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A Sector Wide Model for Curriculum Accountability in the Public Secondary Education in Kenya

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Abstract: The purpose of this research paper was to carry out a sector wide exposition of accountability in curriculum implementation in the public secondary schools in Kenya. The research is conducted with a view to evolving a sector wide model for curriculum accountability in these schools. At the center of this accountability are the Boards of Management and their linkages with various curriculum agencies. BOMA are the semi-autonomous school governing bodies with established local, national and, in some cases, global linkages. The linkages are referred to accountability pathways. The perception that Boards of Management were indifferent to school curriculum matters had gained currency amongst most educational stakeholders. The solicited support of the curriculum agencies during curriculum implementation mitigates against the inherent financial constraints. The continued support of the public secondary education sector by these agencies is usually a function of transparent accountability of funds by the recipient institution. The learning and visible physical facility outcomes were the expected transformational benefits accruing to the curriculum implementation. A lucrative threshold for curriculum accountability by BOMA is created. The researcher employed the *content analysis method* to progressively analyze nine established curriculum models to the very latest. A novel sector wide curriculum accountability model that reciprocally interrelates corporate curriculum agencies with BOMA was formulated to mitigate accountability challenges experienced in the public secondary schools in Kenya. Though objectively intricate, the model operationalizes curriculum accountability processes amongst the pertinent agencies. The model generated unprecedented strengths for the progressive curriculum in the public secondary school sector. The model is replicable to similar education sectors in the developing countries.

Keywords: Accountability Elements, Accountability Pathways, Accountability Dynamisms, Policy Enforcement Agencies, Reciprocal Arrows, Self-Correcting Model, Top-Bottom-Top Model

1. Introduction

Curriculum and instruction are integral components of progressive education sectors of the world. The sectors are broad in both context and content in their respective environments. In this respect, Boards of Management in the public secondary education sector are the most central curriculum accountability agencies in Kenya [15]. Their management mandate is constitutionally derived from the state. Corporate curriculum agencies help to bring transformational changes in the school curriculum by supporting the school boards during curriculum implementation. The agencies influence the implementation processes by rendering both technical and financial support. However, the agencies also expect utmost accountability in the way the sourced funds are expended at the school level [12].

Curriculum Accountability refers to the condition of being liable or responsible for curriculum implementation actions. It is results-focused. Curriculum actors must take both ownership and responsibility of their actions and outcomes in the education sector. Therefore curriculum accountability in a school set up means that educational managers are held responsible for their educational decisions, actions and learning outcomes. The sector wide curriculum accountability

and implementation is a continuum of reciprocal *'Top-Bottom-Top'* accountability amongst the involved corporate curriculum agencies; both at national and global level.

There should be a clear strategy of curriculum accountability and operational linkages amongst the curriculum agencies in the public secondary education sector. A sector wide curriculum accountability model has been employed to display these linkages between the school Boards and the corporate agencies. The accountability pathways display an intricate cascade of resources, information and feedback. The sector wide model for accountability is broad in design and operationalization due to the dynamisms in curriculum implementation. The directional accountability pathways are inherent indicators of emerging challenges between BOMA and the corporate curriculum agencies. Therefore they serve as red flags for planned mitigation [14].

2. Statement of the Problem

A typical curriculum model should be presented with a degree of form and order to provide a conceptual framework for designing a curriculum based on the specific purpose of that curriculum [1]. Consequently, the two authors proposed that there was need to critically examine the accepted curriculum models to not only enhance but also encourage the development of that curriculum that would be most suitable for the African educational heritage. Ideally, a model is a human construct that explains and illustrates clearly the structures or functions of real things in life and how they ought to operate. The illustration can be based on the premise within which the various curriculum agencies impact on curriculum implementation at various levels and localities. Therefore curriculum models could be considered in a continuum, ranging from the earliest to the latest models.

This paper embraces the concept of *sector wide model* as an operational term for the curriculum accountability process. Its scope is the public secondary education sector in Kenya. These schools mostly depend on the public resources to implement their curriculum. Educational stakeholders are intrigued by the apparently shrouded curriculum accountability process in schools despite the sector wide funding of the curriculum implementation process [25]. The statement of the problem is therefore to *examine the established curriculum models with a view to evolving a model for curriculum accountability for the public secondary education sector in Kenya.*

3. A Review of the Established Curriculum Models

Different authors have formulated various curriculum models in the field of curriculum.

According to [2], a model is a systematic description of phenomena that shares important characteristics with the object under consideration. Various models of curriculum development have been proposed by different curriculum theorists and authors. This paper progressively reviews the established curriculum models and their impacts in the education sector.

(i). Giles Inter-relationship Curriculum Model (1942):

In 1942, Giles developed a 4-Step model to curriculum development by use of double headed or reciprocal arrows [24]. The model illustrated both the inter-relationship and inter-dependence of the steps of curriculum development as displayed in figure 1 below.
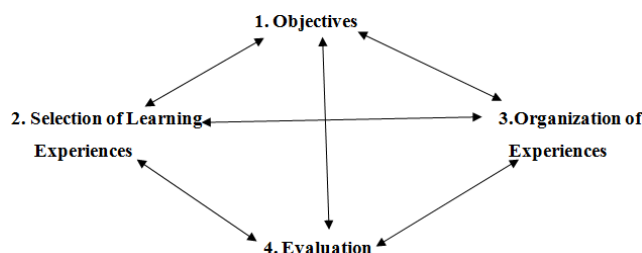

Figure 1. A Model of Curriculum Planning As Presented By Giles.

These steps are;
1. Selection of aims, goals and objectives,
2. Selection of learning experiences and content,
3. Organization of experiences, and
4. Evaluation of learning outcomes.

The arrows show the *reprocity* of the planning process between the 4 steps. For instance, the arrow from (1) Objectives to (4) Evaluation shows that the former could be modified based on the result of the latter while both remain inter-related with the other steps. The same procedure applies for each step as indicated by the arrows.

This model could be replicated in the curriculum accountability in respect to the inter-relationships and inter-dependence of the curriculum actors and agencies. The double headed arrows would indicate the reprocity of the processes and the subsequent accountability trends within the curriculum actors and corporate agencies. Consequently, this model could be modified and replicated for curriculum accountability in the basic education sector in Kenya. This is because of the inherent strengths in displaying the inter-relationships and interdependence of the various curriculum actors and corporate agencies.

(ii). Ralph Tyler's Linear Curriculum Model (1949)

This is the most influential model in the field of curriculum development after that of Giles. It is also known as an *Objective-Centered* model due to its emphasis on the objectives as the first step of curriculum development. It outlined four basic questions which must be answered when developing a curriculum design for instructions. The questions would translate into 4-Steps constituting a linear sequence of curriculum development [22]. These questions are;

Question one: what educational/learning purposes should the school seek to attain?

These represents the first step; *The Selection of curriculum goals and objectives*.

Question Two: what learning experiences can be provided that are likely to help attain these purposes? This represents the second step; *Selection of learning experiences for the achievement of identified aims, goals and objectives*.

Question Three: How can these educational experiences be effectively organized? This represents third step; *the organization of learning experiences*.

Question Four: How can we determine whether these purposes are being attained? This is the fourth step; *Evaluation of the effectiveness of all aspects of steps 2 and 3 in achieving step 1*.

The model presented several time-tested strengths. It was a strong supporter of the 'Student-Centered' approach to the teaching-learning process; a contemporary learning requisite. Due to its sequential nature, it was a practical model for the time-bound operations inherent in the curriculum development. It was a progressive built-up of the Giles curriculum model. However, the model had several misgivings. It was too dependent on behavioral objectives to allow for free interactiveness of the content by both the teacher and learners. Its *4-step linear* nature was inadequate in representing real life learning situations where many factors influence curriculum development process. It was also inadequate in displaying inter-relationships and inter-dependence that exist between curriculum actors due to its linear model nature.

(iii).   Hilder Taba's Interactive Curriculum Model (1962)

Hilder Taba presented an 'interactive model' focusing on the planning of instructional strategies. It was an improvement of the Tyler's objective model. There are seven mutually interactive elements in the model that influence the teaching-learning process. These included;

1. The Diagnosis of needs,
2. The Formation of objectives,
3. The Contents,
4. The Learning Experiences,
5. The Organization of learning experiences,
6. The Teaching Strategies and
7. The Evaluation Measures.

The model displayed the merit of determining the required objectives and the related content. It had the quality of selection of relevant teaching strategies and evaluation procedures and measures [3]. It also portrayed the strength of considering external factors that could affect various components of the curriculum. However, it lacked focus on the educational authorities and global influences that impact on the teaching-learning processes. The model was basically teacher-oriented as opposed to learner oriented. It lacked a substantive position for educational authorities which impact on the teaching-learning process.

(iv).Wheeler's Cyclic / Dynamic Curriculum Model (1967)

In his attempt to mitigate on Tyler's linear model, Wheeler developed a five-phased cyclic model of curriculum development with the following key elements;

One: *Selection of Aims / Goals and Objectives*,

Two: *Selection of Learning Experiences*,

Three: *Selection of Content*,

Four: *The Organization and Integration of Learning Experiences and Content*,

Five: *Evaluation of the effectiveness of all aspects in attaining the Objectives*.

This model shows a cyclic and continuous process indicating the dynamic rather than static nature of the curriculum development process.

Wheeler's cyclic model has several benefits. It is responsive to emerging needs necessitating constant updating of the curriculum process. The dynamic nature of the model makes it possible for adoptions and adaptations of curriculum inventions and innovations. The model views the elements of the curriculum as interactive due to their interrelated and interdependent nature. This attribute is quite applicable to the present study on curriculum implementation and accountability. However, the dynamic nature of the model poses the challenge of 'time-constraint' to the curriculum planners. This is because curriculum development is normally a time and resources bound process. The model dynamism has the potential of allowing stakeholders to over-load curriculum with both content and evaluative ideals. This could be perilous to both learners and parents who lament being overburdened by the overly loaded curriculum [4].

(v). Kerr's Objective Curriculum Model (1968).

John Kerr came up with a complicated but an objective-oriented curriculum model. The model was in specific rather than conceptual operational terms [19]. It heavily borrowed from the Tyler's linear model. However, Kerr simplified and displayed the key curriculum elements *linearly* starting with;

1. The Curriculum Objectives,
2. Knowledge,
3. School Learning Experiences, and
4. Curriculum Evaluation

The model shows the inter-relatedness of the curriculum components and the various pressures that impact on curriculum. Like Wheeler's model, it allows for curriculum dynamisms as impacted by various agencies. However, its complicatedness makes it less relevant to an ordinary curriculum practitioner or planners.

(vi).Nicholls and Nicholls Situational Curriculum Model (1972)

Like Tyler's and Wheeler's models, this model shows that curriculum development process starts with the formulation of objectives. The objectives are elicited from the study of the local environment (local situation). The model has Five-Phases starting with the *Situational* analysis and ending with the *Evaluation component of the curriculum*. The *Objectives*, *Content* and *Methods* come in between. The situation refers to the overall environment which includes pupils, teachers, schools and localities. The model displays *a cyclic and continuous process* of curriculum development that is dictated by information gathered from situational analysis. It is merited for Kenyan situation where scarce educational resources are expended

with minimum accountability [23]. It provides teachers with a wide range of well formulated objectives which enable them strategize on learning opportunities and evaluation for learners. It also allows for curriculum dynamisms dictated by educational reforms [16]. It is merited for a research based curriculum development.

However, the dynamism of the model denies curriculum planners the necessary 'time-bound' attribute to planning. It has the potential of over-loading learners due to the wide spectrum of the objectives. It is inflexible since it restricts planner's to always start with the objectives.

(vii). Walker's Process Curriculum Model (1972)

This was a descriptive model that presented curriculum elements as flexible, interactive and modifiable. It is referred to as *'naturalistic'* since Walker felt that the objective or the *'rational'* curriculum models were unsuccessful conceptualizations. His model includes three important elements;

1. Platform of guiding Principles,
2. Deliberation Process and,
3. Curriculum Designs.

Changes could be initiated from any point in the process unlike the previous models where objectives were always the point of departure. This is an ideal illustration of a sector wide curriculum funding and accountability process. However, the model failed to recognize the situational analysis and authoritative agencies impacting on curriculum development process.

(viii). Lawton's Value-based Curriculum Model (1973)

This model by Denis Lawton (1973) was basically a *Value-Based* curriculum model as opposed to the earlier mostly Objective-Based models. It seeks to address the value elements of the *nature of knowledge*, nature of *the child* and the *nature of the society.* These translate to the *philosophical, sociological* and *psychological* foundations of the curriculum. The model creates the need to identify the universal and special *culture elements* like the arts, crafts, skills, folklore, knowledge, beliefs, ceremonies, patterns of behavior and other ways of life for study [19]. Therefore, this model presents a more embracing approach to curriculum planning than the objective oriented models. It is ideal for Kenyan curriculum development process where societal factors greatly influence the process.

(ix).Saylor, Alexander and Lewis Goals Curriculum Model (1981)

These three curriculum theorists indicated that an ideal curriculum model must commence with identification of major educational goals and the specific objectives to be accomplished. They classified sets of broad goals into Four Domains under which learning experiences take place. The Domains include;

1. Personal Development,
2. Social Competence,
3. Continued Learning Skills and
4. Specialization.

The planners could then proceed with the process of designing the curriculum; critically determining the methods

through which the curriculum will be related to the learners [6]. The planners and teachers would embark on curriculum evaluation from a wide spectrum of evaluation strategies. This could be the summative evaluation or the curriculum achieved through the national examinations. A key strength is that it enables monitoring and evaluation of the total education programme in a state [18].

Consequently, a model of curriculum accountability must display an orderly conception of the functional inter-dependence and inter-relationships between various curriculum actors and corporate agencies in an educational system. In respect to the present study, the functional interdependence of the curriculum actors and agencies could imply existence of reciprocal curriculum accountability model. Ideally, a model of curriculum accountability in the public secondary schools in Kenya must revolve around *BOMA*. The latter directly or indirectly inter-relates with the curriculum actors and agencies in the curriculum implementation processes. The inter-relationship may assume vertical or horizontal direction depending on the trends of the linkage as presented in figure 1 (model of curriculum by Giles).

It follows that models that integrated such curriculum concepts as objectives, dynamisms, situations, interactiveness, processes, values and goals have been conceptualized. None of them has embraced the *accountability attribute* in the curriculum implementation. The foregoing literature is rife with insights to conceptualize novel sector wide curriculum accountability model for the public secondary education in Kenya.

4. A Sector Wide Model for Curriculum Accountability

This is a 'problem-solving' curriculum design model as it mitigates against ineffectiveness in the curriculum accountability by BOMA. This is a '*Top-Bottom-Top* 'model for the curriculum accountability process. The process linkages are shown by double *headed arrows* which serve as operational display of the reprocity in the curriculum accountability. The arrows could also be referred to as *reciprocal arrows* in the model. *They are a display of a self-correcting model for curriculum accountability and implementation amongst curriculum agencies.*

The education agencies in the model are semi-autonomous education systems with own mandated functions within the larger or supra national education system [20]. There is a *top-bottom cascade* of educational resources, curriculum innovations, information and policies from the MOE to the schools. Similarly, a reverse *bottom-top* cascade of feedback from the public schools and educational agencies will take place in the same trend. This model is inherently *linear* and *cyclic* in nature as displayed by the reciprocal arrows. This is observable through the 'Top-Bottom-Top' pathways created by the double headed arrows as shown in *figure 2* below.
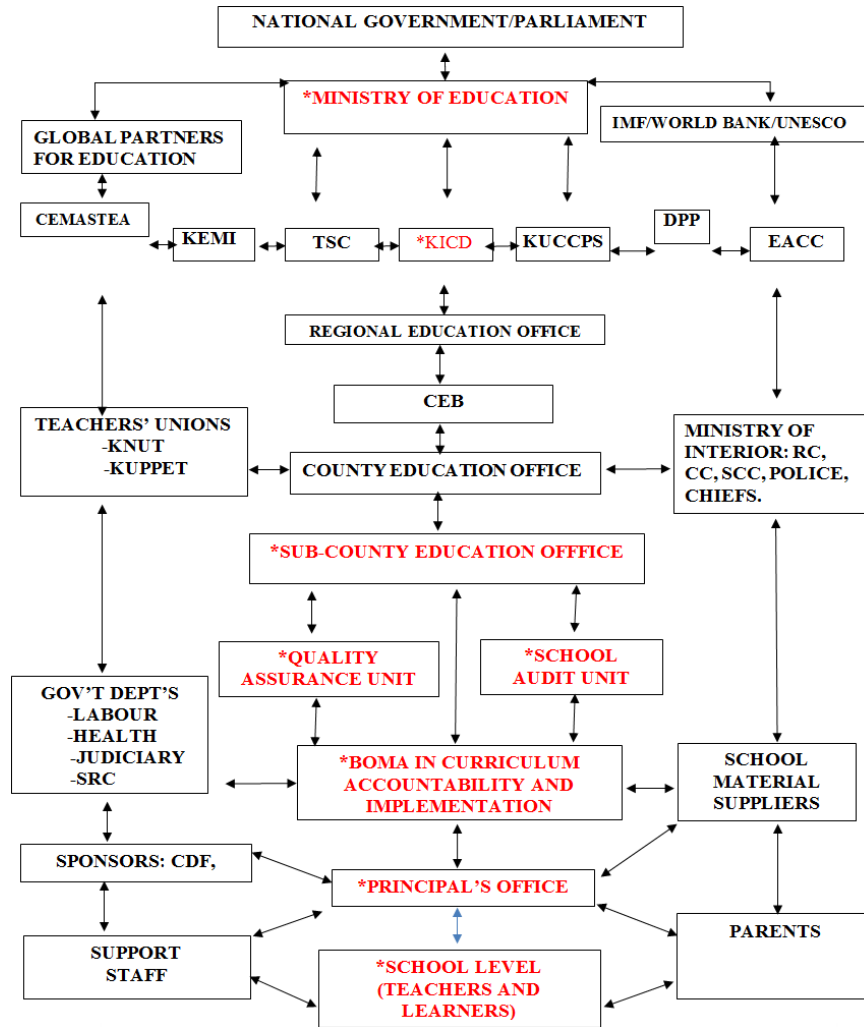
Figure 2. *A Sector Wide Model for Curriculum Accountability.*

ABBREVIATIONS AND ACRONYMS USED IN THE MODEL
BOMA - Board of Management
CDF - Constituency Development Fund
CC - County Commissioner
CDE - County Director of Education
CEB - County Education Board
CEMASTEA - Center for Mathematics, Science and Technology Education in Africa
DPP - Directorate of Public Prosecution
EACC - Ethics and Anti-Corruption Commission
IMF - International Monetary Fund
KEMI - Kenya Education Management Institute
KESSHA - Kenya Secondary Schools Heads Association
KICD - Kenya Institute of Curriculum Development
KNEC - Kenya National Examination Council
KNUT - Kenya National Union of Teachers
KUCCPS - Kenya Universities and Colleges Central Placement Services.
KUPPET - Kenya Union of Post Primary Education Teachers
MOE - Ministry of Education
NEMIS - National Education Management Information System
RC - Regional Commissioner
RDE - Regional Director of Education
SAGAs - Semi Autonomous Government Agencies
SCC - Sub-County Commissioner
SMASE - Strengthening of Mathematics and Science Education
SRC - Salaries and Remuneration Commission
TSC - Teachers Service Commission
UNESCO - United Nations Educational, Scientific and Cultural Organization

5. Operationalization of the Sector Wide Accountability Model

Curriculum policies are formulated at the national government or parliament level where the CS in the MOE is accountable to both the executive and the legislative arms of the government. Besides being internally funded by the exchequer, the MOE is also externally funded and technically supported by the Global Partners in Education (GPE), the IMF and World Bank. For instance, the Japanese Government through JICA and CEMASTEA supported the secondary schools' Science and Mathematics Curriculum through SMASE programs which capacity build teachers in the pedagogy. Two United Nations agencies, the UNICEF and UNESCO, are instrumental in this funding as well. These Global Partners and Financing agencies demand utmost accountability in the manner in which disbursed funds are expended in the basic education sector.

The asterisks * signify *the 7 key curriculum accountability elements* constituting the *conceptual framework* of the model. Consequently, the elements elicit the following *Seven Pertinent Questions* that must be answered in the context of the model;

Question 1. What is the source of curriculum accountability policy for the public schools?

Question 2. What is the planning level for curriculum accountability?

Question 3. Who are the public curriculum accountability monitoring and supervision agents?

Question 4. Where is the ultimate curriculum accountability domiciled in the public schools?

Question 5. Where is curriculum accountability operationalized in the public schools?

Question 6. Who are the consumers and beneficiaries of the domiciled curriculum.

Accountability in the model?

Question 7. What quality control measures can be institutionalized to ensure effective.

Curriculum accountability process in the schools?

These are the *MOE* (policy level), the *KICD* (planning level), the *Sub-County Education office* (supervision and monitoring level), *the BOMA* (the ultimate curriculum accountability level), *the Principal's Office* (operationalization of the curriculum accountability and leadership level) *school level* (Curriculum implementation level) and the Quality Assurance and School Audit units (for Quality Control). All the other internal and external corporate agencies in the model fall within this framework.

The MOE curriculum policy at the national level is also acted upon by the curriculum implementing SAGAs; the TSC, the KNEC, CEMESTEA, KEMI and KUCCPS. The policies are then cascaded downwards through the Regional Directors of Education for further action by the periphery agencies placed at the bottom of the model. These are the County Directors and Sub-County Directors of Education. These are the curriculum implementation monitoring and supervisory agencies. The KICD at the top of the model is the national curriculum planning and development agency. It receives policies from the MOE for concretization into designs and teachers' guides for effective curriculum implementation at the school level. The CEMASTEA and KEMI agencies at the top of the model induct subject teachers and school principals on pedagogy and curriculum leadership, respectively. They are accountable to the MOE which conduct regular audit of their mandated functions and funds.

The TSC is the top national government educational agency responsible for the recruitment and management of teachers for curriculum implementation at the school level. It serves as an independent constitutional commission accessing funds directly from the exchequer. Normally, teacher recruitment is subject-demand driven. The TSC delegates this recruitment function to BOMA in all public secondary schools. The BOMA chairperson must be incorporated in the panel conducting the recruitment interviews in the school. It is important to underscore that only public secondary schools with validly nominated BOMA are allowed and can accountably recruit teachers for their schools. However, the TSC will ultimately be accountable to the CS in the MOE for all its mandated functions.

The Kenya Universities and Colleges Central Placement Services (KUCCPS) at the top of the model is a state agency that provides career guidance and selects state-sponsored students for admission to the universities and colleges in Kenya. It cascades pertinent information downwards to school leavers through its website and the peripheral MOE offices. Similarly, it is accountable upwards to the MOE for its constitutionally mandated functions and activities. Occasionally secondary schools invite the KUCCPS personnel to offer careers' advisory talks to their students / KCSE candidates.

Finally KNEC, as a top national education agency is responsible for the summative assessment and evaluation of the curriculum. The administration of the national examinations (KCSE) in Kenya is a multi-sectorial task that brings the MOI personnel on board for the transportation and the security of the national examinations. Normally, the outcomes/ feedback from the National Examinations are cascaded downwards to the school level for any appropriate decisions, or actions and reciprocal feedback. The *bottom* most curriculum agency in the model is the school level. This is where the curriculum is ultimately implemented. Learners are the ultimate recipients or consumers of the curriculum innovations and reforms. The school administration and teaching staff are accountable to BOMA and, to a small extent, to the parents (Parents' Association). It is important to underscore that the MOE has come up with an online accountability system with the acronym *NEMIS*. This is the national data base for all schools. It ensures regular Top-Bottom-Top cascade of data / information on enrolment, capitation and infrastructure from the schools.

Structurally, BOMA is located almost at the bottom periphery of the model. This is where all the school-based curriculum implementation policies are received, deliberated and interpreted before implementation. BOMA is mandated to approve budgets of resources to be expended in the school. Likewise, it will be accountable to the MOE for the public resources utilized during curriculum implementation at the school. The MOE funds are disbursed to the public secondary schools through school's *operations* and *tuition* accounts. These accounts are operationalized by the respective school BOMA and regularly audited by the schools' audit unit.

BOMA in the model is therefore a critical peripheral accountability agency in the public secondary school education cycle. It is also functionally linked with such Government Departments as Labor, Health, Judiciary and the Salaries and Remuneration Commission (SRC) on account of the school-based employees. For instance, the local Public Health Department is usually engaged with the vaccination campaigns of teachers and learners during pandemics. It also administers iron supplements to the upper primary and lower secondary schools girls to reinforce their health status. This ensures sustainability of the girl-child in the schools by mitigating absenteeism and dropout challenges.

The labor office in the model arbitrates between the aggrieved school workers and their employer, the BOMA, on all employment related matters. Similarly, Teachers' Labor Unions represented by the KNUT and KUPPET are integral components in the model. They can address teachers' welfare issues emanating from the curriculum implementation challenges in the schools. They are in a position to articulate such issues directly in the CEB where their *Executive Secretaries* are mandatory representatives. The SRC provides guidelines on the review and remuneration of teachers' and civil servants' salaries. BOMA is expected to take cue from the SRC as it deals with their employee's issues. Steady salary increments serve as financial motivation towards enhanced curriculum implementation by the teachers and BOMA employees.

Occasionally, aggrieved Educational Agencies and parents may resort to the courts of law to have their cases redressed. This is represented by the Judiciary in the model. The aggrieved parties could also purpose to seek justice through the investigative offices of the DPP and the EACC in the event of irreconcilable accountability differences between them and the school authorities (BOMA). Occasionally, the Directorate of Criminal Investigation (DCI) offer BOMA some critical investigation backup for capital offences committed by students such as arson cases. Similarly, aggrieved teachers may resort to a court of law through their lawyers to litigate against unjustified action preferred against them by their employer, the TSC. Other incidences may demand that BOMA sues individuals and / or corporate agencies encroaching on school land for own interests.

Severe corporal punishment meted to learners by teachers may lead to litigation in courts of law by the concerned parents/guardians [10]. Meanwhile, the MOI would be expected to enforce any court rulings in accordance to the law. However, the litigations, investigations and court proceedings could be counter-productive to the effective implementation of the curriculum. This would be due to the unprecedented diversion of the school resources, personnel and teaching-learning time by the BOMA towards the proceedings.

The County Education Office is the peripheral curriculum monitoring and supervision agency. It is accountable to the CEB and the MOE on all policy and curriculum implementation matters from all schools under its jurisdiction. The CEB is a middle level agency that receives and interprets curriculum management policies from the MOE then cascades them to the Sub-County Education level. The latter presents the policies to the BOMA and, subsequently, to the school level where curriculum implementation and accountability take place. The Quality Assurance and School Audit Units in the model are purposely placed between the Sub-County Office and BOMA. Respectively, they ensure pedagogical and financial accountability in the curriculum implementation in schools. The units conduct assessment and audit during curriculum implementation then submit feedback / reports to BOMA and other pertinent agencies for decision making or action. The outcome of the assessments and audit processes serve as effective feedback for the curriculum accountability process [7].

The school principal serves as BOMA secretary, besides supervising curriculum implementation amongst the teachers, learners, support staff and parents. The principal is also the lead teacher in the school. The principal submits accounts on the curriculum implementation to BOMA for appropriate managerial decisions or actions. A consultative forum between the subject teachers, learners and parents during the so called academic days localize the curriculum accountability process at the school level. In this case, while the leaner's account for their performance to the parents, the parents hold teachers accountable for the learning outcomes of their children [21].

Some corporate agencies sponsor needy learners and educational projects in the schools. In this respect, they qualify and appear as peripheral curriculum agencies in the model. They would expect the value of their funds to be accounted for and be reciprocated by improved performance by the learners. They include the CBF, CDF, CBOs, Religious and Business Organizations and persons of good will. The principal must be accountable to such agencies in the way and manner in which their disbursed funds are utilized in the school. These sponsors are directly linked to the support staff and the school principal and indirectly to the BOMA and learners for the curriculum accountability purposes. In turn, the principal is accountable to them for learners' performance.

Occasionally, curriculum implementation process at the school level may require involvement of the *Ministry of Interior* (MOI) personnel. This would be an appropriate demonstration of collaboration and partnership in curriculum implementation and accountability. For instance, continued

attendance to school by truant and errant learners is enforceable by Chiefs and Sub-Location Elders (*10-Households Initiative*). This enforcement would complement the MOE policy of 100% transition, equity, retention and completion at the secondary school education cycle. Similarly, the *MOI* would render the necessary enforcement to the MOE in the event parents compromised learners' discipline or failed to take / release them to the school. This would be in the spirit of enhancing the multi-sectorial strategy in attaining the Free, Basic and Compulsory Education as stipulated in the Basic Education Act 2013.

The school material suppliers are major players in the curriculum accountability process. This is normally during the procurement and acquisition of school materials from the market [11]. The process must be within the public procurement and tendering policies as provided by the National Government. It is the National or County Governments that license and regulate the business fraternity to ensure supply of genuine and quality instructional materials in schools. Some school parents may double up as school material suppliers. However, they are expected to adhere to the laid down business protocols enforceable by the government. The school's tendering and procurement processes are expected to be as transparent and accountable as possible. The school principal at the periphery of the model is accountable to all the foregoing processes and is expected to report to the BOMA where he sits and reports as a secretary.

6. The Strengths of the Novel Sector Wide Curriculum Accountability Model

This model brings a number of unprecedented strengths and benefits in the curriculum field and in the public basic education sector. It clearly displays the accountability attributes in curriculum implementation amongst various curriculum actors and agencies as depicted by the double headed arrows/reciprocal arrows. It is an ideal model *for centralized education system* where the sector wide approach to education management and funding are critical imperatives in curriculum implementation. The presence of the p*arliament* at the top of the model represents *informed legitimacy (acceptance)* of the prevailing curriculum / education system by the citizenry.

It is a systemic mitigation *on the conflict of interest phenomenon amongst* the BOMA members since the accountability attribute is reciprocal.

It is a concrete demonstration of *Public-Private-Partnerships* in the funding of the basic education in the phase of dwindling public funds.

It serves as an ideal back-up to the *'Problem-Solving-Approach'* to the teaching-learning process and school management as an alternative teaching-learning process. Since the model is *linear and cyclic in nature,* it allows for dynamisms in curriculum implementation for the present and future curriculum and educational reforms. The model is a *rational accountable display of positive collaborations* amongst corporate public agencies and stakeholders in curriculum implementation.

The model *demonstrates synergies that can be outsourced by BOMA* for effective curriculum implementation and accountability in the basic education sector in Kenya. It is an ideal representation of *the operational networking* of internal and external agencies that positively impact on curriculum implementation in the basic education sector.

It is an elaborate presentation of the positions and roles of the *public educational authorities and government and how* they impact on the teaching-learning processes in the basic education sector.

The DPP, the EACC, the Judiciary and the MOI and Judiciary in the model *represent policy enforcement agencies* in curriculum implementation and accountability in the event related agencies and personnel failed or declined to do so.

This model could serve as a basis for formulating alternative curriculum models for educational research in the basic education sector in Kenya.

Finally, this is *an indigenous model of curriculum accountability* that depicts a systematic paradigm shift from the Classical or Western Curriculum Models to more adaptive and localized models for the public education sector in Kenya. The model serves as a structured strategy for soliciting curriculum resources and innovations from global education partners. Its only misgiving could be the intricate display of the accountability pathways. However, the paths are directional.

7. Conclusion

From the foregoing exposition, it is evident that a novel sector wide model for curriculum accountability in the public secondary education in Kenya and, indeed, in similar developing countries, has been evolved and concretely demonstrated. The model serves as a synthesis of the corporate agencies whose resources could be accountably outsourced to fund curriculum reforms and innovations in the secondary education sector. Finally, the present model represents a paradigm shift from the classical / western mostly knowledge-based curriculum models to more adaptive and localized models for curriculum implementation and funding.

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