IOSR Journal Of Humanities And Social Science (IOSR-JHSS)
Volume 20, Issue 3, Ver. III (Mar. 2015), PP 79-87
e-ISSN: 2279-0837, p-ISSN: 2279-0845.
www.iosrjournals.org

Assessment of Stakeholders' Influence on Curriculum Development Process in Secondary Schools in Kericho County

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Abstract: *Major reforms have been on curriculum where several innovations have been developed in various disciplines for implementation at schools. Unfortunately, several pragmatic innovations have partially been implemented or completely shunned. Several factors have been highlighted as impediments to effective implementation that include level of involvement of stakeholders and policy issues. This study sought to assess stakeholders' influence on curriculum development process in secondary schools in Kericho County.This study was relevant because of the poor performance of learners in mathematics that raised an issue of concern to educators in Kenya for many years and despite availability of alternative curriculum which was designed as an option for students who had determined interest to pursue courses which did not require high competence skills in mathematics, secondary schools in kericho county had not implemented. The objective of the study was to: determine the level of involvement of stakeholders in the curriculum development process in secondary schools in Kericho County. The study utilized a descriptive research design where frequency counts, tables and figures were used to boil down data into manageable units. A population of 157 principals, 401 teachers of Mathematics and 20 heads of secondary Mathematics curriculum at KIDC, MoE and KNEC were targeted. Simple random sampling was employed to select respondents. Data was analyzed using SPSS computer programme version 20.0, a reliability level of .83 was ascertained by using a pilot study and a reliability level. The findings indicated that there was minimal stakeholder involvement in curriculum development process.*

Keywords: *Stakeholders' influence, Curriculum development process*

I. Introduction

1.1 Background Information

Instructional materials should be used effectively and stored in an orderly and safe manner and should be within reach, M.O.E (2000). The government through the ministry of education has gone out of its way to provide instructional materials through the free secondary education fund. The ministry of education has also been funding schools with a lot of infrastructure money. All schools are also expected to adhere to the minimum health standards provided in the public health act cap 242 (revised 1972). The Government of Kenya (GoK) has made several reforms of both curriculum and policy to enhance teaching and learning of Science and Mathematics. This includes making at least two science subjects at Kenya Certificate of Secondary Education (KCSE) compulsory. There are also regular Strengthening Mathematic and Sciences in Secondary Education (SMASSE) insets for practicing science teachers. Despite all these the mean score in science and mathematics at KCSE has remained low KNEC (2010). As a result the ministry of education science and technology thought of a curriculum that will take care of the special abilities and needs of learners whose competences are not geared to mathematics by introducing alternative B curriculum. The case has been the same in Kericho district, Kenya.

1.2 Statement of the Problem

Government of Kenya (GoK) intends to be fully industrialised by the year 2030. This will be achieved through improvement of science and mathematics performance. It is noted that performance in these subjects at KCSE has been poor. For this goal to be achieved there is a need to improve performance in science and mathematics. This can be done through good leadership, proper management and proper utilisation of teaching and learning resources. The poor performance in these subjects has been blamed on mismanagement and leadership of schools by Head teachers. The leaders on the other hand blame the poor performance on improper utilization of teaching and learning resources by subject teachers. This study therefore investigated the correlation between management and utilisation of teaching and learning resources in science and mathematics in Kericho District, Kenya. Despite Mathematics Alternative 'B' curriculum being considered a simpler version of the Mathematics subject offered in Kenyan secondary schools Miheso-O'Connor (2011), schools in Kericho County have not implemented this curriculum (Kericho County Director of Education, 2012).

1.3 Objective of the Study

To investigate the level of involvement of stakeholders in the curriculum development process in secondary schools in Kericho County

1,4 Hypothesis

Ho: There is no statistically significant relationship between stakeholders' level of involvement in curriculum development and implementation of Alternative 'B' Mathematics curriculum in secondary schools in Kericho County

II. Literature Review

2.1 Review of theory

The study was based on Leithwood (1982) model of evaluating curriculum implementation. According to this model new curriculum implementation is a process of change and therefore, the educator, the learner and the educational institution has to change to accommodate reforms. Leithwood (1982) identified nine dimensions of curriculum innovation where change occurs. These include: platform, objectives, student entry behaviours, assessment tools and procedures, instructional materials, learners' attitude, teaching strategies, content and time. Leithwood's (ibid.) model of evaluation has four features. These are procedures for: identifying descriptive dimensions of the innovation; specifying practices implied by the innovation; describing actual practices; and comparing actual with intended practices (Leithwood, 1980).

For instance inadequate teaching and learning resources for the implementation of the new Mathematics curriculum, means there is a gap in actual classroom practice. This would be an indication that educators are experiencing difficulties or have concerns which have adverse effects on the implementation of the innovation. This model suggests that the size of the gaps must be reduced so that the innovation is implemented. This model is appropriate for this study since it enabled the researcher to establish how teachers' academic and professional qualifications, instructional techniques, teaching approaches and attitude of the learners influence the implementation of the new Mathematics curriculum.

2.2 Curriculum Development and Stakeholder Involvement

Contemporary curriculum development processes more frequently involve public discussions and consultations with a range of stakeholders, and the curriculum has to progressively evolve into a topic of debate engaging policy-makers, curriculum experts, practitioners and society at large UNESCO (2009). Other studies done by Hoogholf and Bron (2008) described the national curriculum development in England relying heavily upon advisory committee of educators and a review panel made up of teachers, academics and business and industry to provide recommendations for the national curriculum. Various views from different stakeholders are normally a good ingredient in any curriculum development process. While supporting the stakeholder's involvement in curriculum development in the world all over, UNESCO (2005) stated that governments should take appropriate steps to make curriculum development participatory. In addition it further highlighted that curriculum innovations in the modern world would never be successfully implemented if the general public fails to understand its then nature and purpose. This position taken by UNESCO (2002) is applauded by World Bank (2003) in that opportunities for teachers to work together, share ideas, jointly solve problems, co-operatively create material, and greatly enhance the probability of success in curriculum implementation. Conversely, in Kenya curriculum development is exclusively done by subject panellist at KICD and this limits public participation and involvement.

In New Zealand the practice of involving key stakeholders is significant. This had been revealed by INCA (2008) where observations made indicated that representatives from a number of groups were involved in the development process which included trials in schools, collaborative working parties, online discussions and an inquiry into relevant national and international research. It seemed to be a worldwide practice to involve stakeholders in matters of curriculum development. From the onset, research done among teachers in Scotland by UNESCO (2005) indicated that they are engaged fully in shaping the curriculum. Later they generate education feedback and revision process.

Curriculum is the foundation of the teaching-learning process. The development of programs of study, learning and teaching resources, lesson plans and assessment of students, and even teacher education are all based on curriculum. Curriculum and curriculum development at first glance appear to be of chief concern to educators, governments and parents, and both have relevance and impact on the development of communities and prosperity. According to De Coninck (2008), curriculum, more than ever before, is now viewed as being at the centre of daily life and the responsibility of the all stakeholders in the society as a whole. Campbell and Rozsnyai, (2012) define stakeholders as the individuals or institutions that are interested in the school curriculum.

Levin (2007) noted that curriculum documents were "a very large part of the work done by ministries of education in creating curriculum content (para. 1)." However, over time, Levin (2007) states that educational change is more complex, and "as governments have attempted to make large-scale changes," curriculum change has become "less of an activity in its own right" and curriculum renewal has become part of a broader strategy for change in education.

Curriculum development today presents both a strategic process challenge as well as a policy challenge. For example, should the policy aim to teach what is of value, as embodied in subject disciplines, and for deep understanding in preparation for competing in the global economy? Or should policy aim for a personalized curriculum that recognizes students as active partners in their learning and develops their potential as a person? One response to the question could be "both" Ackerman (2003).

In Germany, for example, the 1997 Programme for International Student Assessment results revealed that education in Germany did not compare as well as other countries and the quality of education was assumed to be not as good. The curriculum policy response in Germany was to undergo a fundamental shift toward competencies, resulting in a curriculum with education standards at different levels for "the so-called subject-specific, personal, social, methodological competencies for each subject or subject area, and … the compulsory competencies and content of the core curriculum" Leyendecker and Letschert (2008, p. 27). Schleicher (2011) states that high performing education systems are characterized as knowledge rich in which collaborative partnerships and leadership are essential to formulating policy. In Alberta (Alberta Education, 2011), the policy aims were set out as, All students are inspired to achieve success and fulfilment as engaged thinkers and ethical citizens with an entrepreneurial spirit.

There are many models for curriculum development. Generally, as a process, curriculum development is concerned with reviewing, planning, developing, implementing and maintaining curriculum4 while ensuring that the stakeholders engaged in this process have a high level of commitment to and ownership of the curriculum. In formulating policy, the challenge lies in the discourse on the form, content, aims and goals of curriculum, often referred to as curriculum orientations Eisner and Vallance (1974), as cited in Joseph (2011). These curriculum orientations have a profound impact on roles of stakeholders, parents, educators and students as they relate to vision and practice, decision making, curriculum planning, development, implementation and evaluation. These orientations or "cultures" of curriculum, in turn, have an impact on the curriculum development process Joseph (2011). Given the importance of curriculum, a number of questions arise, "How is curriculum developed, who develops it, and how are curriculum development processes evolving?" However, before these questions can be answered, the first question that needs to be asked is, "What is curriculum?"

Surprisingly, there is no fixed definition of curriculum Sahlberg (2011). The word curriculum is derived from the Latin verb currere which means to run. As Sahlberg notes, in Anglo-Saxon countries curriculum refers to what students should learn, within a framework of goals, objectives, content and pedagogy. In countries such as Sweden (läroplan), Holland (leerplan) and Germany (Lehrplan), curriculum is defined as a "plan for learning" Taba (1962), as cited in Thijs and van den Akker, (2009). Curriculum can also be "concerned with what is planned, implemented, taught, learned, evaluated and researched in schools and at all levels of education" McKernan (2008, p. 4). This latter definition of curriculum is seen to be more as a process rather than just a product.

Johnson (2009) defines curriculum as a "structured series of intended learning outcomes" that prescribes the results of instruction. Curriculum is, therefore, viewed as an output of the development process. Research in curriculum development has focused more on improving the process of curriculum than on curriculum theory, which aims to better understand the educational significance of what students are learning (Pinar, 2004).

Given that there are a number of activities related to curriculum, distinctions among various levels of curriculum activities (policy, design and development, implementation) and the level of curriculum development Van den Akker (2007) provide deeper understanding of curriculum products. He reveals that curriculum is more than a process; it is also a product. These products may vary in scope and in detail. Curriculum development can be viewed narrowly (as developing a specific curriculum framework) or more broadly (as an ongoing process of improvement that takes into account teacher education and assessment programs). The problems of decision making and implementation of curriculum are complicated by a long cyclical process, which often involves many stakeholders, typically with their own perspectives and interpretations of curriculum. Additionally, as Levin (2007) notes, everyone in society wants her or his particular interest included in the work of the school, putting pressure on governments to include more and more in the curriculum. Increasing social diversity has also led to calls to add more content. He further notes that the problem is compounded by the typical curriculum development process where teams of "experts tend to want more and more complex elements of their own disciplines or subject areas included in the curriculum.

The approach taken to date of what to include in curriculum (program of studies) has been to balance the three following priorities Thijs and van den Akker (2009):

• Knowledge-what academic and cultural heritage is essential for learning and future development?
• Society-which issues should be included given societal and global trends and needs?
• Learner-which elements are of importance for learners' personal and educational needs and interests?

Providing responses to the previous questions requires navigating through diverse stakeholders and interest groups to arrive at a coherent curriculum that is not overloaded or fragmented because of a large number of separate subjects. Stakeholders must therefore be involved in the entire curriculum development process Thijs and van den Akker (2009). Public pressure, resulting from unfavorable media reports on students' supposedly inadequate knowledge of something, often leads to the addition of content in curriculum or the development of too many separate courses that most schools are unable to offer Levin (2007). As well, curriculum of today is striving to be "more challenging and intrinsically motivating" and move toward instruction that is more meaningful and autonomous Thijs and van den Akker (2009). The overloaded curriculum does not respond to students' interests and teachers feel pressured to cover the curriculum that may be pitched at a level that is too high for students to achieve Levin (2007). Additional challenges in curriculum development often arise from gaps between the intended curriculum (policy, vision, rationale and philosophy underlying a curriculum), the implemented curriculum (curriculum as interpreted by school administration and teachers; the process of teaching and classroom practices) and lastly, the attained curriculum (learning as experienced by learners, resulting from defined learning outcomes for students). If a curriculum revision process is overly ambitious, is carried out within short timelines and is within an environment of low investment in teachers, problems will inevitably arise. A particular curriculum may include knowledge and require pedagogy that teachers may or may not have.

To address this problem, education systems provide professional development for teachers, but it is highly unlikely, given the amount and variety of curriculum content, that we can provide enough support to enable most teachers to teach most subjects with a very high level of content and pedagogical knowledge Levin (2007). Further, if there is poor planning and linking with other system components, such as assessment programs and learning and teaching resources, problems will arise. When problems and tensions do arise, participants tend to engage in blaming each other for problems in the education system. Thus, curriculum needs to be thought of as a web of interrelated and aligned activities dedicated to achieving common learning goals Thijs and van den Akker (2009) Curriculum developers face many uncertainties in a complex task undertaken within very dynamic contexts Thijs and van den Akker (2009). Curriculum developers want theoretically underpinned and empirically tested development principles and methods. Unfortunately, current research, with its focus on descriptive knowledge, does not provide developers with useful solutions to their problems. These problems usually arise from the ambitious and complex nature of reform policies that affect many facets of education at multiple levels, ranging from macro level policy formulation to micro level realization. As Levin (2007) notes, "curriculum, when done well, can be a mainstay of effective teaching and learning, but if we are naïve about the real pressures on school curricula we are unlikely to be able to achieve our educational goals" (para. 17). Caskey (2002) notes that coherent, integrative and democratic curriculum requires a great deal of thought and is a time-intensive activity. Success in achieving educational goals, therefore, depends upon careful planning and implementation of these activities in a range of levels and contexts.

Sahlberg (2006) makes the following observations about curriculum:

• Curriculum development is an ongoing process and not just a product. Further, curriculum development can no longer be viewed as a project that has a start and an end. In today's rapidly changing world, the curriculum designed today and implemented in the years to come could still be responsive and relevant in five years conceptually but specific facts may not be so. Curriculum should be viewed as a "living, organic instrument to help teachers and schools to find optimal ways to educate" students (p. 8).

Curriculum lies at the heart of educational enhancement policies, geared to quality improvement. Curriculum should support teachers in developing their schools, increasing access to all students and raising the quality of the learning-teaching process. To achieve this, qualified experts are required to lead the process that is based on consensus and aligned with accepted policy defining the purpose of curriculum.

• Direct copying or transfer of curriculum from another jurisdiction as a means of addressing mobility and qualifications, without taking into account cultural and political differences, teaching traditions and provision of education, is not advisable.

• Finally, curriculum development processes require expertise and continuous production of new knowledge of these processes. As such, it requires that well-resourced and well-equipped research structures be in place (Joyce and Showers 1995, as cited in Sahlberg, 2006, p. 9). Stronger research is needed on potential directions (path finding) and curriculum models of development with systematic follow-up and analysis of implementation of curriculum in schools.

This last point underscores the importance of viewing curriculum development as a process and not just a static product.

III. Methodology

3.1 Research Design

This study employed the expost-facto design in a causal comparative research. According to Mathooko, Mathooko and Mathooko (2007), an expost-facto design explores and clarifies relationship between two or more variables. This design was found to be most appropriate for this study because both independent and dependent variables could not be manipulated since they had occurred. A correlation describes how, as one variable changes (the independent variable) another variable also changes (the dependent variable) in a somehow predictable way. In this study the design helped the researcher to establish the relationship between dynamics of curriculum development and acceptability of Alternative B curriculum. The characteristics which constitute the independent variables could not be directly controlled by the researcher. Their influence had already occurred and therefore not manipulatable. The design ensures that little or no control is exercised over any of the variables. This design was considered as suitable for this study because many of the phenomena in dynamics of development and acceptability can only be studied after the facts.

3.2 Target Population

The target population for the study was all the Head teachers and teachers in Kericho Districts. According to TSC (2010), there were about 157 secondary schools with 157 principals and 401 mathematics teachers which formed the study population with 20 heads of mathematics from KICD, MOE and KNEC.

3.3 Sampling Size and Techniques

The sample size that was selected for the study from the target population was 157 Headteachers and 401 science teachers. The figure was arrived at by using the formula provided by Krejcie and Morgan (1970) as cited by Kathuri and Pals (1993). In this formula:

$$S= \frac{X^2NP(1-P)}{d^2 (N-l) + X^2 P (1-P)}$$

Where

S= Required Sample Size.

N=. Number of secondary school teachers in the District (401),

P= Population proportion of individual that yield maximum possible sample size (Assumed to be 0.5).

d= Degree of accuracy as reflected by amount of error that can be tolerated (taken as 0.5).

X^2=Table value of chi-square for one degree of freedom taken as 3.841 for 0.95.

The study used district schools only to ensure that only schools with comparable academic resources formed the framework of the study. The total number of secondary schools in the district was 157. From this, 47 schools were randomly sampled. A list of all schools was used as initial sampling frame. The schools were sub-divided into sub-groups or strata based on their locality and gender of students. A proportionate number of respondents was selected from each stratum in order to obtain a sample which could typically reflect the schools' characteristics. Teachers' sample was obtained using simple random sampling method as recommended by Muthooko, Muthooko, and Muthooko, (2007). Head teachers purposively sampled.

No.	Participants	Sub-County	School Type	Target Population	Sample size	%
1	Principals	Kericho East	Boys	8	3	1.9
			Girls	9	3	1.9
			Mixed	9	3	1.9
		Kericho West	Boys	8	3	1.9
			Girls	10	3	1.9
			Mixed	12	4	2.5
		Londiani	Boys	6	2	1.3
			Girls	7	2	1.3
			Mixed	10	3	1.9
		Kipkelion	Boys	7	2	1.3
			Girls	6	2	1.3
			Mixed	11	4	2.5
		Bureti	Boys	13	4	2.5
			Girls	17	5	3.2
			Mixed	24	7	4.5
		Sub total		157	47	30.0
2	Teachers of Mathematics	Kericho East	Boys	24	7	1.7
			Girls	20	6	1.5
			Mixed	27	8	1.9
		Kericho West	Boys	18	5	1.2
			Girls	25	7	1.7
			Mixed	26	8	1.9
		Londiani	Boys	14	4	0.9

			Girls	19	6	1.5
			Mixed	24	8	1.9
		Kipkelion	Boys	18	5	1.2
			Girls	14	4	0.9
			Mixed	27	8	1.9
		Bureti	Boys	33	11	2.7
			Girls	44	13	3.2
	Sub-Total		Mixed	68	20	4.9
				401	120	30.0

Source: Field Data, 2012

3.4 Data Collection Procedure

The researcher sought permit from the national council for science technology and innovation (NACOSTI) under the MoE. Upon clearance the researcher made phone calls to book appointments with selected principals of secondary schools in Kericho County. All selected principals and teachers of Mathematics were requested to travel to sub-county headquarters centres to participate in the study. Adequate arrangements were made for transport, lunch and venue preparation. Follow ups and reminders were made to ensure that all respondents attended and participated in the study.

3.5 Validity and Reliability of the Instruments

Validity refers to the accuracy and meaningfulness of inferences which are based on the research results Mugenda (2003). Validity is the degree to which results obtained from the analysis of the data actually represent the phenomena under study; to determine the accuracy and meaningfulness of the data. To determine content validity of the instrument items, the researcher's supervisors were contacted to assist in ensuring that the instruments' items were in relation to the set objectives and content area under study. Their suggestions and comments were used as a basis to modify the research items and make them adaptable to the study. The reliability of the instrument was worked out using Cronbatch alpha. Head teachers' questionnaire had reliability value of 0.81 and science and mathematics teachers' questionnaire had reliability value of 0.78. Both the questionnaires had reliability value of above 0.7 which was considered reasonable enough as suggested by Orodho (2002). Cronbatch alpha method was preferred because it is suitable for items whose scores take a range of values.

Basing on the feedback from the experts, the wordings of the instruments were modified appropriately. Reliability of research concerns the replicability and consistency of methods and results Wiersma and Jurs (2005). Reliability refers to the measure of the degree to which research instruments yield consistent results or data after repeated trials Mugenda and Mugenda (2003). Reliability in research is influenced by random error. As random error increases, reliability decreases.

Error was eradicated through accurate coding, clear instructions to the subjects, and proper training of interviewees to reduce bias. Data collected from the pilot study was used to compute the reliability of the instruments' items. Cronbach's alpha coefficient was computed to determine internal consistency of the items. This method is appropriate owing to the fact that it requires only one administration of the test Cohen and Swerdlik (2005). It is also appropriate where items have got choices Cozby (2003). In this study, the items were considered reliable since they yielded a reliability coefficient of 0.70 and above. This figure is usually considered desirable for consistency levels Fraenkel and Wallen (2000).

3.6 Data Analysis

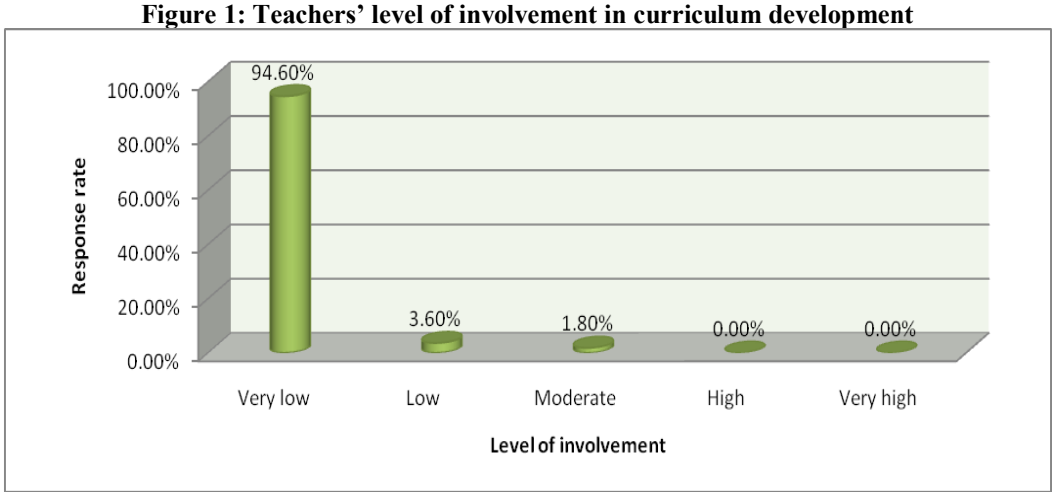
After data collection, responses from all questionnaire items and interview schedule items were cross-checked to facilitate coding and processing for analysis. Responses from interview schedules were analyzed basing on emerging themes. Findings of the study were presented in form of cumulative frequency tables, charts and graphs.

IV. Results And Discussion

4.1 Level of Involvement of Stakeholders in the Curriculum Development Process

The study sought to establish the level of involvement of teachers of Mathematics and principals alike in the curriculum development process, particularly in new curriculum innovations, Alternative 'B' Mathematics being a case in point. This was done by the use of a five-likert scale: very low; low; moderate; high; very high. Majority (106; 94.6%) of the teacher respondents indicated that their involvement in curriculum development process of new curriculum innovations is very low. Those who indicated that their involvement was low and moderate were 4 (3.6%) and 2 (1.8%) respectively. None of the teacher respondents indicated that their level of involvement in curriculum development process was high or very high. This finding is presented in Figure 1.

Figure 1: Teachers' level of involvement in curriculum development



Source: Field data, 2012

The principals too were asked to indicate their level of involvement in the curriculum implementation process, which they are charged with the responsibility of overseeing its implementation. Of the 47 principals who were subjected to the structured interview schedules, 40 (85.1%) of them indicated that their level of involvement in the curriculum development process was very low. A proportion of 4.3% (2) indicated that their level of involvement in the curriculum development process was low. Only 10.6% (5) of the respondents indicated that their level of involvement was moderate as illustrated in Table 2.

Table 2: Principals' level of involvement in curriculum development

Level of Involvement	Frequency	Percentage
Very low	40	85.1
Low	2	4.3
Moderate	5	10.6
High	0	0.0
Very high	0	0.0
Total	47	100.0

Source: Field data, 2012

A principal who indicated that her level of involvement in the curriculum development process was moderate was quoted observing as follows:

I think principals are moderately involved in the curriculum development process since we are occasionally called upon to attend seminars on the same. However, principals are normally passive in the entire curriculum development process....

As indicated in Table 4.3, majority of the principals indicated that their level of involvement in the curriculum development process is very low as one of these respondents indicates:

...something is not just right in our education system. Principals are supposed to oversee curriculum implementation in their respective schools and yet their participation in the entire curriculum development process is very low at best and none at all at worst...how do you oversee the implementation of a process you are not conversant with....something needs to be done with the minimum of delay!

The tone of this response indicates some level of frustration, notably by the principals and subsequently by the teachers of Mathematics as well. A report by UNESCO (2009) indicates that contemporary curriculum development processes more frequently should involve public discussions and consultations with a range of stakeholders, and the curriculum has to progressively evolve into a topic of debate engaging policy-makers, curriculum experts, practitioners and society at large.

Besides, Hoogholf and Bron (2008) describe the national curriculum development process as one that should rely heavily upon advisory committee of educators and a review panel made up of teachers, academics and business and industry to provide recommendations for the national curriculum. Various views from different stakeholders are normally a good ingredient in any curriculum development process. While supporting the stakeholder's involvement in curriculum development in the world all over, UNESCO (2005) stated that governments should take appropriate steps to make curriculum development participatory. In addition the report further highlighted that curriculum innovations in the modern world would never be successfully implemented if the general public fails to understand its nature and purpose. Opportunities for teachers to work together, share

ideas, jointly solve problems, co-operatively create material, and greatly enhance the probability of success in curriculum implementation is key to its success.

Studies undertaken by Otunga (2007) support findings of this study by indicating that teachers participation in the process of curriculum development enhanced ownership and commitment towards the implementation of the desired innovation. These findings are further supported by Cohen and Hills (2001), who lamented that expecting teachers to embrace new approaches without sufficient involvement, training and information on why changes were necessary or warranted is a tall order which often results in inadequate adoption of the curriculum mandate.The curriculum development process in Kenya is exclusively done by subject panellists at KICD, limiting stakeholders' participation and involvement. This is one of the reasons why Alternative 'B' Mathematics curriculum could not have seen the light of day.

Key stakeholders who were supposed to be on the fore front in its implementation were totally left out of the process and hence could own the new curriculum innovation.

4,2 Hypothesis Testing

Ho: There is no statistically significant relationship between stakeholders' level of involvement in curriculum development and implementation of Alternative 'B' Mathematics curriculum in secondary schools in Kericho County. A Chi square correlation analysis was computed to determine the strength of association between stakeholders' level of involvement in curriculum development and implementation of Alternative 'B' Mathematics curriculum. The results obtained showed the existence of a positive and significant relationship between the two study variables. Table 3 shows the tabulated results from the computation.

Table 3: Chi square correlation analysis results

Stakeholder involvement	Correlation	New Curriculum Implementation
	Correlation Coefficient	.609**
	Sig. (2-tailed)	.000
	N	161
**. Correlation is significant at the 0.01 level (2-tailed).		

Source: Field data, 2012

The results indicated that, the calculated p-value (0.000) for stakeholder involvement, school-based factors was less than the hypothesised p-value (0.01). Further, the results confirmed a strong positive correlation for the variable tested at one percentage significance level with the coeefficient of correlation, r =0.609.

The overall implication was that stakeholder level of involvement play a significant role in the implementation of a new curriculum innovation. This factor should therefore be taken into consideration before the implementation process begins.

V. Conclusions And Recommendation

Based on the findings of the study it can be concluded that generally, key stakeholders are not involved in the curriculum implementation process in Kenya. As a result, implementation of new curriculum innovations has faced challenges majorly because key curriculum implementers do not own the process and are therefore not committed towards its implementation. Besides, the inadequate involvement and participation of key stakeholders has resulted in a general negative attitude towards new curriculum innovation. Subsequently, this affects their implementation; a clear reason why Alternative 'B' Mathematics curriculum was shelved. Since the study established that there is a strong correlation between participatory curriculum development process and acceptability of an innovation it is recommended that the curriculum developers adapt participatory approach and involve teachers in decision concerning their areas of specialty in order to improve acceptability and consequent effective implementation of curriculum innovations.

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