements on scope and coverage of the syllabus in your school" The response was on likert scale having five degree of agreement such as; Strongly agree = 5; Agree = 4; Undecided = 3; Disagree = 2; Strongly disagree = 1.

Finally, there were two open-end questions. The first asked respondents "What do you think are the major influences on the implementation of the curriculum for Physics in your school?" and the second question was "What do you think should be done in order to manage these influences in your school?" Open-ended questions gave respondents complete freedom of response in their own words but the amount of space provided desired a brief answer.

Lesson Observation Schedule (LOS)

This study used Lesson Observation Schedule (LOS) meant to assess the extent to which the syllabus was covered at that time of the year as well as find out the efficacy of coverage.

LOS was used to obtain primary data during classroom lessons or laboratory lessons. In the first part of the schedule the observer filled in data on: name of the school, class, time, subject and roll or number of boys and girls in the class. The Second section of the schedule was the introduction of the lesson where the observer filled in data on topic being covered and effectiveness in syllabus coverage in terms of teaching methods, learners' motivation, teaching- materials and teaching-learning activities used.

Data analysis

Data collected from the field was compiled, sorted, edited, to ensure accuracy and consistence to facilitate coding. Quantitative data collected using closed-ended questions and observation checklist was coded using numbers while qualitative data from open-ended questions and lesson observation was organized in narrative form into themes. Data was then analyzed using both descriptive and inferential analysis techniques (Creswell & Plano, 2007). The descriptive statistics used for analysis of quantitative data were percentages and means while the inferential statistics used were chi-square and Pearson Product-Moment correlation. Data was analyzed using the Statistical Package for Social Science (SPSS) version 20 at $\alpha = 0.05$ level of significance. Qualitative data was organized in narrative format and analyzed thematically. Chi-square was used to establish the relationship between scope and coverage and implementation of the curriculum for Physics for secondary schools (Morgan, 2007). If the probability of the computed Chi-square value was less than the level of significance set, the null hypothesis was rejected and concluded that the two variables were not independent of each other and vice versa (Kothari, 2009). Pearson Product-Moment correlation coefficient was used to measure the relationship between scope and coverage of the syllabus and implementation of the curriculum for Physics for secondary schools.

V. RESULTS

Influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics for secondary schools

The objective of this study was to investigate the influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics for secondary schools in Kenya. To achieve this objective, the respondents were asked to rate statement on scope and coverage of the Physics curriculum. Scope and coverage of the syllabus were defined in terms of too wide, adequate time allocated, work load, teaching pace and completion of form One and Two topics at the end of each year respectively. The responses were recorded on a five-point likert scale ranging from: Strongly Agree = 5 to Strongly disagree = 1. Data on this objective was analyzed under the hypothesis "*Scope and coverage of the syllabus does not influence the implementation of the curriculum for Physics for secondary schools.*"

4.6.1. Data from Teachers' and Students' closed-ended Questions

Data from teachers' and Students' Questionnaires are presented in Table 1.

Table 1. Influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics for secondary schools

Response Scope and coverage Of the syllabus	SA N	SA %	A N	A %	U N	U %	D N	D %	SD N	SD %
F1. The syllabus is too wide to be covered within the available time	149	35.9	75	18.1	30	7.2	53	12.8	108	6.0
F2. The time allocated for physics Is inadequate to cover all topics	56	13.5	170	41.0	17	4.1	130	31.3	41	10.1
F3. The work load affects the coverage of the Physics syllabus	134	32.3	107	25.8	39	9.4	59	14.2	76	8.3
F4. The syllabus is too wide that teachers teach at a fast pace	113	27.2	94	22.7	28	6.7	97	23.4	83	0.0
F5. I never completed form One and	93	22.4	60	14.5	5	1.2	61	14.7	195	7.0 form Two topics in the year respectively
Mean	**109**	**26.2**	**101**	**24.3**	**24**	**5.7**	**80**	**19.3**	**101**	**24.3**

Key:SA= Stronglyagree; A= Agree; U= Undecided; D= Disgree; SD= Stronglydisagree

As shown in Table 1, 109 (26.2%) and 101(24.3%) respondents, stronglyagreed and Agreed respectively. In total, a mojority 210(50.5%) of the respondents agreed that the scope and coverage of the syllabus influenced the implementation of the curriculum for Physics for secondary schools. In contrast, a minority 181(43.6%) disagreed that scope and coverage of the syllabus influenced implementation of the curriculum for Physics. Notably, 24(5.7%) respondents were undecided. Overall, the findings indicated that a significantly higher percentage of the respondents 50.5% held that the scope and coverage of the syllabus had an influence on the implementation of the curriculum for Physics for secondary schools.

4.6.2. Data from Teaches' and Students' open-ended Questions

The reports given by teachers and students in the open-ended questionnaires were consistent with data from close-ended questionnaires. One teacher in identifying major influences on implementation of the Physics curriculum wrote:

The scope of the syllabus for Physics is not in par with the allocated time for the subject in the school timetable. The time allocated is not enough to allow adequate coverage of all planned topics and objective in the curriculum.

Majority of the teachers also identified workload as a key influence on implementation of the curriculum for Physics. Students seemed to agree with teachers that scope and coverage influenced implementation of the curriculum. Accordingly, one student had reported in an open-ended questionnaire that:

Our teacher of Physics did not cover all form One and form Two topics. The teacher had a tendency of skipping one or two topics to be able to complete the syllabus for the sake of the fourth coming examinations.

4.6.3. Data from lesson observation

It was observed that only six (42.8%) schools could be able to completed form Three syllabus by the end of the year out of 14 schools in which lesson observations were made. Majority, eight (57.2%) of the schools were still lacking behind in the syllabus coverage.

Hence, it is not surprising if students fail in KCSE examinations if the syllabus is not effectively covered.

Based on the findings from questionnaires and lesson observations, the researcher carried out data analyzed using chi-square to test the null hypothesis that, "*Scope and coverage of the syllabus does not influence implementation of the curriculum for Physics for secondary schools*. The results of chi-square are summarized in Table 2.

Table 2. Chi-square results on influence of scope of the syllabus on the implementation of the curriculum for Physics

	Chi-square	observed frequency (O)	Expected frequency (E)	sig.
	321.720	5	19.8	0.001
df	20			

0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.8.

The results on Table 2, shows computed Chi-square values; F (5,321) = 19.8; df = 20*; p*<.05). This gave a significant value of 0.001 which is below the P value = 0.05, hence the researcher rejected the null hypothesis that stated that *"There is no significant influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics for secondary schools."* Therefore the alternative hypothesis which states that there is significant influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics for secondary schools was accepted. It was concluded that there is significant influence of scope and coverage of the syllabus on implementation of the curriculum for Physics for secondary schools.

Further, Pearson Product Moment correlation coefficient was used to establish the degree of relationship between scope and coverage of the syllabus and implementation of the curriculum for Physics for secondary schools. The findings are shown in Table 3.

Table 3. Pearson Product Moment correlations on scope and coverage on the implementation of the curriculum for Physics for secondary schools

Variable	r	r^2
Scope and coverage of syllabus	0.121**	0.014

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

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

Results presented in Table 3, shows that there was a significant positive correlation between scope and coverage of the syllabus on the implementation of the curriculum for Physics.

Scope and coverage was found to have a small but significant influence on the implementation of the curriculum for Physics (r = 0.014, *p*< 0.01). The results shows r^2 to be 0.014 which imply that 1.4 percent implementation of the curriculum for Physics is predicted by the scope and coverage of the syllabus.

VI. Discussion of The study Findings

The objective for this study was to find out the influence of scope and coverage of the syllabus on the implementation of the curriculum for Physics for secondary schools in Kenya. As shown on Table 1, 50.5% of the respondents indicated that Scope and coverage of the syllabus had influence on the implementation of the curriculum for Physics. The results on Table 2, showed the computed Chi-square values; F (5,321) = 19.8; df = 20*; p*<.05). It was established that there is significant influence of scope and coverage of the syllabus on implementation of the curriculum for Physics for secondary schools. Findings on Table 3, indicated that scope and coverage of the syllabus influenced the implementation of the curriculum for Physics by 1.4 percent.

It was established that the syllabus for Physics was too wide. Most teachers did not cover all topics in form One and Two but skipped some topics due to the inadequate time allocated for Physics. The syllabus coverage in most schools was not in-depth and timely. These influenced the implementation of the curriculum for Physics for secondary schools in Kenya.

This finding is in line with the findings by Mkandawire (2010). Mkandawire (2010) asserted that scope and coverage of the syllabus depended on the available time. Mkandawire further argued that allocated time does not necessarily translate into actual learning if teachers spend some of the allocate time on other activities. A teacher who is not conscious is not disciplined and a drawback in as far as curriculum implementation is concerned.

For instance, a teacher of Physics who goes to class five (5) minutes late for each lesson in a particular class every day, will have lost 25 minutes at the end of the week. This is a lot of learning time wasted and will derail syllabus coverage and implementation of the curriculum since curriculum developers do not take this time into consideration when developing the curriculum.

Kyule et al., (2016) noted that "curriculum implementation is a composite of the learner, teacher, teaching resources, teaching methodologies, anticipated experiences and outcomes (P.76)."

In the same line, the study by Shikuku (2012) offered an empirical support indicating that late or non-coverage of the syllabus contributed to the poor performance. The study further suggested that students who had in-depth and timely syllabus coverage were likely to be more successful in examinations compared to those who had a shallow and late coverage.

Provision of adequately trained teachers is too often an impediment to providing quality Education in Kenya. According to Ayiro (2015) the Education sector in Kenya is still grappling with a shortage of teachers estimated at 80,000 tutors. Glaring inconsistencies on the side of the government has been observed every time critical areas including: quality of Education, relevance of Education offered, provision of computers and other resources

for teaching and learning process. Shortage of teachers in schools results to the overloading of the few who are employed by the government. This forces them to have a heavy workload to teach. This reduces effectiveness in implementation of the curriculum in secondary schools.

The curriculum revision of 2002 envisaged that learners would be equipped with competencies to operate effectively in a knowledge based economy (UNESCO, 2010). Many factors play a role in motivating curriculum reforms some of these include: whether the curriculum objectives are clear, pertinent to the needs of society, achievable and realistic; whether the curriculum is overloaded; the scope and depth of the existing curriculum; areas of unnecessary overlap within and across subjects; availability, adequacy and appropriateness of the resources (physical and human) for effective curriculum implementation (UNESCO, 2010).

Furthermore, the evaluation of the Education process by UNESCO (2010) found out that Kenyan schools burden learners with frequent Continuous Assessment Tests (CATs) at the expense of learning due to the high stakes placed on summative examinations. Internal examinations, Mocks and final examinations also take up learning time for non examination classes. Other consequences of this situation include private tutoring, extra-tuition, remedial teaching and use of commercially developed examination papers which at times do not conform to the curriculum or what the teacher has taught.

Teacher absenteeism from schools for various reasons also costs the students by depriving the learner of valuable time. In addition, the need to devote inordinate amount of time to the management of problems of large classes effectively reduce students' time on the learning task which results in the failure to complete the intended content for the lesson and will necessitate the allocation of more time to the same task (Mkandawire, 2010).

Studies in developing countries like; Mkandawire (2010), UNESCO (2010), Shikuku (2012), Ayiro (2015) and Kyule (2016) revealed disparities between intended instructional time in the curriculum implementation, actual time allocated in schools and the time learners spend actually learning (time on task). The time spend in situations where students and learning materials are well matched; learning occurs in a fairly ideal fashion (academic learning time). This study has also confirmed that scope and coverage of the syllabus in Kenya one of the developing countries influence implementation of the curriculum for Physics hence need for curriculum revision.

VII. Conclusion

The following conclusion was made on the basis of the research findings:

The scope and coverage of the syllabus influenced the implementation of the curriculum for Physics for secondary schools. A wide scope of the syllabus forced teachers to teach at a fast pace to cover it within the allocated time on the school timetable. This made an average and slow learners lack behind. As a result of the wide syllabus, most schools never covered the form One and two topics. A wide scope of the syllabus therefore hindered an in-depth and effective coverage of the curriculum. It is therefore crucial that the scope of the syllabus for Physics is reviewed to fits into the allocated or available time.

VIII. Recommendation

Curriculum developers should systematically consult with the teachers so as to holistically revise the overloaded curriculum for Physics in order to improve curriculum implementation.

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