

Stakeholders' Preparedness of School Teaching and Learning Conditions to Facilitate Transition from 8-4-4 to Competency Based Curriculum in Bungoma, Kenya

Cecilia Osyanju Namuyemba, Dr. Simon Kipsemon Kipkenei, Prof. Julius Kiprop Maiyo

Educational Planning and Management, Faculty of Education
and Social Sciences, Kibabii University, Bungoma, Kenya

ABSTRACT

Change and transition processes are complex. As a result, the implementers tend to be reluctant in executing them. Education in Kenya has evolved with time in an effort to meet the needs of the changing times to attain quality standards. However, policy changes in the education sector have been both a success as well as have experienced failures in their implementation. Kenya's education system is currently transitioning from 8-4-4 to the Competency Based Curriculum (CBC) which is in its implementation stage following a one-year pilot. This study sought to investigate the Stakeholders' preparedness of school teaching and learning conditions to facilitate transition from 8-4-4 to Competency Based Curriculum in Bungoma, Kenya. The study was anchored on Kotters eight step model theory that defines the manner of handling change in an organization and used descriptive research design due to its appropriateness in identifying characteristics, frequencies, trends, correlations and categories of the variables under study. The population under study was divided into separate clusters from which a probability sample was drawn. The target population of 3,159 was used and samples were drawn from the target population with the use of systematic random sampling and purposive sampling techniques. Further, data was collected by use of questionnaires, interview guides and document analysis guide.

KEYWORDS: *Competency Based Curriculum (CBC), Change, Transition, Education in Kenya*

The study revealed that the pace of transition from 8-4-4 to CBC was slow with (287) 90% out of the 319 school heads' who held the view that the pace of transition to CBC is slow while 113(64.6%) out of the 175 teacher respondents held a similar view. The found that the lack of adequate resource variables accounted for the slow pace of transition compared to attitude and condition variables. Further the study found that there was no statistically significant positive correlation between the adequacy of staff as per the required pupil teacher ratio and the pace of transition. Nevertheless, this study recommends improving the teachers working conditions to ease the workload occasioned by overpopulated classrooms. Further, the study recommended that focus should be laid on providing interventions for the lacking

resource variables and incorporation of self-learning training strategies for the instructors as well as students in order to overcome the challenge occasioned by the inappropriate pupil-teacher ratio. The study concluded that the discrepancy with regards to the lack of adequate resources had more to do with lack of proper change management with regards to transition and therefore the National government, County government, educational planners, principals and School Boards of Management ought to intervene by incorporating change management strategies to spur the CBC change management process, failure to which the CBC may fail to take root like other preceding policies in the education sector.

How to cite this paper: Cecilia Osyanju Namuyemba | Dr. Simon Kipsemon Kipkenei | Prof. Julius Kiprop Maiyo "Stakeholders' Preparedness of School Teaching and Learning Conditions to Facilitate Transition from 8-4-4 to Competency Based Curriculum in Bungoma, Kenya" Published in International

Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-6 | Issue-1, December 2021, pp.567-589,

URL: www.ijtsrd.com/papers/ijtsrd47840.pdf



Copyright © 2021 by author(s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



INTRODUCTION

Organizational capacity to change has been referred to as the overall capability of an organization to prepare or respond to unpredictable circumstances emanating from within or outside its external environment. This capability enables an organization to upgrade or revise its existing organizational competencies so as to cultivate new competencies in order to survive and prosper (Vail, 1991). Change within the organization may affect behavior, shared beliefs, the way work is done and the rules that shape mental models. It is noteworthy that these mental models are a part of organizational culture (Hayes, 2007). The change process is the means of transforming an organization or away to realize the new vision for an organization and involves going through several stages to execute different tasks, including performing tasks such as; organizational audit, planning for the 8-4-4 by formulating a change strategy, communicating, persuading others and consolidating the change. In order for this to take place, transformational leadership is required at the individual, group and organizational level so as to attain all these activities (Christensen, 2000).

One of the major challenges identified in planning and implementation of reforms in education is an inclination to formulate ambitious transformations without adequate plans that will lead to implementation (Havelock and Hubberman, 1978). It has been observed that in many countries that curriculum change follows a heavy top-down approach. Nevertheless, each stakeholder holds his own perspective to educational issues. Therefore, before pursuing curriculum changes, it is necessary for policymakers and other stakeholders to have an in-depth understanding of the roles, expectations and interests of the various actors, groups and institutions that are involved in, or affected by the process of change (IBE-UNESCO, 2013).

Managing change in Kenya's educational space has previously faced uncountable challenges. According to Otach (2008), the NARC (National Rainbow Coalition) government implemented the free primary education program with the aim of providing more opportunities to the disadvantaged school age children in January 2003. However, soon after its rollout some of the challenges were experienced such as; congested classrooms, limited physical facilities and shortage of qualified teachers. It has been noted that these challenges have continued to have negative impact on the quality of teaching and learning which resulted to indiscipline in schools (Okwach & George, 1997). On January 3rd 2019, the competency-based curriculum (CBC) also known as

2-6-3-3-3 education system for early years' education was rolled out in preprimary 1 and 2, and grades 1,2 and 3 across the country. Prior to its implementation stage, the curriculum designs for early years education had been distributed to schools. Some 186,000 teachers currently teaching the early years pupils were trained in four sessions; December 2017, April 2018, August 2018 and December 2018 respectively (Kihii, 2019).

It is noteworthy that the aspect of curriculum change has invited interest from various stakeholders, varied ideas, criticisms, skepticism, and cynicism in equal measure. Questions such as; if the changes are realistic, if a country like Kenya can implement such changes realistically, the ability/flexibility of teachers in Kenya to adapt the changes and if the changes can be successfully realized have become very common in most forums where the curriculum reforms agenda is presented. Curriculum reforms, therefore, ought to be undertaken with keen attention to both processes and products (Kabita, 2017). Kenya has only experienced one major curriculum reform since its independence, in 1963. The reform was prompted by a change in the structure of the Kenyan education system in 1985. Ironically, the reform was incidental, and not initially anticipated.

In 1981, the government set up an Education Commission, named "The Presidential Working Party on the Second University in Kenya" whose singular mandate was to advise on the establishment of the second university in Kenya. This notwithstanding, in the course of its deliberations, the Commission advised the government that it would be practical to reform the country's education structure and curriculum. This culminated in the change of structure of education from 7 years of primary education to 8; from 6 years of secondary education to 4; and from a minimum of 3 years of university education to 4, hence the system. While the structure of education has remained intact since its implementation in 1985, the curriculum has undergone several reviews, in 1990, 1992, 1995, and 2003. Nonetheless, the majority of citizens felt strongly that the current system of education (including both structure and curriculum) were not fit for purpose. This was confirmed by findings of a summative evaluation, of primary and secondary education curricula, conducted by the Kenya Institute of Curriculum Development (KICD) in 2009; and a national needs assessment study, also conducted by KICD in 2016. This was also guided by the Kenya Vision 2030, which is the country's blue print for national development and which points towards the need to reform the country's education in order to

equip citizens with the necessary knowledge, skills, attitudes, and values to achieve the nation's social, economic, and political aspirations (Kabita, 2017).

In order to steer the implementation of the CBC, the Ministry of Education Science and Technology (MoEST) constituted a taskforce which provided guidelines and oversaw tasks such as training stakeholders on CBC and conducted the first nationwide evaluations in 2019. In spite of the efforts currently being made to ensure efficient and effective management of the curriculum reform, the Kenya National Union of teachers (KNUT) among other critics called for the suspension of the Competency Based Curriculum citing that the teachers were ill prepared and lacked the adequate training among other reasons such as need for proper infrastructure, lack of public awareness campaign after the rollout by KICD, TSC and MoE and insufficient stakeholder involvement (Kihui, 2019). The rationale behind the change from 8-4-4 to CBC emanated from the various forces of change such as; social, business and economic, political, governmental, technological, demographic, legal, and natural environmental factors respectively. Therefore, the need to manage the change successfully will enable the various stakeholders in the education space to be in tandem with the on-going developmental forces and steer country's economy.

Prior to emergence of CBC in Kenya, important transformative changes in education sector have been abandoned or were poorly implemented. The 8-4-4 system of education was deemed to be expensive and burdensome to parents, pupils and teachers. There was lack of adequate funding by government, insufficient training of teachers tasked with implementing 8-4-4's vocational and technical subjects and too much content for teachers to deliver and students to grasp. These among other challenges led to failure of 8-4-4 in achieving the objectives envisioned in the Mackay report. The 8-4-4 system of education emphasized on sciences, mathematics, technical and vocational subjects and this required specific teaching and learning resources to facilitate learning. Its mode of evaluation comprised of summative tests, examination and good performance was based on grading. On the other hand, the CBC intends to develop a broad skill base focused on core competencies such as; cognitive critical thinking, problem solving, knowledge application and creativity. Implementation of the CBC requires the teachers to utilize differentiated instructional support. Further, learners undergoing the CBC are required to undertake continuous assessment unlike the 8-4-4. There are many opportunities for the CBC to thrive as

it is still in its advent phase and previously made transition problems can be addressed. Currently, the education sector has teacher shortages, congestion in schools, very minimal training for teachers, capitation delays, inadequate resources and infrastructure. In spite of CBC's opportunities to thrive, there are still many challenges that need to be addressed in order to facilitate smooth transition from 8-4-4 to CBC. The glaring challenges are an indication of neglect of education sector policy documents such as the basic education regulations (2015) subsection one which provides requirements for provision of school utilities and education sector disaster management policy of July (2018) and pupil-teacher ratio. This raises a concern on the level of stakeholder preparedness in transitioning from 8-4-4 to CBC in the education sector and how effective the transition from 8.4.4 to competency based curriculum will be.

The overriding objectives of the study were; to examine individual teaching and learning conditions to facilitate transition from 8-4-4 to CBC, to examine environmental teaching and learning conditions to facilitate transition from 8-4-4 to CBC, and to examine organizational teaching and learning conditions to facilitate transition from 8-4-4 to CBC. The corresponding null hypothesis that guided the study were three that stated that; there is no statistically significant relationship between the individual teaching & learning conditions and transition from 8-4-4 to CBC, there is no statistically significant relationship between the environmental teaching & learning conditions and transition from 8-4-4 to CBC and thirdly, there is no statistically significant relationship between the organizational teaching & learning conditions and transition from 8-4-4 to CBC.

Theoretical Background and Literature Review

This study was guided by the Kotter's eight step model theory. This is an eight step process that defines the manner of handling change in an organization which offers a holistic approach to implement far-reaching organizational change (Kotter, 1995). It is imperative for the management to convince the employees and staff of the urgency of taking new direction in the organization. Kotter advises that the management should help others feel a gut-level determination to move and win now (Kotter, 2011). Similarly, the sense of urgency to transition from 8-4-4 to CBC should be felt and understood clearly by all stakeholders to avoid delays and prevent stagnation and resistance.

The second step is the creation of a guiding coalition. A coalition of people to lead the change effort should be formed. The team should have enough power,

credibility, expertise, excellent leadership skills and a shared objective to foresee the success of the change (Kotter, 2011). Likewise, it should be acknowledged that the GoK through its MoEST established a taskforce to champion the transition from 8-4-4 to CBC. It is envisaged that this existing guiding coalition will provide the needed change management capacity that will result to curriculum transition from 8-4-4 to CBC. Additionally, the smaller management units of education such as institutions of learning should also have a team of staff who are knowledgeable in the CBC who shall form the guiding coalition that shall steer the transition from 8-4-4 to CBC.

The third step is the development of a change vision. (Kotter, 1995) observed that developing a vision for the future is crucial at this point because it serves as a basis for decision making, motivates people to take action in the right direction and help coordinate actions of different people in a fast and efficient way. Similarly, anchoring a change vision to the change management strategies of institutions of learning will enhance the capacity to manage change and enable the management to guide the team to transition effectively from 8-4-4 to CBC.

The fourth step is the communication of the vision for buy-in. To get a buy in with the employees on the vision it needs to be communicated throughout the organization. (Kotter, 1995) advised that under-communication and inconsistency is extremely common. Successful leaders, he says, use every communication channel possible to broadcast the vision daily. Communication of the change vision to all stakeholders is a strategy that will highlight the management capacity to transition from 8-4-4 to CBC thereby minimizing resistance to change.

The fifth step is about empowering broad based action among the employees. Once the employees accept the new vision, they need to be empowered to

act upon it. (Kotter, 1995). The guiding coalition has the responsibility of removing any barriers and make sure people have the resources, tools and systems to bring about the change. The ability to implement the change by all employees in the education sector will indicate the management's capacity to manage change and specifically the transition from 8-4-4 to CBC.

The sixth step is the generation of short-term wins. Research shows that organizations tend to lose the change momentum very quickly. To keep the sense of urgency and fire blazing, short term wins are essential. According to Kotter, companies that experience significant short-term wins are much more likely to complete a transformation process (Kotter, 2011). Similarly, the ability to manage change will be indicated by short-term wins in transitioning from 8-4-4 to CBC.

The seventh step is consolidation of gains to produce more change. Kotter warned that organizations should not declare victory before the changes and business improvements have sunk deeply into a company's culture as this may kill ongoing momentum allowing resistance to take over. Similarly, it is envisaged that transitioning from 8-4-4 to CBC is a continuous process whose management success will be indicated by its ability to conduct continuous monitoring and evaluation that will enable them to appreciate gains and produce more change.

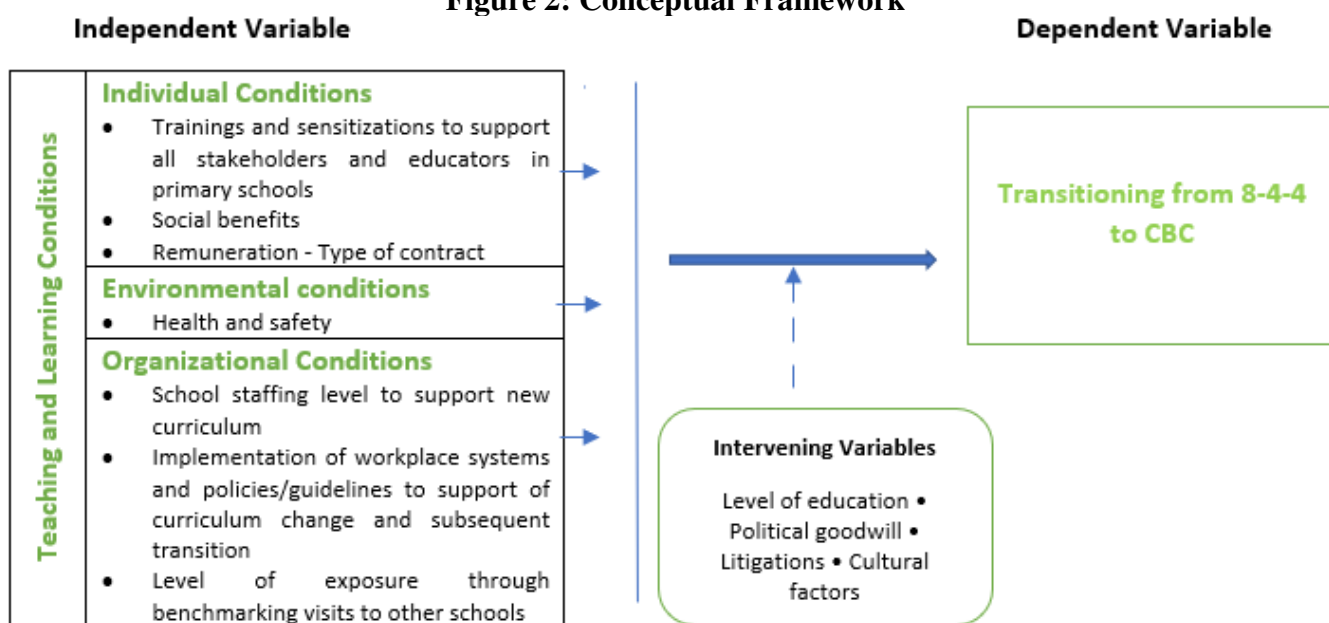
The final step is the incorporation of changes into the culture. This step is about incorporating and anchoring the new practices and approaches into the corporate culture in order to make it stick and not get lost as soon as the pressure of change subsides (Kotter, 2011). Similarly, successful change management will be indicated by the positive outcome of integration of CBC into the organizational culture.

Figure 1: Kotter's 8-step organizational change model (Kotter,2014)



The conceptual framework that guided this study was adopted from Kotters, 2014 and has been is illustrated diagrammatically in figure 2 below where the dependent variable is transitioning from 8-4-4 to competency based curriculum (CBC).

Figure 2: Conceptual Framework



In the case of the cause-effect relationship, there are three types of variables in the figure above. The independent variables depicted are; individual, environmental and organizational teaching and learning conditions. The dependent (result) variable is the transitioning from 8-4-4 to CBC system of education which is determined by the independent variables (causes). The dependent variables can influence each other and be directly related to each other. Additionally, there exists intervening variables which refer to abstract processes that are not directly observable but that link the independent and dependent variables. Such variables include factors such as budgetary allocation, litigations, political goodwill and level of education. The intervening variables can alter the results of the outcome variable

Literature Review

The need for preparedness of stakeholders’ conditions is vital for a successful transition as highlighted by Passenheim (2010). This means that reforms needs to be backed by sustainable financing. However, if the level of preparedness is poor, the efforts can be wasted when education administrators do not have knowledge, professional know-how and adequate institutional arrangements for the new tasks and responsibilities in the reforms. The concept of preparedness is well exemplified in Finland, one of the countries ranked to have the best developed education system in the world by the World Economic Forum’s Global Competitiveness Report, 2021. This preparedness can be attributed to its strategies for education reform cited by its leaders who attribute the gains to; their intensive investments

in teacher education whereby all teachers receive three years of high-quality graduate level preparation completely at the state’s expense, a major overhaul of the curriculum and assessment system designed to ensure access to a “thinking curriculum” for all students. A recent analysis of the Finnish system summarized its core principles as; provision of resources for those who need them most, high standards and support for those with special needs, qualified teachers, evaluation of education and, balancing decentralization and centralization (Laukkanen, 2008).

According to Sahberg (2009), the Finnish education policies are a product of four decades of systematic, mostly intentional, development that has created a culture of diversity, trust, and respect within Finnish society in general, and within its education system in particular. Education sector development has been grounded on equal opportunities for all, equitable distribution of resources rather than competition, intensive early interventions for prevention, and building gradual trust among education practitioners, especially teachers. It is worth mentioning that the Finnish system shows a clear commitment to the public provision of a quality education which is responsive to local needs. He further adds that the system is highly decentralized, and most education-related decisions are taken at municipal or institutional level, with strong stakeholder participation.

Finland’s preparedness of resources is also exemplified by its budget allocation whereby it spends more on education as a share of national

wealth than on average across the Organization for Economic Co-operation and Development (OECD) by setting aside 5.5% compared to 5.0%. It is worth noting that a high proportion of these funds at every education level are publicly sourced. At tertiary level, tuition remains free for most students and core funding allocations to institutions are heavily performance-based (OECD, 2020). Singapore as a young nation has exemplified transformation from an impoverished country to an economically and educationally advanced country within 50 years. Its transformation journey has been gradual and purposeful. Through its concept of Thinking Schools Learning Nation, it introduced critical and creative thinking, more diversity in curriculum, greater structural diversity (independent and autonomous schools, school cluster scheme) and provided greater resourcing to encourage bottom up innovation as well as improved its teacher education, service and working conditions. Further, it exploited the potential of information and communication technology to give students access to new information sources and make anytime, anywhere learning possible and shifted from a rigid system to a more flexible and responsive system, a system of ladders and bridges (Gopinathan & Sharpe, 1999).

According to Frost, Maria and Gents (2015), Canada emerged as one of the high performing countries using elements of the competency based curriculum. One Canadian province adopted an education plan called the K-12 innovation strategy to foster more personalized learning for students. This move required curriculum redesign to increase autonomy at school level, encourage curriculum flexibility and focus attention on students' demonstration of high order skills. The Canadian province planned to offer autonomy to teachers. It is noteworthy that Canada consistently outperforms the United States on PISA exams in mathematics, science and reading (Frost, Maria and Gents, 2015).

In Kenya, change and subsequent transition in matters of the curriculum has been demand based. Upon adoption of new changes, emerging issues have resulted to reviews which led to further changes. Soon after independence and the creation of a single nation, came the emergence of a single educational system which was no longer stratified along racial lines. The Ominde Commission was then formed to introduce changes that would reflect the nation's sovereignty. The principle preoccupation of Omondi's report was to introduce an education system that promoted national unity and inculcated in the learners the desire to serve their nation (Simuyu, 2001).

Lack of preparedness was manifested in the 7-4-2-3 system of education in Kenya. As a result, there was a lack of capacity and flexibility in responding to the changing aspirations of individual Kenyans and the labor market needs such as skills, technologies and the attitude to work (Owino, 1997). According to Simuyu (2001), the 7-4-2-3 policy was criticized as being too academic and therefore not suitable for direct employment. Additionally, the policy was criticized for encouraging elitist and individualistic attitudes among school leavers, something that was considered incompatible to the African socialist milieu. (Simiyu, 2001).

The Gachathi Report of 1976 raised the issue of unemployment in relation to 7-4-2-3 policy. The report maintained that "One of the largest problems confronting the country is that of unemployment." (GoK, 1976). The problem was aggravated by the annual outputs of school leavers whose number continued to swell following the enormous expansion of the education. Among those who made calls for change of educational policy were, the Kenya National Assembly's Select Committee on unemployment of 1970 (Maleche, 1976).

Therefore, the education which was regarded by Kenyans as a medium for social mobility and national economic development failed to deliver as the number of unemployed school leavers continued to grow in the first years of independence. Further, the ILO also called for a change to the education system in order to help reduce unemployment. The change consisted of increasing the technical and vocational aspects of the curriculum. The move by ILO to vocationalize the education system won support from the World Bank. As a result of the push to vocationalize the education system and solve the unemployment problem, the 8-4-4 system of education was introduced in January 1985, following the Mackay report of 1982. According to King and McGrath (2002), the 8-4-4 policy arose out of the concerns that a basic academic education might lack the necessary content to promote widespread sustainable self-employment (King and McGrath, 2002).

Similarly, the new CBC was conceived out of the same concern to promote sustainable self-employable skills from the acquired competencies. The 8-4-4 policy emanated from the assumption that it would equip pupils with employable skills thereby enabling school dropouts at all levels to be either self-employed or secure employment in the informal sector. King & McGrath (2002) observed that a new policy would orient youths towards self-employment. The system was lauded for strongly emphasizing

attitudinal and skills preparations for the world of work and especially self-employment. The 8-4-4 system became the subject of national debate since its inception. It was criticized for being broad, expensive and burdensome to pupils and parents.

In as much as adjustments were made to the system for it to be more accommodative, several commissions were formed with the view of improving the system such as; The Wanjigi Report (GoK, 1983); The Kamunge Report (GoK, 1985), The Mungai Report (GoK, 1995); The Ndegwa Report (GoK, 1991) and The Koech Report (GoK, 1999). A majority of these reports were either rejected or partially implemented. For instance; The Kamunge Report (GoK, 1985) on education and training which recommended the reduction of examination subjects under the, was implemented in secondary schools but ignored at the primary school level (Muya, 2000).

In a study conducted by Serem and Ronoh (2012), on the challenges faced in implementing free primary education for pastoralists in Kenya to evaluate the impact of an educational policy and find out how its implementation responds to challenges in provision of access to Primary Schooling it was determined that inadequate funding; poor infrastructure; limited awareness towards education; limited community support; insecurity and cattle rustling and lifestyle of pastoralists that impeded the government's efforts to attain FPE. These challenges threatened the implementation of FPE for pastoralists and further illustrated the complex and messy process of policy implementation in education sector (Serem and Ronoh, 2012).

The findings of the study highlighted that 90.6% of the participants agreed that inadequate funding posed a challenge in the implementation of FPE. As regard to other challenges in implementing FPE for pastoralists, the following findings were reflected: 85.3% felt that there was limited community support; 70% cited negative attitude towards education; 75.3% concurred that there was lack of social amenities; 90% were of the view that poor infrastructure hindered access to schools; 84.7% noted that there were limited physical facilities; 59.4% agreed that there were difficulties in the implementation of the curriculum; 65.3% noted that the school calendar was not suitable for pastoralist mode of living; 90% of the participants cited limited community awareness towards education as a major challenge (Serem and Ronoh, 2012).

Similarly, in a study conducted by Njoroge, (2002) on FPE in Kenya and determinants of the education budget, cited that there were a lot of inefficiencies in the allocation and utilization of financial, human and

materials resources. The study identified that the 5 main costs of primary education all over the world are teacher salaries, learning and teaching materials and other non-wage costs. Further, the study reported the main determinants of primary education budget in Kenya as teachers' salaries, non-wage cost which includes development expenditures, total education budget and to some extent enrolments. Additionally, the study also revealed that the government policies including Free Primary Education and cost sharing policies are important but no significant determinants of primary education budget (Njoroge, 2002)

It should be noted that if various levels of preparedness are not put into consideration in implementing Kenya's CBC, history might repeat itself resulting to criticisms and a series of system review commissions that will be timewasting and financially draining to the Kenyan economy. Additionally, the system may result to widening the country's already worrying inequalities (Kanyi, 2019).

Preparedness of Conditions

Head (1997) described transformational change as consisting of changes to structure, process and culture. The preparedness of conditions can be viewed in 3 dimensions namely; individual conditions, environmental conditions and organizational conditions. Improving the teaching and learning conditions is a responsibility shared by policy makers, administrators, teachers, parents, and students as well as by members of the wider community. While each of these stakeholders has important contribution to make, what teachers do bring together the effects of all such contributions. Therefore, it is noteworthy that what teachers do depends on their motivations, capacities, and the conditions under which they work (Leithwood, 2006).

Environmental conditions

The school is a social and learning agent that provides the environment upon which a child may be formally educated in order to attain educational goals. Human beings, have unlimited capacity to learn, but may however be limited by the behavior patterns and facilities that the immediate environment offers. According to Umoh (2006), nature only provides the raw materials in form of potentials, but it is the environment that determines the extent of development. Umoh and Etuk (2003) asserted that a child who wants to learn Agricultural Science and develop desirable attitudes, interest, appreciation, understanding, habits, abilities, knowledge and skills requires a stimulating environment. Similarly, Kenya's CBC intends to inculcate learners with some core competencies and should consider having stable

conditions its institutions of learning at individual, environmental and environmental levels.

A stimulating school environment enables the teachers to teach a variety of activities with broad-base ideas about what the students are likely to learn or respond to. This makes it possible for both the teachers and the students to work cooperatively and productively towards attainment of educational goals. School environmental variables that affect teaching and learning include the following: Science and Computer laboratories, library facilities, adequate classroom facilities, workshop facilities, farm buildings and structures, farmlands and play grounds to mention but a few. Teachers and other personnel to manage and service the physical facilities are the teaching, non-teaching and the administrative staff of the school. The availability of those resources and facilities in a given school environment influence the teaching, learning and the performance of both the teachers and the students (Nsa, et al, 2012).

According to Usman (2007), effective school libraries provide additional reading opportunities for students which in turn improve reading skills, comprehension and writing clarity of expression which in turn support students' performance in all other curriculum subjects. This implies that students' use of library books assimilate the learning of other subjects easily; thereby improve their academic performance in those subjects. When talking about utilization of physical resources in teaching and learning, it is important to know that the teacher as the facilitator must have practical knowledge on how to use these resources when available, and also how to improve when resources are not readily available. Thus, Usman (2007) noted that without the teacher who is knowledgeable, educational materials/resources cannot create change and progress in the learner.

According to a study undertaken in Oron Educational Zone of Akwa Ibom State of Nigeria to assess the relationship between the school environmental factors and students' academic performance in Agricultural Science. It was established that there was a significant relationship between agricultural facilities and student's performance in agricultural sciences. Specifically, the study sought to; assess the relationship between availability of laboratory facilities and students' academic performance in Agricultural Science and to assess the relationship between availability of farming facilities and students' academic performance in Agricultural Science. (Olaitan and Mama, 2002). This finding was as a result of the active participation by the students which influenced the learning outcomes positively. As a result, the null hypothesis showed a significant

correlation between the availability and utilization of school farm facilities and students' academic performance in agricultural science (Udo, 2008).

Further, the study made recommendations that secondary schools should create environments that facilitate students' acquisition and development of cognitive, psychomotor and affective skills, Agricultural Science Teachers should provide practical-oriented activities to develop the students' competency in problem-solving, teachers of Agriculture should be retrained on the practical strategies of teaching so that the learners could acquire Agricultural skills, in addition to exposure to contents, students should be made to be actively involved in Practical Agriculture and that teachers of Agriculture should develop positive attitudes towards agricultural practicals.

On digitization, Olson et al, (2011) revealed that e-learning is a term that encompasses a broad array of content and instruction methods, and that has come to mean a new model of education involving revised curriculum, infrastructure, teacher professional development, textbooks, and exams to provide students with technology and "21st century skills" such as creative problem solving. A particularly useful aspect of ICT in education includes accessing the enormous number of educational resources on the internet and online libraries. The networking of teachers, students and others can also produce a lively community sharing information, ideas and strategies. It is important to realize that there were several supporting factors, which will ensure digitization conditions are taken care of. Some of these factors include; technological, human and pedagogical infrastructures, management and leadership (Kasse and Balunywa, 2013).

In addition, Al-Mobaideen, et al., (2012) emphasizes that the school should give more interest to the technological infrastructure and technical supplement in order to provide the best climate for the teachers to use the system of elearning in teaching. Furthermore Boulton, (2008) adds that planned parental involvement for students working from home, and careful preparation of students, together with tutorial support and opportunity for collaborative work is vital for digitalization. According to Conrad and Donaldson (2011), the technological experience of teachers in an online environment is also one of the challenges that determine the smoothness of instructional activities.

The emphasis on the duties and obligations of teachers in teaching and the ability of teachers to understand ICT have impacted the success of online learning. Teachers who do not have online teaching

experience or have difficulty running technology and information tools will usually find it challenging to carry out online learning. Even teachers who have teaching experience or senior teachers can find it difficult to run applications. This condition becomes a burden for teachers in implementing instruction, so learning is not optimal. For teachers who master applications, technology tools, and computers, online learning can be an effective instructional method to use (Conrad and Donaldson, 2011).

In Indonesia, distance learning or using online systems have provided solutions for schools that are starting to implement the School from Home (SFH) system. SFH is a program that migrates the learning process from school to home. Based on the instructions of the Ministry of Education and Culture, schools are to organize online learning to provide a meaningful learning experience for students without being burdened with the demands of achieving all curriculum requirements. In this, SFH considers the health and safety of students, educators, education staff, and the community.

According to Whitaker et al., (2013), headmasters play an essential role in determining and implementing policies that are appropriate in learning digitally in a school from home system (SFH). Support from headmasters in SFH conditions can be in the form of motivation to teachers, coordinating all school equipment, teacher readiness, funding, and other supporting aspects such as the availability of learning facilities and infrastructure. Motivation or enthusiasm from the headmaster provides comfort to a teacher so that learning can take place smoothly (Whitaker et al., 2013). The headmaster determines the funds to support online instructional activities such as data packages, which are essential for implementing online learning. School funds allocated to support all school activities during the SFH, guided by the Ministry of Education regulations, provide the flexibility for school principals to determine the appropriate allocation of funds, which may be made to the operational funds of teachers and the school as a whole. This scenario may be a useful area of learning for the Kenyan context as it incorporates digital technology in learning.

In reference to the aforementioned study findings and recommendation, it should be acknowledged that for Kenya's competency based curriculum to take root, the school conditions ought to be improved. In order to perform well in their teaching activities, teachers need to be motivated. There could be many factors that can affect their motivation. They range from the nature of the school infrastructure, to salary, recognition/professional status, achievement,

advancement/further trainings, relations with others, school leadership and policies, working conditions, recruitment and deployment among others. Such factors characterize the schools effectiveness in terms of performance (Sergiovanni, 2009).

Individual Conditions

The teaching profession has always brought with it additional stress due to excessive workloads, interpersonal communication problems, insufficient training, and job insecurity (Ryan et al., 2017). This stress may have consequences for the health of teachers and, as a result, could lead to increased instances of sick leave, absenteeism, and poor work performance. As such, it is important to safeguard the emotional health of teachers since, as a recent study by De la Fuente et al. (2020) highlights, teacher-student relationships are also stressors for the student, and the teacher's behavior predicts the emotional well-being and commitment of the students, which are also important factors for reducing their stress levels. Further research carried out in several countries has revealed that in the teaching profession there have been many casualties of stress, anxiety, and depression (Ryan et al., 2017).

According to Sergiovanni (2009), effective schools endeavour to create professional conditions that facilitate teachers to accomplish their tasks, participate in decisions affecting their work, have reasonable autonomy to execute their duties, share purpose, receive recognition, are treated with respect and dignity by others, work together as colleagues and are provided with ample staff development opportunities so as to help them develop further. This will result in teacher creativity, persistence and commitment to work. In the United Kingdom for example, teacher motivation and satisfaction are found to be related to working with children while dissatisfaction is related to work overload, poor pay and the perception of how teachers are recognized by the society (Spear et al, 2000). These two authors conclude that for teachers to be highly motivated, they need a high level of professional autonomy, an intellectual challenge, feel that they are benefitting the society, enjoy good relations with others, and spend sufficient time working with children.

In most developing countries, however, teachers' individual working conditions and environment are not supportive and thus lower their motivation and commitment to teach. In South Asia (India, Pakistan, Bangladesh, Nepal) teachers' responsibility in schools is very low due to the politicization of the teaching profession. This low accountability by teachers in school matters has also a disastrous effect on other aspects of job motivation, including promotion,

school management, deployment and recruitment (Bennell, 2004). In sub-Saharan Africa, research has it that sizeable proportions of teachers have low levels of job satisfaction and are poorly motivated. Children are not well taught and thus don't receive the minimal acceptable education. Most schooling systems therefore are faced with teacher motivation crisis that are related to salary, advancement, achievement, recognition, responsibility, poor school facilities among others which have far reaching consequences (Bennell & Akyeampong, 2007).

According to Woods, (2008), the CBC emphasizes on competence development among learners rather than the acquisition of content knowledge. The curriculum entailed a change in paradigm from content-based approaches to learner- based approaches. KICD (2017) states that it involves the use of learner-centered teaching methods like role plays, discussion, problem-solving, projects, case study, and study visits. In the use of such methods, the teachers' role change to an expert, facilitator, coach, mentor who guides the learning process. The learners should engage and interact with the learning content taking responsibility for their learning through direct exploration of knowledge which will result in desired experiences. CBC proponents advocate that this approach enhances the preparation of students for their future careers.

Adelabu (2005), indicates that teacher motivation in Nigeria is based on the way teachers are deployed, working conditions, teachers' competence, teachers' status, vocational intent, career advancement, fringe benefits, and remunerations. Furthermore, some schools are inadequate, dilapidated, overcrowded, lack teaching materials. Such factors are prevalent elsewhere in the least developed countries. They have an impact on the teachers' performance and academic quality and need to be improved. In Tanzania, younger-qualified teachers are generally less satisfied than their older counterparts who still take teaching as a privilege. These younger qualified teachers are heavily concentrated in urban areas. Across Africa, there is much frustration by unqualified teachers because they are limited to opportunities to acquire basic teaching qualifications through fulltime study leave, or open distance learning programs (Bennell & Akyeampong, 2007).

According to Ofojebe and Ezugoh (2010) motivation can be in the form of strategies such as remuneration, in-service training, promotion and employee status. This implies that teachers should be motivated to be productive by being trained on the job, being promoted, being assured of their employee status and being remunerated properly. Of importance to this

study is remuneration, particularly in view of the growing global economic realities, which threatens the lives of the general populace, including teachers. Teachers are often shown in the electronic and print media agitating for better working conditions, especially for increased remuneration. As Nyakundi (2012) put it, while teacher motivation is crucial to the teaching-learning process, a good number of teachers appear not to be motivated. With this in mind, one is left to wonder what influence these teachers perceive that their remuneration will have on their motivation.

Good educational policies are often abandoned or poorly implemented due to failures in upgrading the teaching and learning conditions. In Uganda, Okuni (2003) found that the quality of Universal Primary Education was deteriorating due to pupils' overcrowding resulting from large class sizes; inadequate training, motivation, commitment and monitoring of teachers; less active and contribution by parents; less disciplinary control of students by teachers; and lack of housing for teachers, especially in rural areas. This worrying pattern of consequences emanating from poorly implemented policies should trigger the Kenyan government to provide the favorable conditions for teachers and learners in our public primary schools in order to have a successful transition from 8-4-4 to CBC.

Rwanda is one of the developing countries in the world which had a main education goal of Education For All (EFA) by 2015; it has an education system where students study six years of primary school, three years of lower secondary/ordinary level, three years of upper secondary/advanced level, and four years of university-6-3-3-4 (Mineduc, 2010; Elkim, 2010). The government recognizes that through the sector, it can address challenges of poverty eradication, expand access to education without compromising quality, and place the country on the path of sustainable growth and development as well as achieving the millennium development goals and its vision 2020. The government, therefore, recognizes that the teacher is the main instrument in bringing about the desired improvements in quality learning (Mineduc, 2007).

According to a study conducted on teacher preparedness for implementation of competency based curriculum in private pre-schools in Dagoretti North sub county, teachers expressed their concerns over limited in-service training in addition to minimal training in the competency based curriculum (Ondimu, 2018). In an effort to equip teachers for successful implementation of CBC, teachers were taken through training during the holidays. According

to Muraya (2019), at the onset, a team of 181 master trainers were trained 1,165 regular and special needs education curriculum support officers and 1,320 CBC champions as the trainer of trainers. It was expected that at the end of the training, all teachers would acquire the knowledge, skills, and attitudes necessary for effective implementation of CBC, apply innovative pedagogical approaches and models, demonstrate competencies in assessment and be self-reflective, self-improving and supportive learners themselves. However, in spite of the training, many teachers felt that the system has tripled their work as they were required to keep the records of each child as marks are not awarded based on academic output only but on extra curriculum activities as well. Further, it was acknowledged that the CBC had come with new costs that had to be endured by the parents (Otieno and Onyango, 2019)

Organizational Conditions

Staffing, division of work, educational policy design is a preserve of the Ministry responsible for education in a country and school management. According to Elikim (2010), the education for all (EFA) policy in Rwanda resulted to huge turn up of pupils which resulted into school enrollment of 97% compared to that of 74.5% in 2002. Overcrowding was seen in classes where the student teacher ratio is 67:1. The World Bank report described this class overcrowding as the “highest” in the world (Mineduc, 2007). The government tried to minimize this problem by establishing the method of “study in double shifts.” This implies that some pupils of the same class study in the morning session while others in the afternoon session. This impacted on the teacher in terms of commitment and morale to teach because he/she is the same teacher who teaches both sessions. He/she becomes worn out in the afternoon session due to work overload.

Schools just like organizations require change management plans. Planning is a process of finding answers to future questions such as what, why, when, how, where, by who, for how long and at what cost and making decision ahead of time about any matter (Sabuncuoglu & Tuz 1998). According to the Kenya national union of teachers, KNUT, (2017) The CBC encountered numerous challenges occasioned by hurried implementation as curriculum which generally requires small classes for teachers to give personal attention to each learner. However, with the increased enrolment to meet the 100 percent transition, the classrooms overflowed with large numbers of pupils. Further, the CBC faced shortage of teachers, with some schools, having only a few teachers which posed a major challenge in the

successful implementation of the new curriculum (Sossion, 2017; Ondimu, 2018). Teachers found it difficult to assess learning progress. In addition, the teachers lacked specialized training for different learning areas. Other challenges include the assessments Rubrics having unclear guidelines which made giving learner’s assignments difficult, poorly printed books owing to hurried implementation of the curriculum which overstretched the writers and publishing houses resulting in unedited books, or poorly printed books. Further, the syllabus for learners with special needs had not been distributed to schools while there was no syllabus for mentally challenged learners Ondimu, (2018).

Purposes of planned organizational change are to maintain organizational integrity, ensure sustainability, growth and development of the organization, increase efficiency, productivity, motivation and satisfaction levels, and in addition it has purposes such as preparation to change and future, development of trust and mutual support among members of the group, provide solutions for issues and arguments improve communication, ensure competency based authority rather than position based authority and create synergy effect (Sabuncuoglu & Tuz 1998). Similarly it is expected that Kenyan public primary schools have the CBC syllabus and internal organizational strategies that will facilitate transition from 8-4-4 to CBC. Change policies cite the change communication strategies, risk management strategies, tools for measuring the success of transition and structure of the change team with knowledge and experience of managing change. Teachers are crucial change infrastructure and influential stakeholders in determining the degree to which schools implement curriculum policies (Porter, 2015).

According to the UN report on financing for sustainable development, significant additional financing is required for SDG-4 which is geared towards ensuring inclusive and equitable quality education and promotion of lifelong learning opportunities for all by 2030. The report explains that annual total spending to achieve the first two and costliest education targets, namely universal pre-primary, primary and secondary education, would need to more than triple in low-income countries (UN, 2019). Kenya’s education objectives are driven by both international and national policy commitments including vision 2030 as well as the Sustainable Development Goals (SDGs). Education in Kenya is financed through public funds in form of taxes, payment of fees by parents or guardians, private firms or individuals and international donor

agencies. The Kenyan government direct funds to schools through Free Primary Education grants (FPE), Free Day Secondary Funds (FSD), Constituency Development Funds (CDF) and the County Development Funds in devolved units. On the other hand, Parents meet direct cost including boarding fees, activity fees, uniforms, transportation and lunches. Indirect or opportunity costs include the household labor and income that could have been earned by children while in school (Itegi, 2016). This means all stakeholders have to be involved in ensuring the conditions of the school are well supported financially.

According to an exploratory study conducted in Sabatia sub county (Vihiga) and Kakamega Central (Kakamega) on the teacher-parent nexus in the competency based curriculum success equation in Kenya, a sample of 56 participants were involved in the study undertaken by Amunga et al (2020). It was established that in as much as parents were expected to work as co-educators with teacher and provide learning materials for practical sessions, they were reluctant in doing so. The study revealed that although the CBC in Kenya sustained interest in learning, there still existed many challenges such as; lack of materials, parental support, time, curriculum structure and class size among others. With regards to stationery, majority of the respondents who were teachers (40; 90.89%) expected parents to provide materials for practical lessons as they were of the view that, all learning areas have practical lessons with specific material requirements. For example, drawing and coloring require drawing books, pencils, crayons and coloured pencils; when they are learning hygiene and taught how to brush their teeth, the parents have to provide tooth brushes and tooth paste; an item of crockery may be required to practice cleaning. The list of activities is actually endless and parents' cooperation is very important. An example was cited where a teacher respondent said learners may be required to learn how to wash an item of crockery and this meant that parents should allow their children to carry cups, plates to school as need arises. The study further recommended sensitization of parents on the CBC and their roles in addition to schools maintaining an optimum class size, government to provide adequate funding and TSC to improve staffing in public schools. The addition of talent schools was also recommended (Amunga et al, 2020).

Another aspect of organizational conditions is management of student behavior. According to Greenwood, B. (2019), student behavior is one of the most difficult parts of a teacher's job. Not only does

student behaviour require skill, patience and experience, but the consequences of not managing behavior well can be detrimental. He further adds that over a quarter of mental health issues in teachers were provoked through student behavior and 70% of teachers considered leaving the profession as a result of it. This notwithstanding its the teachers also spend their physical time which puts more of a strain on their wellbeing and work/life balance. The most effective way to ensure positive behavior management is to have a well-thought out and correctly implemented behavior policy which is consistently communicated and reinforced by all stakeholders and this may reduce the teacher workload. He further adds that when introducing work reduction initiatives, which include asking staff to stop what might be a career long practice, it can be both difficult and daunting thus eliminating something from their workload will also allow them to have more down time, preventing teacherburnout. To help implement these rules create a new policy if needs be, and lead by example as the staff are more likely to follow suit if you make the move first.

With regard to digital literacy, Spires (2017) highlights that digital literacy is about having three aspects; firstly, it is the ability to find and consume digital content while being able to read an article stacked with hyperlinks, videos, audio clips, images, interactive graphics, share button and comment by utilization of your technical skills and intelligence to make a decision. Secondly, the ability to create digital content by utilizing skills in preparing responsible content in the form of emails, tweets, podcasts and videos which require mature thinking, as digital content is often meant to be shared. It also requires creativity and knowledge of various digital tools. Thirdly, is the ability to communicate or share digital content prudently such as it doesn't attract any kind of dangerous controversy and puts the person's privacy, safety, and reputation at stake (Spires, 2017)

According to Waga and Maina (2019), Digital literacy (DL) is one of the competencies recommended for educators to be embedded in the Kenyan Competency Based Curriculum (CBC) in preparation for learners for the 21st century skills. Working digitally primarily involves use of digital skills or 21st century skills which include; Communication, Creativity, Collaboration and Critical thinking for problem solving– 4 Cs that are necessary to be digitally literate. It is clear that ICT integration is one of the important pillars of the Kenyan CBC through the digital literacy competence. However, there have been past efforts by the government to promote ICT integration in primary

schools through programs such as the Laptop Project for Primary Schools. Although the program was initiated as a political tool in 2013, its implementation has the ability to promote effective teaching and learning, hence stimulating intellectual curiosity. (Wafula, 2014).

In reference to the Ministry of Education, Science, and Technology basic education statistical booklet of 2014, adoption of ICT in Tharaka Nithi County was reported as low due to an array of factors such as; lack ICT infrastructure and equipment as a result of lack of commitment by the government, inadequate trained teachers in relation to ICT (MoEST, 2014). Other challenges previously highlighted include; stakeholder support, pedagogy, negative attitude among some learners and teachers, incompatible curriculum designs, collaboration among teachers and the cost of maintenance of ICT equipment. According to a report on competency-based curriculum activities of 2018, the CBC focuses on using technology in the classroom to achieve digital literacy by moving technologies tools from the lab to the classroom where learners can seamlessly interact, relate, and learn through application of the tools. Further, this is fundamentally important to ensure that they are up-to-date regarding digital knowledge acquisition and application of constantly changing digital world (MoE, 2018)

In conclusion, Anderson and Anderson (2001), recommend that a transitioning organization should endeavor to implement the change strategy with particular attention being paid to dealing with resistance by responding to employees' reactions relating to organizational conditions; and supporting the employees' internal changes (Anderson and Anderson, 2001). Further, the organization should monitor and correct the implementation process by focusing on communication delivery, impact and rumor management; employees' reactions; mindset and behavior successes and failures in addition to provision of training and coaching as well as opportunities for celebrating success (Anderson and Anderson, 2001).

Summary of Literature Review

The literature reviewed clearly spells out the key assumptions that underlie the theory of change and subsequent transition. However, the assumptions about the context and external factors could be explored in more detail especially the implications. The literature review provides a narrative assessment of each key hypothesis and attempts to provide evidence from various authors and experiences both in Kenya and outside the country. In summary, it reviews that managing transition is about providing

and enabling a program to achieve transition as quickly and effectively through focusing on the conditions, attitudes and resources. The focus on creating the right environment for transition requires building the internal capability, skills or motivation, to enable staff to play their part in transitioning from 8-4-4 to CBC.

Methodology

Research Design

The descriptive survey research design was used to obtain information both quantitatively and qualitatively due to its suitability in the primary data that will be collected from education managers and school heads pertaining to their level of preparedness in transitioning from 8-4-4 to CBC. This study adopted the descriptive research design to explore and explain additional information about the conditions, resources and attitudes of the education stakeholders. It was used to identify the characteristics, frequencies, trends and categories so as to understand of variables among sampled respondents in Bungoma County. The descriptive survey research design method is used to collect data about attitudes, opinions and habits of people on educational issues by sample administration of questionnaires to individuals (Orodho & Kombo, 2002). In addition, descriptive research design is suitable for evaluating education policies and programs (Best and Khan, 2000)

Sample and Sampling Procedure

This study was guided by the Yamane (1967) formula indicated below due to the fact that a sample size is a finite portion of statistical population whose properties are studied to get information about the entire population (Kombo and Tromp, 2006).

$$n = \frac{N}{1 + N(e)^2}$$

N= target population n = sample size e = (0.05) level of precision

Table 1: Summary of sampling framework

Category	Target Population (N)	Sample Size (n)	Percentage sample (%)
School heads	1,568	319	20%
Teachers	1,560	156	10%
SCE officers	9	9	100%
KICD officers	9	9	100%
SCQA officers	9	9	100%
County Director	1	1	100%
Total	3,156	497	16%

The probability sampling and non-probability sampling technique was used for this study. Gay et al., (2009) indicates that probability sampling technique allows every item of the population to have an equal chance of inclusion in the sample. Consequently, for this study, systematic random sampling was used to ensure that every public primary school across the sub-counties in Bungoma had an equal chance of being included in the sample. The non-probability sampling technique was also used in the form of purposive sampling to ensure that stakeholders within the Ministry of Education with different roles are informants of the study. Through this sampling procedure, 9 subcounty quality assurance, 9 curriculum officers, 9 subcounty education officer, 1 officer from KICD and 1 county director of education were sampled. From the target population of 784 public primary schools, 9 clusters were formed according to the sub-counties. It is from these clusters that systematic random sampling was undertaken by creating a list of public primary schools per subcounty. An interval number of 10 was selected randomly and used to determine a list of schools that will be the representative sample. Through this strategy, 78 schools were selected from across the 10 sub-counties. The respondents were comprised of the 319 school heads and their deputies, 10 subcounty education officers, 10 sub-county quality assurance officers, 1 officer from KICD and 1 county director of education. Hence the total number of respondents for this study was 350. In a descriptive research, a sample size of 10-50% of the total population is acceptable (Mugenda & Mugenda, 2003). Therefore, this study included 16% of the target population from Bungoma County.

Data Collection Instruments

Questionnaires, interview guides and the document analysis guide were used to solicit data on the level of preparedness in transitioning from 8-4-4 to CBC from the target population. Both structured and unstructured questionnaires were used as a means of data collection in order to test the stated hypotheses. According to Kothari (2004), structured questionnaires involve definite, concrete and pre-determined questions. The questionnaires used for this study included both closed and open ended questions and will solicit information relating to the three levels of preparedness (attitudes, conditions, resources and infrastructure) as cited in the conceptual framework. The questionnaire also included a likert scale to interrogate the attitude aspect.

According to Wikipedia (2010), the likert scale is referred to as a psychometric scale. It is very

commonly and widely used in research survey and is used to determine the level of agreement to a statement. This is due to the fact that structured questionnaires are considered inappropriate in investigations where the aim happens to be to probe for attitudes and reasons for certain actions or feelings (Kothari, 2004). The questionnaires used for this study were short and simple. The questions proceeded in logical sequence moving from easy to more difficult questions. The questions ranged from dichotomous (yes or no answers), multiple choice (alternative answers listed) and open-ended.

An interview guide was also utilized in soliciting for structured responses where applicable. The interviews were administered to 9 sub county education officer, 9 sub county quality assurance officer, 1 officer from KICD and 1 county director and lasted for 10 minutes. Prior to the commencement of the interviews, the interviewer sought permission from each participant to take notes of the interviews. The interview items were mainly derived from an interview guide prepared for the purpose of interrogating the study variables. The interviews responses were then transcribed and where relevant, quotations from the interview transcripts were used to support the results from the statistical analysis.

Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic (Bowen, 2009). This research incorporated document review and analysis of documents within the school setup as well as within the offices of the Ministry of Education officials. The documents to be reviewed ranged from; school textbooks with particular focus on the learning areas content for the lower primary education, school syllabus content, schemes of work, lesson plans, education policy manuals. A list of documents with potential of being encountered was generated, then a checklist of the components of each document was identified and utilized to assess the authenticity, credibility and reliability in line with the requirements of the CBC. Consequently, the document analysis worksheet shall be used when collecting and analyzing data. This study also used document analysis due to the fact that documents contain data that no longer can be observed, provide details that informants have forgotten, and can track change and development with regards to transition from 8-4-4 to CBC. Document analysis can also point to questions that need to be asked or to situations that need to be observed, making the use of document analysis a way to ensure research is critical and comprehensive (Bowen, 2009).

Validity and Reliability

To ensure content validity of the questionnaires that will be used for the study, the items in the research instruments will be shared with the research supervisors to ensure accuracy in capturing the data required for the study. According to Cooper et. al., (2006), a pilot should be conducted to detect the weakness in design of an instrument to provide proxy data for selection of a probability sample. In conducting a pilot, the content validity index (CVI) developed by Waltz and Bausell (1983) will be used to rate each item in the research instruments for relevance, clarity, simplicity and ambiguity on a four point scale given in the table below.

Table 2: Criteria used for determining content validity

Criteria	Rating
Relevance	1=not relevant
	2=item need some revision
	3=relevant but need minor revision
	4=very relevant
Clarity	1=not clear
	2=item need some revision
	3=clear but need minor revision
	4=very clear
Simplicity	1=not simple
	2=item need some revision
	3=simple but need minor revision
	4=very simple
Ambiguity	1=doubtful
	2=item need some revision
	3=no doubt but need minor revision
	4=meaning is clear

Based on the ratings, the supervisors gave their advice on how to improve the research instruments before data collection.

To determine the reliability of the research instruments, the study respondents were issued with questionnaires for them to fill. The same questionnaires were again be subjected for retest within a period of one month. After the two tests, the Pearson's Product Moment Co-efficient was computed to establish the correlation coefficient. According to Mugenda and Mugenda, 2003, a correlation co-efficient of 0.7 or above will be considered appropriate and hence reliable for collecting data. The reliability coefficient obtained was 0.78 after pretesting the questionnaires for reliability on 12 public primary schools in Bungoma County. The number 12 was chosen for pretest as it is the smallest number that could yield meaningful results in data analysis of a survey research (Mugenda and Mugenda, 2013).

Data Analysis

The data analysis was based on both qualitative and quantitative approaches by use of descriptive and inferential statistics. The collected data was thoroughly checked and examined for completeness

and comprehensibility. The data was summarized, classified, coded and entered to ensure better and efficient analysis. The coded data was entered into the Statistical Package for Social Sciences (SPSS) for analysis. Descriptive statistics was computed to obtain a general understanding of the institutions and respondents characteristics whereas inferential statistics was used to test the hypothesized relationships so as to make generalizations of the findings.

To determine the relationship between education stakeholder's preparedness of school teaching & learning conditions and transition from 8-4-4 to CBC, the spearman correlation test which is a nonparametric test was conducted due to the ordinal nature of the likert scale questions. The interpretations were made based on the sig value. The parameters used were; if the sig value is less than 0.05 then there is a significant correlation between the stakeholder attitude variables and transition from 8-4-4 to CBC. This was used determine whether the null hypothesis was to be rejected.

To examine the degrees of association or relationship between school working and learning conditions on the dependent variable which is transition from 8-4-4 to CBC, the Spearman rank correlation coefficient was used to correlate the means of the schools with stipulated working conditions and those without sound working conditions. Similarly, to establish the relationship between the teaching and learning resources available on the dependent variable which is transition from 8-4-4 to CBC, the Spearman rank correlation coefficient was used to correlate the means of the schools with required teaching and learning resources and those without. The use of spearman rank correlation assumes that there is a monotonic relationship between the dependent variable (transition from 8-4-4 to CBC) and the independent variables (teaching and learning conditions, resources, attitudes). When one variable increases, the other variable may increase or decrease. In order to test the hypothesis (Taylor, 1990) scale will be used to interpret the value of the coefficient as indicated below.

Table 3: Interpretation table of the spearman rank order correlation

.00-.09	Very Weak
.20-.39	Weak
.40-.59	Moderate
.60-.79	Strong
.80-.1.0	Very Strong

A correlation coefficient of zero will indicate that there is no linear relationship exists between two

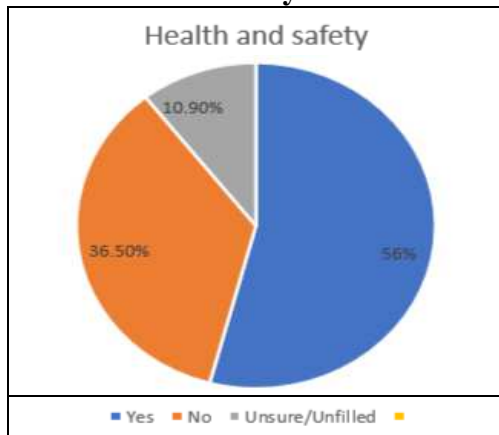
continuous variables, and a correlation coefficient of -1 or $+1$ will indicate a perfect linear relationship.

The strength of relationship will be determined anywhere between -1 and $+1$. The stronger the correlation, the closer the correlation coefficient comes to ± 1 .

Findings

In investigating the school working and learning conditions so as to establish their effect on the dependent variable which is transition from 8-4-4 to CBC in Bungoma County, the researcher interrogated the teachers on the average number of pupils per classroom, if they were satisfied with the health and safety conditions in the school, adequacy of physical resources to support learning, as well as availability of amenities such as sports field, clean water and toilet.

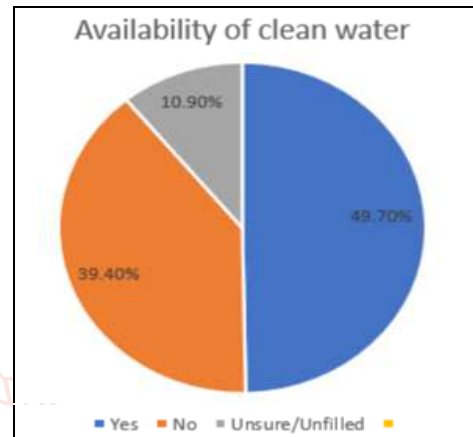
Figure 3: Teachers response on satisfaction with health and safety conditions



Data from Figure 3 above reveals that majority of the 175 teacher respondents, 99 (56%) were satisfied with

the health and safety conditions in the school. Further, the table reveals that 57 (36%) of the respondents were not satisfied with the health and safety conditions in the school. Further In determining the school conditions responses were sought from the teachers on the availability of clean water within the school premises. Their responses are presented in figure 4 below.

Figure 4: Teachers response on availability of clean water



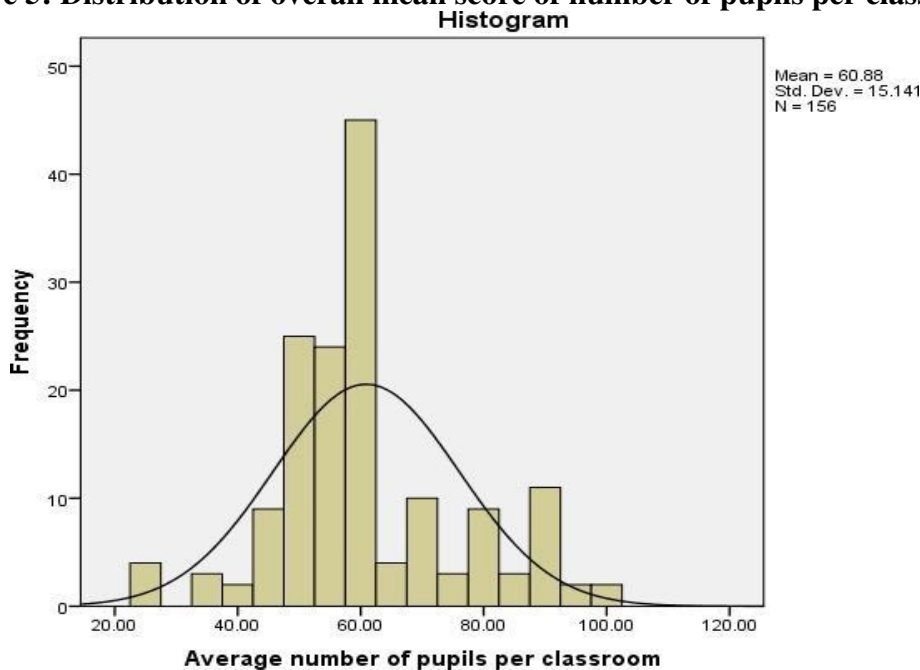
Data from figure 4 above indicates that of the 175 respondents 87 (49%) acknowledged the availability of clean water within the school. Further, the data reveals that 69 (39%) of the respondents indicated that clean water available within the school premises. Additionally, the study also sought to establish the classroom conditions by inquiring on the average number of pupils per classroom. The teacher responses on the averagenumber of pupils per classroom are presented in Table 4 below

Table 4: Summary of the descriptive statistics of the average number of pupils per classroom mean scores

N	Min	Max	Mean	Median	Mode	Std Dev.	Variance	Range	Percentiles		
									25	50	75
156 (19 missing system)	25	100	60.8782	60.0000	60.00	15.14120	229.256	75.00	50	60	69

Table 4 above reveals that the overall mean score of responses by 156 teachers was 60.8782 with a standard deviation of 15.14120. However, there was a slight positive skew in terms of the distribution of the overall mean score as depicted in figure 5 below.

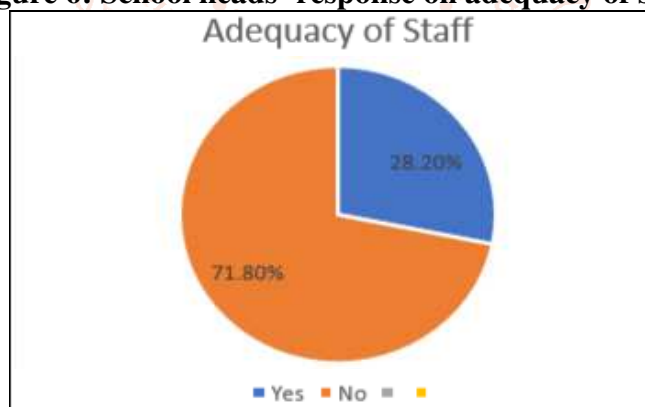
Figure 5: Distribution of overall mean score of number of pupils per classroom



The distribution curve in figure 5 above reveals that the scores were positively skewed as the mean of 60.88 is slightly greater than the median which is 60. The histogram presented shows a perfectly symmetrical distribution as the mean and the median are the same. Additionally, the mode of 60 is the same as the mean and median. Majority of the 156 schools represented have a mean of 60.88 learners per classroom. This finding is also in line with the sentiments of one of the head teachers interviewed who said: ‘The health and safety conditions of the school are wanting due to the high population per class especially during the current pandemic. Some classes are overcrowded and the workload per teacher, per classroom is too heavy. For this reason, I feel some staff are not motivated to implement the CBC’ (Head-teacher 7)

The researcher also set out to establish from the school heads if they had adequate staff as per the required pupil-teacher ratio. 319 school heads and their deputies responded as per the frequency distribution table in figure 6 below:

Figure 6: School heads’ response on adequacy of staff



Data from figure 6 above indicates that of the 319 respondents a vast majority of 229 (71%) decried the adequacy of staff as the pupil teacher ratio. Further, the data reveals that only 90 (28%) of the respondents indicated that the staff were adequate as per the requirement per class.

To investigate whether there was any statistically significant relationship between the school working and learning conditions and transition from 8-4-4 to CBC, the null hypothesis was tested using the chi- square test due to the nature of the dependent and independent variables which were categorical. Additionally, the one sample t-test to compare the average mean of the number of pupils per classroom. Further, the spearman correlation was used to understand the strength of the relationship between the average number of pupils per class and the pace of transition.

The scores of variables denoting the school working and learning conditions were used as independent variable and transitioning from 8-4-4 to CBC was used as the dependent variable. The school working and learning

conditions was computed from the frequency of responses such as the health and safety conditions in the school, availability of clean water and the average number of pupils per classroom.

The average number of pupils per classroom was solicited and responses were used to infer if there is a significant difference between the assumed mean and the actual mean. The findings are presented in Table 5 below.

Table 5: One sample T-test – Average number of pupils per classroom

	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Average number of pupils per classroom	.724	155	.470	.87821	-1.5165	3.2729

The one sample T-test result in table 5 above ($T=0.724$, $p=0.470$) at $\alpha = 0.05$ shows that there is no statistically significant difference between the assumed mean of 60 and the actual mean. This indeed is a reflection that the mean average of pupils per classroom is high compared to the required pupil-teacher ratio in primary education for Kenya thereby making the school conditions unfavorable for successful transition from 8-4-4 to CBC. These findings echo the sentiments of Kanyi, (2019) that the system may result to widening the countries inequalities if various levels of preparedness are not put into consideration when implementing the CBC. Further, in examining the relationship between the adequacy of the staff as per the required pupil teacher ratio and the pace of transition, a spearman correlation was conducted and data is presented in table 6 below.

Table 6: Relationship between the adequacy of staff as per required pupil teacher ratio and the pace of transition

	Adequacy of staff as per required pupil-teacher ratio (Yes or No)	Correlation Coefficient	1.000	-.533**
Spearman's rho	Adequacy of staff as per required pupil-teacher ratio (Yes or No)	Sig. (2-tailed)	.	.000
		N	319	319
		Correlation Coefficient	-.533**	1.000
	Gauge success of transition from to CBC in your school (Slow or Fast)	Sig. (2-tailed)	.000	.
		N	319	319

The finding of the study presented in table 6 above shows ($\rho=-.533$, $n=319$, $p=.005$) that there is no statistically significant positive correlation between the adequacy of staff as per the required pupil – teacher ratio and the pace of transition. Based on this finding, the study fails to reject the hypothesis that, “There is no statistically significant relationship between the school conditions and transition from 8-4-4 to CBC.” This implies that adequacy of staff is not to be used as a determinant of transition. This fact can also be supported by the following sentiments made by some school heads during the interview.

“As you may have realized, the CBC curriculum integrates more than one stakeholder in the teaching process such as parents and books

have been designed to encourage self-paced learning. Currently, not all classes are implementing CBC and the younger pupils are adjusted and there is quick mastery of competencies required as they are still young. Also, the teachers have integrated the strands and sub strands and learners are ready to learn and develop creativity, life skills, self-efficacy, effective communication’ Headteacher 228

Inspite of the findings which shows ($\rho=-.533$, $n=319$, $p=.005$) that there is no statistically significant positive correlation between the adequacy of staff as per the required pupil –teacher ratio and the pace of transition. It is worth mentioning that one of the findings from Kenya’s benchmarking exercises on the

CBC established that the Competency Based Curriculum has been successful in Finland because of increased contact between teachers and pupils due to low Pupil Teacher Ratio. As one of the countries with the best education system in the world, Finland has a pupil teacher ratio of 13:1 in both primary and secondary schools. (Sirrku, Jarkko & Tommie, 2009).

It is also worth noting that findings of studies by Makunja, G (2016) and Muneja, M (2015) have demonstrated that overcrowded classrooms, high Pupil Teacher Ratio (PTR) and heavy work load for teachers have hampered effective implementation of competence-based curriculum in Tanzania. While the adoption of competence-based teaching and learning offers a promise for improvement of quality of education, inadequacy of educational resources still remains a widely recognized barrier by scholars to effective implementation of the curriculum. It was therefore important to establish the teacher requirement that would enable Kenya to effectively implement CBC hence providing quality education to the citizens by the year 2030.

Additionally, for learners to thrive as they get transitioned to the CBC their conditions of learning ought to be favorable. Umoh and Etuk (2003) asserted that a child who wants to learn Agricultural Science and develop desirable attitudes, interest, appreciation, understanding, habits, abilities, knowledge and skills requires a stimulating environment. Similarly, Kenya's CBC intends to inculcate learners with some core competencies and should consider having stable conditions in its institutions of learning at individual, environmental and environmental levels.

In view of the findings of the study which shows ($\rho = -.533$, $n = 319$, $p = .005$) that there is no statistically significant positive correlation between the adequacy of staff as per the required pupil – teacher ratio and the pace of transition. The education stakeholders in the Ministry of Education should consider refining and incorporating self-learning materials for pupils while inculcating it as an important skill for children as they journey through education and beyond to adulthood so as to building independence and have the ability to progress without reliance on a teacher.

Tennant (1997) believed that self-directed learning as a practical and theoretical term is still strongly connected to the work of Knowles and his model of the lifelong learner, who works through the following skills: the ability to develop curiosity skill, the ability to form questions that can be answered through inquiry, the ability to identify the information required to answer the questions the learner forms,

the ability to specify the most relevant and reliable sources of information, the ability to select and use the most efficient means for collecting the required information from the sources and the ability to generalize, apply and communicate the answers to the questions (Tennant, 1997).

Similarly, Sparrow and Swan (2000) considered self-learning one of the several teaching strategies that have much in common. These strategies are collaborative learning, experiential learning, authentic learning, problem based learning, constructivist learning, and student-centered learning. Hedge (2000) claimed that ideas about self-learning have come to the ELT profession through two basic sources of influence: insights from research studies into second language acquisition, and educational thinking of the last few decades.

Research about learner strategies has made an important contribution to the ELT profession by clarifying the possibility of learners becoming more independent in their learning, and by generating discussion of how learners can be ready to take on more responsibility for their learning. Hedge (2000) pointed out that much of the research has established whether it can be possible to facilitate learning by using certain strategies, or whether learners can modify and create their own strategies. The author added that the second main source of ideas about autonomous learner in ELT has been educational thinking, "where the concept of self-determination has been the focus of debate for many years." Self-determination suggests that the learner can reflect, make choices, and make personal decisions.

It is noteworthy that the school heads as well as the teachers were asked to gauge the pace of transition to which responses received from 319 head teachers of which the vast majority comprising of 287 indicated that the transition was slow. Similarly, out of the 175 teacher respondents, 113 (64.6%) held the view that the pace of transition is slow.

Based on the findings of the study, the following are policy recommendations as well as recommendations related to practice:

1. This study recommends improving the teachers working conditions to ease the workload occasioned by overpopulated classrooms.
2. The education stakeholders in the Ministry of Education should consider refining and incorporating self-learning materials for pupils while inculcating it as an important skill for children as they journey through education and beyond to adulthood so as to building independence and have the ability to progress

without reliance on a teacher. This recommendation is as a result of the finding that there is no statistically significant positive correlation between the adequacy of staff as per the required pupil –teacher ratio and the pace of transition. Based on this finding, the study failed to reject the hypothesis that, „There is no statistically significant relationship between the adequacy of the staff as per the required pupil teacher ratio and transition from 8-4-4 to CBC. This implies that adequacy of staff is may not be used as a determinant of transition.

3. The education stakeholders in the Ministry of Education should consider improving school communications through the use of technology by providing easy access to up-to date digital resources for teaching and learning. They should also consider incorporating desired approaches to learning while refining the CBC to aligns with the emerging fourth industrial revolution which focuses on smart technology adoption while considering both online and offline approaches to learning.
4. Improvements and/or adjustments of the CBC based upon recent studies and changes occasioned by the pandemic and/or other factors. This may be done by development and adoption of a Transitional Education Plan (TEP) by education stakeholders which will serve as a national policy instrument, developed under the leadership and responsibility of state authorities (national or regional within the Ministry of Education). This will enable education stakeholders and its partners (development, humanitarian, and civil society) to develop a structured plan that will maintain progress towards ensuring attainment of longer-term and short-term educational goals to cushion all stakeholders in education in periods change and uncertainty. Such improvements may include making immediate provisions to adjust the physical environments to allow for social distancing and appropriate sanitation measures which lacked in most schools in addition to reimagining of how the school year is structured for a healthy teaching and learning cycle favorable to both teachers and their pupils.
5. Parents and surrounding community should be sensitized on the nature of the CBC so as to support by providing the required environment for learning. It emerged that some schools found it almost impossible to expose their pupils to required activities for learnings such as visiting nearby supermarket, historical site and market. Further, it was also established that most parents

did not provide their children with required stationery.

6. Government should consider putting up at least one library/study center in a central point in each sub county with required teaching and learning resources to allow easy access to CBC books and digital devices for learning among other resources. This recommendation is occasioned by the findings that most schools lacked a library with upgraded teaching and learning material. In addition, the study also found out that due to the large populations of pupils per classroom the digital devices for learning were inadequate. This would enable pupils from poor backgrounds who are unable to meet the resource requirements to interact with the learning resources and schools which lack connectivity and/ or power supply to meet the requirement of CBC as a temporary measure
7. Continuous learning by all education stakeholders to enhance resilience in periods of change such as the unforeseen change in teaching during the coronavirus pandemic. It's worth noting that the pandemic can be characterized as a colossal and complex issue, with many different things to take into consideration, and even well-experienced teachers felt that they had to learn what and how to teach (Bergdahl, N. 2020). The teacher's attitudes and perspectives should be considered major subjects of investigation during the educational changes as educational change depends on what teachers do and think.

In reference to the findings of the study, it can be concluded that the lack of adequate resource variables accounted for the slow pace of transition compared to attitude and condition variables. The discrepancy with regards to the lack of adequate resources can be attributed to lack of proper change management with regards to transition and therefore the National government, County government, educational planners, principals and School Boards of Management ought to intervene by incorporating change management strategies to spur the CBC change management process which was hurriedly undertaken. Failure to take action as per the suggested recommendations may lead to system and policy failure and the CBC may not take root like other preceding policies in the education sector.

REFERENCES

- [1] Adelabu, M. (2005). Teacher motivation and incentives in Nigeria. Retrieved from <http://dfid.gov.uk/R4D/PDF/Outputs/policystrategy>

- [2] Al-Mobaideen, H., Allahawiah, S., Alkhaldeh, A. (2012). Factors influencing the effectiveness of e-learning systems in the educational process, electronic learning system, (Eduwave): Jordan casestudy. *European Scientific Journal*, 8(28)
- [3] Amunga, J., Were, D., and Ashioya, I. (2020). The teacher-parent nexus in the competency based curriculum success equation in Kenya. *International Journal of Educational Administration and Policy Studies*. Vol.12(1), pp. 60-76.
- [4] Anderson, D. and Anderson, A (2001). *Beyond Change Management*. San Francisco. Jossey-Bass/ Pfeiffer.
- [5] Bennell, P. (2004). Teacher motivation in sub-Saharan Africa and south Asia. *Education papers*. Retrieved from: www.dfid.gov.uk/R4D/PDF/Outputs/policystrategy/researchingthesisues
- [6] Bennell, P., Akyeampong, K. (2007). Teacher motivation in sub-Saharan Africa and Asia. *Education Papers*. Retrieved from www.dfid.gov.uk/R4D/PDF/Outputs/policystrategy/researching
- [7] Best, J., Khan, J. (2000). *Research in Education*: Chicago: University of Illinois.
- [8] Bowen, G. (2009). Document analysis as qualitative research Method. *Qualitative Research Journal*, 9(2), 27-40. doi:10.3316/QRJ0902027
- [9] Cooper, R. & Schilder, K. (2008). *Business research methods* (10th Ed). New York, NY: McGraw Hill Irwin.
- [10] De la Fuente, J., Peralta-Sánchez, F., Martínez-Vicente, J., Sander, P., Garzón-Umerenkova, A., and Zapata, L. (2020). Effects of Self-Regulation vs. External Regulation on the Factors and Symptoms of Academic Stress in Undergraduate Students. *Front. Psychol.* 11:1773. doi: 10.3389/fpsyg.2020.01773
- [11] Elkaim, S. (2010). Rwanda a common destiny. Retrieved From: <http://www.Afriquemagazine.com>
- [12] Gopinathan, S., & Sharpe, L. (1999). Preparing for the next rung: Economic restructuring and educational reform in Singapore. *Journal of Education and Work*, 12(3).
- [13] Head, C. (1997). Beyond corporate transformations: A whole systems approach to creating and sustaining high performance. New York: John Wiley & Sons, Inc.
- [14] IBE-UNESCO (2017). The why, what and how of Competence-Based Curriculum reforms: The Kenya experience. *Journal on current and critical issues in curriculum learning and assessment*. No.11, June 2017
- [15] Kanyi, J. (2019) Magoha must listen to all critics of new curriculum. *Daily Nation*. Retrieved from: <http://www.nation.co.ke>
- [16] Kasse, J. & Balunywa, W. (2013). An assessment of e-learning utilization by a section Of Ugandan universities: challenges, success factors and way forward. *Proceedings of International Conference on ICT for Africa 2013*, February 20-23, Harare, Zimbabwe.
- [17] Kihui, N. (2019). KNUT wants competency based curriculum suspended, says teachers ill prepared. *Capital News*: Retrieved from www.capitalfm.co.ke
- [18] Kotter, J. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review*, March-April, 1-20.
- [19] Kotter, P (1996). *Leading change*. Harvard Business Review Press
- [20] Kothari, C. and Garg, G. (2014). *Research Methodology: Methods and Techniques*, Third Edition. New Delhi: New Age International Publishers
- [21] Laukkanen, R. (2008). Finnish strategy for high-level education for all. In Soguel, N. C. & Jaccard, P. (Eds). *Governance and performance of education systems*. Springer, Dordrecht
- [22] Leithwood, K. (2006). *Teacher Working Conditions that Matter: Evidence for Change*. Elementary Teachers Federation of Ontario, Toronto.
- [23] Maina, G., Waga, R. (2019). *Digital Literacy Competency Enhancement Status in Kenya*. Nairobi, Kenya. Research Gate.
- [24] Makunja, G. (2016). Challenges Facing Teachers in Implementing Competence-Based Curriculum in Tanzania: The Case of Community Secondary Schools in Morogoro Municipality. *The International Journal of Education and Social Sciences*, 3(5), 30 - 37.
- [25] MINEDUC. (2008). *School Management: Training manual for secondary school head teachers*. Kigali: NCDC.

- [26] Ministry Of Education. (2018). Report On Competence Based Curriculum Activities [Ebook]. Retrieved from <https://kicd.ac.ke/wpcontent/uploads/2018/02/Presentation-on-CBC-Activities-Jan-2018.pdf>
- [27] MoEST, (2014). Basic Education Statistical Booklet [Ebook]. Ministry of Education Science and Technology. <https://kicd.ac.ke/wp-content/uploads/2017/10/2014-Basic-Education-StatisticalBooklet.pdf>
- [28] Mugenda, O. and Mugenda, A. (2003). Research Methods. Quantitative and Qualitative Approaches. Nairobi. Acts Press.
- [29] Muneja, M. (2015). Secondary School Teachers' Implementation of the Competency-Based Curriculum in the Arusha Region, Tanzania. Unpublished Doctoral Dissertation, UNISA, Pretoria.
- [30] Muraya J (2019). 91,000 Teachers undergo Competency-Based Curriculum training Capital News. Retrieved from: <https://www.capitalfm.co.ke/news/>
- [31] Njoroge, M (2004). Free primary education in Kenya: determinants of the primary education budget. Published thesis, University of Nairobi. Nairobi.
- [32] Nsa, E., Akpan, E. and Williams P. (2012). Instructional Strategies and Students' Skills Acquisition in Vegetable crop production. Pakistan Journal of Business and Economics Review. Vol.3 (1) pp.125-141.
- [33] Nyakundi, T. (2012). Factors affecting teacher motivation in public secondary schools in Thika West District, Kiambu County, Kenya. Retrieved from <http://www.irlibrary.ku.ac.ke/pdf>
- [34] OECD,(2020). Education Policy Handbook-Finland. Retrieved from; <https://www.oecd.org/education/policy-outlook/country-profile-Finland-2020.pdf>
- [35] Ofojebe, W., & Ezugoh, T. (2010). Teachers' motivation and its influence on quality assurance in the Nigerian educational system. African Research Review, 4 (2), 398-417.
- [36] Okuni, A. (2003). Quantity-quality trade-offs after UPE: prospects and challenges of Universal access in Uganda. Retrieved from www.norrag.org/issues/article/822/
- [37] Okwach, A. and George, O. (1997). Efficiency of primary education in Kenya: situational analysis and implications for educational reform. Nairobi: Institute of Policy Analysis and Research.
- [38] Olaitan, S. and Mama, R. (2002). Principles and Practice of School farm Management. Owerri-Nigeria, Cape Publishers International
- [39] Olson, J., Codde, J., de Maagd, K., Tarkelson, E., Sinclair, J., Yook, S., & Rhonda, E. (2011). An analysis of e-learning impacts & best practices in developing countries with reference to secondary school education in Tanzania. Retrieved from <http://tism.msu.edu/ict4d>
- [40] Ondimu, S. (2018). Teachers' preparedness for implementation of competency based curriculum in private pre-schools in Dagoretti North sub county, Nairobi. Retrieved from <http://erepository.uonbi.ac.ke/>
- [41] Otach, O. (2008). Abolishing school fees in Africa: Lessons from Ethiopia, Ghana, Kenya, Malawi and Mozambique
- [42] Otieno, R. and Onyango, P. (2019). CBC teachers laud new curriculum. Standard Digital. Retrieved from: <https://www.standardmedia.co.ke>
- [43] Porter, R. (2015). Implementing the Common Core: How Educators Implement Curriculum Reform. Educational Policy, 29
- [44] Ryan, S., Nathaniel, P., Pendergast, L., Saeki, E., Segool, N., and Schwing, S. (2017). Leaving the teaching profession: The role of teacher stress and educational accountability policies on turnover intent. Teaching Teacher Educ. 66, 1–11. doi: 10.1016/j.tate.2017.03.016
- [45] Sabuncuoglu, Z. and Tuz, M. (1998) Örgütsel Psikoloji: The Management of Change in Education. Bursa, Alfa Yayınları
- [46] Sahlberg, P. 2009, Educational Change in Finland, in A. Hargreaves, M. Fullan, A. Lieberman, and D. Hopkins (Eds.), International Handbook of Educational Change
- [47] Serem, D. and Ronoh, R. (2012). Challenges faced in implementing Free Primary Education for pastoralists in Kenya. Narok University College, Narok, Kenya. ISSN 1822-7864
- [48] Sergiovanni, T. (2009). The principalship: A reflective practice perspective (6th Ed.). Texas: Pearson education, Inc.
- [49] Simiyu, J. (2001). Factors, which influence the teaching of technical and vocational subjects in primary schools in Uasin Gishu, district.

- Eldoret: Moi University (Department of educational communication). MA dissertation (unpublished)
- [50] Sossion W. (2017). Rush to roll out the new education system, caught withperils. Daily Nation. Nairobi.
- [51] Sparrow, L.; Sparrow, H. and Swan, P. (2000). Student- Centered Learning: Is It Possible?. Teaching and Learning Forum 2000. <http://Isn.curtin.edu.au/tlf/tlf2000/sparrow.html>.
- [52] Spear, M. (2000). Who would be a teacher? A review of factors motivating and de-motivating prospective and practicing teachers. London: National foundation for educational research.
- [53] Tennant, M. (1997). Humanistic Psychology and the Self- Directed Learner. New York: Routledge. PP 7-10.
- [54] Tyler, R. 1949. Basic Principles of Curriculum and Instruction. Chicago. The University of Chicago Press
- [55] Umoh, A. M. (2006). Basic Psychology of human learning. Uyo-Nigeria. MEF (Nig.) Limited.
- [56] Umoh, M. and Etuk, L.A. (2003). Principles of Curriculum Development in Agricultural Education. AbujaNigeria. Hill-Alex Ventures.
- [57] Usman, A. (2007). The relevant material resources to the teaching and learning of Arabic and Islamic studies. An encyclopedia of the Arts Vol. 7 (1). 47-52
- [58] Wafula, S. (2018). Preparedness Of Public Primary Schools In The Implementation Of Laptops Project In Kenya; A Case of Kimilili Sub County, Bungoma County [Ebook]. Retrieved from <http://erepository.uonbi.ac.ke/> Whitaker, T., Whitaker, B., & Lumpa, D. (2013). Motivating & inspiring teachers: The educational leader's guide for building staff morale. Routledge.
- [59] Woods, D. , and Wreathall, J. (2008). Stress-strain plot as a basis for assessing system resilience. In E. Hollnagel, C. Nemeth, and S. W. A. Dekker (Eds.), Resilience engineering perspectives. Aldershot, UK: Ashgate.

