FACTORS AFFECTING THE IMPLEMENTATION OF COMPETENCY BASED CURRICULUM STRATEGY IN PUBLIC PRIMARY SCHOOLS IN UASIN-GISHU COUNTY, KENYA.

BY

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DECLARATION

To the best of my knowledge, this MBA project is my original work and has not been published or presented for the award of a degree in any other university.

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DECLARATION	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
ABBREVIATIONS AND ACRONYMS	vi
ABSTRACT	vii
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1The Concept of Strategy	2
1.1.2The Concept of Strategy Implementation	3
1.1.3 Competency Based Curriculum Strategy	4
1.1.4 Primary Schools in Uasin Gishu County, Kenya	5
1.2 Research Problem	6
1.3 Objectives of the Study	9
1.4 Value of the Study	9
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Theoretical Foundation	10
2.2.1 The Institutional Theory	10
2.2.2 Social Constructivism Theory	11
2.2.3 Human Capital Theory	12
2.3 Factors influencing Implementation of Competency Based Curriculum Strategy	12
2.4 Summary of the Knowledge Gaps	14
CHAPTER THREE: RESEARCH METHODOLOGY	16
3.1 Introduction	16
3.2 Research Design	16
3.3. Target Population	16
3.4 Sample Size and Sampling	16
3.5 Data collection	17
3.5 Data Analysis	17

TABLE OF CONTENTS

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS	18
4.1 Introduction	18
4.2 Response Rate	18
4.3 Background information	18
4.3 Instructional Materials	21
4.4 Availability Of Trained Teachers On CBC	22
4.5 Teachers And Parents Attitudes	24
4.6 Participation In Strategy Formulation	25
4.7 Comprehensive learning environment	27
4.8 Implementation Policy	29
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	31
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 5.1 Introduction	
	31
5.1 Introduction	31 31
5.1 Introduction5.2 Summary of the Findings	31 31 31
 5.1 Introduction 5.2 Summary of the Findings 5.3 Conclusion of the Study 	31 31 31 32
 5.1 Introduction	31 31 32 32
 5.1 Introduction	31 31 32 32 32 33
 5.1 Introduction	31 31 32 32 32 33 37

ABBREVIATIONS AND ACRONYMS

- **CBC:** Competency Based Curriculum
- **CBT:** Competency Based Training
- **CBAM:** Competency Based Approach Model
- **CBA:** Competency Based Approach
- **ICT:** Information Communication Technology
- **KICD:** Kenya Institute of Curriculum Development
- **UNESCO:** United Nations Educational, Scientific and Cultural Organization

ABSTRACT

The implementation of the Competence - Based Curriculum (CBC) strategy aims at ensuring that teaching and learning is more interactive and effective by incorporating new technologies within the curriculum. Studies on the successful implementation of the CBC strategy have taken into account a variety of factors that are most likely to determine its implementation. The main objective of this study was to identify the factors affecting the implementation of the Competency - Based Curriculum strategy in public primary schools in Uasin Gishu County, Kenya. This study employed a descriptive cross - sectional research design to enable the researcher address the research question. From a target population of 540 public primary schools, 229 public primary schools were sampled. Structured questionnaires were used to collect data and the data was analyzed using descriptive and inferential statistics. The study findings indicated by putting in place the implementation policy of the CBC strategy, availability of teaching materials, trained and skilled teachers on CBC, teacher participation in CBC strategy formulation and implementation, the relationship between teachers and the attitude of parents towards implementation of CBC strategy were critical factors. The study concludes that, the government should have a clear and uniformly structured policy on the implementation of the CBC strategy, provide the necessary political goodwill, continuously monitor the implementation of the CBC as per the targets and the involvement of all key stakeholders in the implementation of CBC strategy. The study further recommends that the government with donor partners should avail resources to ensure instructional materials and teacher training is undertaken to smoothen the implementation of the CBC strategy.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Creative trends within the global education sector have given rise to novel learning strategies that involve the adoption new technologies, delivery platforms, and pedagogy approaches (Kim, 2015). The Competency-Based Curriculum (CBC) strategy, as an alternative to the traditional based education strategy, brings greater innovations and customization to the education curricula (Johnson, Becker, Estrada, & Freeman, 2015). A report by UNESCO (2017), points out that a CBC strategy, focuses on what learners are envisaged to do rather than on what they are envisaged to know. According to the Kenya Institute of Curriculum Development (KICD) report (2016), lack of teacher knowledge of CBC pedagogy, lack of finance, difficulties in prescribing specific competencies, rushed implementation, lack of trained teachers, inappropriate infrastructure and mistakes in the syllabus affected the implementation of CBC strategy in primary schools in Kenya. While the implementation of the competency - based curriculum strategy has gained acceptance among stakeholders globally, studies have demonstrated that the implementation of CBC strategy has been constrained by factors due to different contextual settings (Isaboke, Wambiri & Mweru, 2021). Ngwacho (2019) posits that implementation of CBC is a strategic response to a change in the education sector in terms of improving quality, accessibility, and affordability for all learners despite the inhibiting factors. Thus, the CBC strategy disrupts the traditional thoughts on teaching and learning and helps policy makers to re-examine epistemological, pedagogical and technological changes that focus on the learner.

This study conceptualization was anchored on the Institutional theory (North 1991), which suggests that to gain acceptance and legitimacy, educational institutions, should not only be influenced by educational policies and principles but also by societal pressures, values, and expectations. The Institutional theory was complemented by the Human Capital theory (Blundell et al., 1999) and Social Constructivism theory (Dewey, 1944). The Human Capital theory suggests that by investing in training and education, learners acquire knowledge and skills, thus increasing learner's ability to perform tasks and achieve desired outcomes effectively. The Social Constructivism theory, suggests that learners as active participants can create their own knowledge and their experiences determine reality.

Kenya's Vision 2030 strategy, emphasizes the need for reforming Kenya's educational paradigm that focuses on equipping learners with the requisite knowledge, values, attitudes skills, and values for the country's political – legal, economic and social expectations. Consequently, the Kenyan Government introduced the Competency Based Curriculum (CBC) strategy to replace the 8-4-4 system of education strategy after a needs assessment had been carried out through – out the country by a team of educational experts. The implementation of the CBC strategy which began in 2018 has been an ongoing process that been implemented in phases, that began with pre-primary and lower primary classes. Accordingly, the government anticipated that various factors such as unstructured educational policies, inadequate in ICT infrastructure, and lack of skilled and competent teachers and wrong perception towards implementation of the CBC strategy by key educational stakeholders, could likely limit the effective implementation of the CBC strategy on the national scale, the implementation has been hampered by various factors more so in public primary schools (KICD, 2016).

1.1.1The Concept of Strategy

The concept of strategy has been defined by various scholars and still its definition has remained an elusive concept. Chandler (1962), defined strategy as the way an organization determines and adopts its future planned objectives, activities and resources to be allocated to attain the planned objectives. Strategy is defined as a consistent pattern of managerial decisions to deal with the ever - changing environment (Mintzberg, 1994). The concept of strategy is defined as the process of deciding the organization's future direction and how resources are configured to meet the needs of stakeholders. Strategy is defined as a deliberate decision to opt for different specific activities that delivers value to key stakeholders (Porter, 1985). Strategy is defined as an action plan or how organizations move from their current state to a desired future state (Dhalimi 2022; Grundy, 2012). Generally, the definition of strategy, which this study is going to adopt is that it is a plan of action detailing how an organization moves from its current state to a desired future.

Strategy has been described by various scholars using different dimensions due to different contextual settings. According to Rumelt (2012) a strategy has three core components that include a diagnosis that identifies the challenges, obstacles, and opportunities, a guiding policy that coordinates the efforts of the organization and finally, a set of coherent actions to implement the

guiding policy. On the other hand, Markides (2004), describes strategy as a set of three parameters or decisions focusing on the targeted customers, the products or services offered to the chosen customers and delivery of the products and services to the chosen customers. Strategy can also be described as either planned or emergent (Mintzberg, 1994). The planned approach is a structured process a strategy is formulated at predefined periods, while the emergent approach is where strategy emerges from the daily organizational initiatives formed over time (Mintzberg, 1994. Strategy can also be classified using different levels, including corporate, business and functional (Bourgeois, 1980). The corporate-level strategy focuses on what industry the organization is to compete in (Bourgeois, 1980). The main focus of the business-level strategy is to identify the market segment to compete in (Hambrick, 1980). Finally, the functional-level strategy, which is derived from the business strategy, focus on the maximization of resource productivity. Since the dimensions of strategy depends on the contextual settings, this study will adopt Rumelt (2012) framework that incorporates components that include a diagnosis, guiding policy and a set of coherent actions.

1.1.2The Concept of Strategy Implementation

Eccles (1994) defines strategy implementation as actions that makes an organization decide on its strategic alternatives in fulfilling its mission and vision. Strategy implementation is where the action plans of an organization are executed through the strategic management process (Allio 2005). Strategy implementation is defined as a continuous process, consisting of various actions undertaken by managers, actualize strategic plans so as to realize an organization's strategic goals (Yang et al., 2010). MacLennan (2011) defines strategy implementation as the process of leveraging the organization characteristics with its internal and external environment to achieve its corporate goals. As a process, strategy implementation is defined as putting in action an organization's objectives, strategies and policies, by formulating procedures, programs and budgets (Wheelen & Hunger, 2014). Ramadan, (2015) defines strategy implementation as the process that involves the execution of the necessary activities to get the desired planned results. Lee & Puranam (2016) simply define strategy execution as the method used by the organization to align its strategies with its strategic intents. A review of the definitions of strategic implementation, show that it is a continuous activity where objectives, strategies and policies are actualized by developing programs, budgets and procedures. This study will adopt this framework to enable it investigate the factors influencing the process of implementing the CBC strategy.

Various scholars have argued for the effective application of strategy implementation through the application of different approaches. According to Galbraith & Nathanson (1978), strategy implementation is putting in place an integrated element of systems, structures and processes including human resources, tasks, rewards and communication mechanisms. According to Stonich (1990), implementation of strategy involves a continuous effort to align structure, processes, human resources and culture to attain an organization's strategic intentions. Hrebiniak & Joyce (1984), argued that effective strategy formulation begins with a well formulated strategy, operating level objectives, incentives & controls and both primary and operating structures. Thompson, Peteraf, Gamble & Strickland (2022) pointed out that strategy implementation is done in phases starting with a budget to support the strategy, aligning work activities to performance targets; creating a climate of employee commitment to strategy throughout the organization; providing administrative support structures; and finally providing strategic leadership. Since strategic leadership has the ultimate responsibility for crafting and implementation.

1.1.3 Competency Based Curriculum Strategy

The definition of the Competency- Based Curriculum (CBC) by Sturgis, Patrick & Pittenger (2011) is that it is a process where students learn to advance to the next levels upon demonstrated mastery. CBC strategy is defined as an outcome-based approach to education aimed at ensuring learners become proficient by demonstrating acquisition of skills, know how, values and attitudes in practical situations at the appropriate grade level and age profile (Gervais, 2016). A CBC strategy is defined as an educational program that instills in learners on what they need to practically do and not of what they know (UNESCO, 2017). Amutabi (2019) defined CBC strategy as a flexible learning process which is aligned to the aspirations and future prospects of each learner. Levine (2019) define CBC strategy as an educational program, empowering learners on a continuous basis to make independent and critical decisions on their learning circumstances, demonstrating their creativity and application of the acquired knowledge in their learning activities. A review of the definitions shows that CBC strategy is a method of teaching and learning activities which is learner's competency centered, a definition that this present study will adopt.

Scholars have adopted different dimensions to operationalize CBC strategy. CBC strategy is characterized as a professional practice that involves identification of competencies, outcome oriented, industry involvement, self-paced approaches, performance oriented and assessment based (Smith & Keating, 1997). CBC strategy involves learners demonstrating competence by monitoring students' progression and measuring such progression through formal assessments, where learning gaps are eliminated by supporting students at each level. CBC's most distinctive features include meaningful learning in terms of context, integrative, holistic, constructive, cooperative, interactive, discovery, reflective and personal learning respectively (Mkonangwa, 2018). Chaney & Hodgson (2021) identified the critical elements of CBC strategy to include well explained practical competence outcomes, phased progression of learner competencies and their developmental targets, customized learning that facilitate seamless acquisition of competencies, competency-focused instructions that promote the acquisition of competencies, and programmed assessment.

1.1.4 Primary Schools in Uasin Gishu County, Kenya

The Competency Based Curriculum (CBC) was launched in 2017 on a pilot basis and was expected to be fully rolled out to replace the current 8-4-4 system by the year 2023. The first phase in the implementation of CBC strategy began in lower primary schools, the next phase being grade one and then grade two. In 2019, the CBC strategy was rolled out from grade three to six. In 2020, it was rolled out grade seven, eight. Despite the much-publicized implementation of the CBC strategy and its potential contribution to Kenya's social and economic development, there have been a number of factors facing the process which may have hindered its effective implementation.

While the learning levels are above the national average, the quality of education is still quite low in public primary schools in Uasin Gishu County (Uwezo Learning Assessment Report, 2021). The report further revealed that 70% of children in class 3 in the same county could not successfully attempt class 2 math questions. Hence, the successful implementation of CBC strategy in the primary schools in Uasin Gishu county not only depends on the competence of the teacher and close collaboration with all the key stakeholders, especially the parents. According to the Uwezo Learning Assessment Report, (2021), highlights inadequately trained and lack of teacher involvement, lack of basic infrastructure and poor financing or resources as some of factors impeding effective implementation of the CBC strategy in most public primary schools. In

addition, the role of parents in the successful implementation of CBC strategy is crucial, especially the provision of a conducive home learning environment that could motivate learners to exploit their potential by completing homework assignments by monitoring and guiding them, providing the requisite learning materials for practical sessions.

1.2 Research Problem

Prior studies show that successful organizations implement strategies to ensure that they operate proficiently to achieve their visions (Rani, 2019). Implementing the curriculum - based competence (CBC) strategy is aimed at ensuring that teaching and learning is more interactive and effective by incorporating technological advancements within the curriculum. Studies on the successful implementation of the CBC strategy have taken cognizant of the various factors that are most likely to influence its effective implementation. A study by Evans, Landl & Thompson (2020) on implementing the competency-based education strategy in the United States of America, found out that misaligned standardized tests, unavailability of quality data on students' performance standards and skills, inadequate instructions and student support services, lack of support from the local community, teachers, and schools, resource constraints and lack of student ownership during the learning process were critical barriers towards the effective implementation of the competence based educational strategy. Suleiman (2019) study on the factors affecting the implementation of the CBC strategy in Tanzanian secondary schools, established that personal, internal and external factors created a high degree of resistance among the teachers. A study by Ngeno (2023) found out a positive and significant relationship between teacher training and implementing the CBC strategy in public primary schools in Kericho County, Kenya. The cited studies have established different factors affecting the execution of CBC strategy due to the different settings, hence a contextual gap. Still, other studies have adopted disparate factors and different dimensions of strategy implementation of CBC strategy, thus raising a conceptual gap that this study set out to address.

The competency-based curriculum strategy which supposedly was to be rolled out in January 2018, was delayed by key stakeholders in the education sector. Most importantly, most teachers had not yet been sufficiently trained and schools had not been provided by learning resources as they were still being developed. Reports by Kenya Institute of Curriculum Development and the Teachers Service Commission showed that most teachers did not have the requisite skills and knowledge to implement the CBC strategy. Thus, despite the much-publicized implementation of the CBC

strategy in January 2019, and its potential contribution to Kenya's social and economic development, it has been reported that a number of factors could have hindered its effective execution in public primary schools.

Various global, regional and local studies on the factors enhancing or limiting the successful execution of CBC strategy have been undertaken by various scholars. A study by Ridley & Farrar (1982) on implementing competency- based education of vocational teachers in New York State, USA found out that administrative support, competence and experience of individual teachers, availability of resources, clear lines of authority, and respect for teachers' professional integrity, were critical factors. A study by Sadeq, Akbar & Al Wazzan (2021) on implementing the CBC strategy in Kuwait, revealed that resistance to change and insufficient training by teachers and the lack of awareness by parents were the most significant factors. Bordoli (2021) study on curricular design for competencies in basic education in Uruguay indicated that the curricular structure, assessment methods and level of participation of teachers in the CBC strategy implementation were critical factors. The global studies cited have highlighted a number of contextual gaps as some focused on vocational programs and were done in different countries. Their findings cannot be generalized to be a representation of public primary schools in Kenya.

An empirical investigation by Rwigema & Andala (2022) on teacher related factors and execution of the CBC strategy in public primary schools in Rwanda, established the positive role of teachers' pedagogical content and technological skills. A study by Ndamba & Chavarika (2023) established that teacher incompetence, high teacher-pupil ratio, lack of support from parents, inadequate resources and failure to use the mother language significantly impeded the implementation of the CBC strategy in Zimbabwe. Research by Mgaya, Onyango & Rupia (2022) on resource mobilization strategies and execution of CBC strategy in Tanzania's secondary schools, found out that fundraising as a resource mobilization strategy had limited influence on the implementation of the CBC strategy in Somalia's primary schools, identified lack of trained teachers, attitude of teachers and lack of instructional materials influenced the implementation of CBC strategy. While the studies cited have focused on different concepts such as resource mobilization strategies, school and teacher-based factors, they were also done in different countries, thus raising conceptual and contextual gaps that this study will seek to address.

Studies done in Kenya have highlighted a number of different findings based on their conceptualization and contextual settings. An empirical investigation by Silas (2020) study on factors and implementing the CBC strategy in primary schools in Luanda Sub- County, Vihiga County Kenya, showed that teachers qualifications, sufficient content knowledge, use of instructional materials and well equipped with pedagogical skills were the most critical facilitators in implementing CBC strategy. Owuor (2022) comparative study on implementing CBC strategy in both private and public primary Schools in Mbita Sub-County, Kenya, showed that private primary schools had adequate resources and were able to effectively implement the CBC strategy. Koskei (2021) study on school-based factors and implementation of inclusive early years' education among rural public primary schools in Uasin Gishu county, Kenya, revealed a significant link between school learning environment, support of the schools' board of management and the implementation of inclusive education. An empirical investigation by Syomwene (2022) on parental involvement strategies and challenges of implementing the CBC strategy early child development education (ECDE) in Uasin Gishu County, Kenya indicated a lack of cooperation by parents, inadequate learning resources, negative perception by parents and lack of trained teachers as the greatest impediments. Most of the studies cited have either focused on identifying teacher or school - based factors or sought to determine the link between the factors and implementation of the CBC strategy, hence emergence of a conceptual gap that this study will seek to address

The studies cited have indicated a number of conceptual and contextual gaps that this present study will seek to address. While most of the studies cited focused on either school or teacher-based factors, this present study will address the conceptual gap by integrating all the factors and determine the most critical. Other studies focused on establishing a relationship between factors and implementation of CBC strategy, thus emergence of a conceptual gap. Studies have also been done in different settings such as countries, counties and secondary, vocational and private institutions, thus raising different findings due to the contextual gaps. Such findings cannot be generalized to apply to public primary schools in Uasin Gishu County, Kenya. To address these gaps, this study set out to address the following research question; what are the factors influencing the implementation of CBC strategy in public primary schools in Uasin Gishu County, Kenya?

1.3 Objectives of the Study

The objective of this study was to identify the factors influencing the implementation of the Competency - Based Curriculum strategy in public primary schools in Uasin Gishu County, Kenya

1.4 Value of the Study

This study will advance knowledge in the area of factors necessary to effectively implement CBC strategy. Scholars will be able to identify gaps in this present study and engage in further research to address the conceptual and contextual research gaps and advance new understanding on how to successfully implement the CBC strategy. The findings of this study will help enrich the theories anchoring this study as they will enable scholars to get a clear picture of how the Institutional theory as the main framework will be complemented by the Human Capital theory and Social Constructivism theory in addressing the study phenomenon of factors influencing the implementation of the CBC strategy.

The study findings will help the ministry of education to identify critical factors that could hinder effective implementation of the competency-based curriculum strategy in Kenyan primary schools. Such information will enable the Ministry to address the inhibiting factors early enough through appropriate policies. The study could be of value to primary school head - teachers and teachers, as the main drivers of the curriculum change process, as the study recommendations can enable the head teachers and teachers to be better prepared to successfully implement the new curriculum.

The study will provide a valuable repository of information to government policy makers and curriculum developers that will aid them formulate policies on how to successfully implement CBC strategy in primary schools in Kenya. The findings will enable the government through KICD to formulate appropriate policies that will enable primary schools implement the CBC strategy by mitigating the factors inhibiting the strategy implementation process.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter provides the justification of the theoretical framework and it will review the empirical literature on factors influencing the implementation of the CBC strategy. The aim of the review is to identify the research gaps that will aid in addressing the research question.

2.2 Theoretical Foundation

The main theory of this study was the Institutional Theory (North, 1991) which posit that to maintain legitimacy, educational institutions must adapt to the environmental factors in the implementation of the CBC strategy. The Institutional theory will be supplemented by the Human Capital (Becker, 1962) and the Social Constructivism (Dewey, 1944) theories respectively. The Human Capital theory suggests that when developing learners' competencies, educational institutions should create a curriculum that addresses the aspirations of the learners. The Social Constructivism theory suggests that factors such as shared meaning, collaboration, context adaptation, continuous learning, and the creation of networks leads to successful strategy implementation of CBC strategy.

2.2.1 The Institutional Theory

The Institutional theory (Meyer & Rowan 1977) posits that institutional factors such as formal rules, regulations, and norms, significantly shape decisions of individuals and organizations. It offers prescriptions on how organizations align with societal norms and beliefs in which they operate in. According to Scott (2014), the theory suggests that institutions are propelled by underlying principles and assumptions that shape organizational behavior. The Institution theory's main assumption is that organizational structures and processes are inclined to get certain behaviors and secure their own stability. The theory addresses the central question of why all organizations in a particular sector tend to adopt the same structures and processes (DiMaggio & Powell, 2000). According to Scott (2005), the theory examines the ways in which structures, including rules, norms, and societal values are viewed as established strategies for shaping organization success. Consequently, once organizations adapt to the institutional forces and conform to social norms through appropriate structures and processes, they gain legitimacy and are rewarded with resources, and survival capabilities (North, 1991).

While there is a strong consensus among scholars on the necessity and benefits of institutional theory and its focus on legitimacy, there are exceptions. Momanyi & Rop (2019) criticized the institutional theory for its focus on organizational structures rather than on the wider complex organizational and the dynamic environment organizations operate in. In addition, the theory assumes organizational passivity and fails to address the role strategic leadership behaviors play in the process of institutionalization (Scott, 2014). Despite the theory's limitation, it is applicable to this study since organizational legitimacy is gained when institutions are bound to conform to the informal and formal institutions within which they operate in the society. It is therefore prudent for the stakeholders to implement an appropriate CBC strategy that conform not only to societal needs, but aligned to the changes brought by the institutional forces.

2.2.2 Social Constructivism Theory

As postulated by Dewey (1916), the Social Constructivist theory looks at learning as an iterative process and it is effective when learners actively rather than passively construct knowledge in the learning process. Thus, as the theory's postulation, learners actively participate in creating their own knowledge and the practical reality is as a result of the learners' experiences (Alanazi, 2019). The theory suggests that learners should be offered subjects that are aligned with their age profiles and experiences through systematic approaches that are learner friendly. According to Vygotsky (1978), the major postulation of the theory is anchored on the idea that learning and knowledge are constructed through social interaction and is a shared. The theory's implication is that through interpersonal interaction and discussion, teaching and learning become effective since the primary aim is for students to understand the discussions (Schreiber & Valle, 2013).

While the Social Constructivism theory highlights the importance of interaction between experience and ideas as the basis of creating knowledge, it has been subject to scrutiny and criticism. Liu & Mathews (2005) pointed out that the theory's aim is on the active participation of learners on not on the tradition methods of teaching whose focus was on passiveness and memorization. While scholars have argued for the constructivist teaching approaches such as one-to one classroom interaction, other scholars opine that the effectiveness of teaching is not always guaranteed. Despite its criticism, the applicability of this theory to this study pinpoints the importance of social interaction and collaboration in knowledge construction through effective implementation of the CBC strategy to address societal expectations.

2.2.3 Human Capital Theory

As advanced by Becker (1962) and Blundell et al., (1999), the Human Capital theory suggests that by investing in education, learners acquire the requisite knowledge, skills and training that increases their value or capital. The theory highlights the critical the role of education and training in enhancing a learner's knowledge and practical skills. Human Capital theory reinforces the need for a close relationship between learning and work based since knowledge and skills gained through education and training will be useful in the workplace (Down, 1994). Thus, the theory recognizes that learner's knowledge, skills, and competencies are valuable assets that contribute to their ability to perform effectively in the labor market. The Human Capital theory stresses the importance of education as a way of increasing efficiency and performance of employees as investment in education increases the levels of employee capability (Almendarez 2013). Consequently, any type of formal education is seen as an investment in human capital and it's even considered more valuable than physical capital (Woodhall, Scott-Jackson, Newham & Gurney 2009).

While it has its merits, scholars have raised several valid criticisms of Human Capital theory. Marginson (2019) argues that the theory assumes a straight - line learning process despite the complex relationship between education and outcomes, and thus, it cannot scientifically predict the relationship between education and learner's knowledge, skills and competencies. The Human Capital theory overlooks how social structures and inequalities shapes individual opportunities and outcomes. (Choudhary, 2022). Thus, it fails to acknowledge that access to quality education, training, and job opportunities is often unequally distributed across society and hence perpetuates social inequalities. Despite its criticism, the relevance of the Human Capital theory to this study cannot be overlooked as it reinforces the value of investing in education and training through effective implementation of CBC strategy that is designed to develop practical skills and competencies of learners to meet societal demands.

2.3 Factors influencing Implementation of Competency Based Curriculum Strategy

Prior studies on factors and implementation of CBC strategy have been conducted and different findings have been noted as a result of contextual and conceptual research gaps. A study by Jippes et al (2012) on the factors affecting the execution of CBC in post – graduate medical curricula in Netherlands, established that level of support; the relevance of training on patient care; and

collaboration between hospitals were critical factors that either enhanced or hindered effective implementation of CBC strategy. Nevenglosky (2018) study on barriers to effective curriculum implementation in schools in Minnesota, USA, established that the learners, parents and teachers' attitude towards implementation of CBC strategy essential factors. The study further indicated resource availability, school environment, culture and ideology as well as instructional supervision and assessment hindered new curriculum implementation. A study by Dailey & Robinson (2016) on implementing a new science curriculum in elementary schools in the USA established that political goodwill and planned programs enhanced the seamless implementation of the curricula. Byrne, Downey, and Souza (2013) study on challenges of implementing CBC strategy in four schools in England, found out lack of clear transitional strategies to equip the teachers and education handlers. A review of the above studies has shown that they were done in different settings and mainly focused on the challenges as opposed to the factors, thus raising contextual and conceptual gaps

A study by Molapo (2018) on implementation of curriculum changes in Limpopo, South Africa established that political interference hindered effective implementation of the CBC strategy. A study by Rwigema & Andala (2022) on teacher related factors and implementation of CBC strategy showed that clear grasp of content by teachers was a critical enabler to the development of relevant strategies that ensured effective implementation of the CBC strategy. Nyoni & Botman (2019) on the execution of CBC strategy in Lesotho, concluded that support from the government agencies, parents, learners and opinion leaders was critical. Wongnaa and Boachie (2018) carried a study in Ghana where they investigated the adoption of competency-based training (CBT) and the conclusion was that by providing appropriate teaching and instructional resources and incentives to the teachers were essential factors that facilitated the effective implementation of the CBC strategy. Mugabo, Ozawa and Nkundabakura (2021) study on school profiles and implementation of CBC strategy in Rwanda, found out that implementation of CBC strategy was not uniform across all schools due to different levels of training on CBC among the teacher, teaching learning resources and infrastructural capacity. Makunja (2016) study on the challenges of executing Competency Based Curriculum strategy in Tanzania, found out the unavailability of in- house training of teachers, insufficient instructional materials, overcrowded classrooms and low levels of ability of pupils as the major challenges hindering effective implementation of CBC strategy. Mosha (2012) study of schools in Tanzania pinpointed the lack of trained teachers

affected the implementation of CBC. The studies above were done in different African findings and their conclusions cannot apply in Uasin Gishu County, Kenyan context, thus raising contextual gaps

Studies on the implementation of CBC strategy have shown a plethora of factors that have in effect hindered its effectiveness (Ondimu, 2018). Haris (2017) study highlighted the factors affecting the implementation of the CBC strategy to include, lack of clear implementation policies on education, the lack of validity and reliability of scores, inadequate ICT infrastructure, lack of trained teachers as well as poor attitude among the teachers and parents as well. Sifuna and Obonyo (2019) on challenges of implementing CBC strategy in primary schools in Kenya, found out that insufficient staffing, classroom size, resources as well as inadequate support from the parents. According to Chege (2014), unavailability of class room space, lack of ICT infrastructure and lack of trained teachers limited the successful implementation of CBC strategy. Silas (2020) studied on teacher related factors and implementations of CBC strategy in Luanda, Kenya, findings showed that competency of the teacher played a significant role in ensuring effective implementation. Abdullahi (2019) investigated factors that influence the implementation of CBC strategy in public preschools in Garissa County and concluded that inadequate instructional resources have hampered the implementation and success of CBC in Garissa County. Momanyi and Rop (2019) empirical investigation in Bomet East Sub-County, established lack of adequate knowledge and skills by teachers as the single most major factor hindering effective execution of the CBC strategy. Most of the local studies cited focused on teacher related factors and were done in different counties, thus raising conceptual and contextual research gaps that this study will seek to address.

2.4 Summary of the Knowledge Gaps

Studies have been undertaken on implementation of CBC strategy have revealed conceptual and contextual research gaps. Most of the international studies focused on barriers or challenges affecting implementation of CBC strategy in either elementary or secondary schools. The studies also focused on science or medical curriculum and the role of ICT in the implementation of the CBC (Jippes et al 2012; Dailey & Robinson 2016). This has pin pointed the conceptual and contextual gaps that this study will seek to address. Regional and local studies have also pinpointed conceptual and contextual gaps. Most of the studies investigated teacher related factors without considering other institutional and environmental related factors, were done in different settings

such as secondary schools, counties and countries (Silas 2020; Sitienei 2020; Wongnaa and Boachie 2018; Makunja 2016). Generally, whereas studies have been undertaken on CBC, little has been done on the factors affecting the implementation of CBC strategy in public primary schools in Uasin Gishu County. Besides, studies done in Uasin Gishu County, have focused on early childhood education and on science-based curriculum. This study sought to identify the factors affecting the implementation of the CBC strategy in Uasin Gishu County.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter focused on the research design, the population and sample size, data collection as well as how data was analyzed.

3.2 Research Design

This study employed a descriptive cross - sectional design to enable the researcher address the research question. According to Creswell (2012), a descriptive cross - sectional method enables the researcher to collect information about present existing phenomena. Consequently, the aim of descriptive method enables the researcher to establish a comprehensive explanation and description about the study phenomenon in a systematic manner. Mugenda & Mugenda (2003) avers that a cross sectional research design gives insights on the profile of a population of interest or phenomenon.

Descriptive cross – sectional survey research was adopted to provide valuable pointers as to what variables are worth testing quantitatively (Cooper & Schindler 2001). The main advantage of a cross - sectional survey is that data was collected at a particular point in time for each respondent participant and consequently, it is less costly to use compared to longitudinal surveys and the findings from the sample was inferred to the larger population. Scholars have used this design to successfully address their study's research objectives (Silas 2020; Boachie, 2018)

3.3. Target Population

The target population were all the 540 public primary schools in Uasin Gishu County, Kenya (Appendix II). The schools are drawn from Turbo, Kesses, Moiben, Kapseret, Soy and Ainabkoi sub-counties.

3.4 Sample Size and Sampling

This study adopted purposive sampling method and the sample size was arrived at by utilizing Yamane's formula. The confidence level for this study was at 95% with an error of 5%. Using Yamane's (1967) formula, the sample size was determined as follows.

$$n = \frac{N}{1 + Ne^2}$$

Where n = the sample size

N = the size of population (number of schools)

e = the error of 5 percent

n=540/1+1.35 =540/2.35 n=229

3.5 Data collection

The primary data which was qualitative in nature primary was collected through a structured questionnaire. According Sekaran (2013), structured questionnaires are useful data collection instruments which offers the investigator to understand what data will be needed, the unit of analysis and how the variables will be measured. The respondents were the headteachers of the public primary schools in Uasin Gishu County, Kenya. The questionnaire contained 2 sections: Section A – demographic profile; Section B – factors influencing implementation of CBC strategy. Authority to gather data was sought from the relevant authorities before the actual collection of data was conducted. To gather the data, the Faculty of Business and Management Sciences, University of Nairobi facilitated the process of data collection by writing a letter to the National Commission for Science, Technology, and Innovation (NACOSTI), to write a letter that authorized the researcher to collect data.

3.5 Data Analysis

Descriptive and inferential statistics were used to analyze the data. Before the data was analyzed, to ensure the accuracy and consistency, the data was first edited to remove errors and omissions. Next, the collected data was codified and classified into common traits. Descriptive data in the form of frequency distribution, measures of central tendency and dispersion, correlation, percentages and tests of significance were worked out to analyze data. Inferential statistics in the form of factor analysis, a data reduction technique that were condensed a large number of variables into a handful of comprehensible underlying factors, resulting in easy-to-understand, actionable data. Factor analysis enabled the researcher spot trends faster and pinpoint datasets that have common themes.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This section highlighted the analysis of data, findings and discussion on factors affecting implementation of CBC strategy of public primary schools in Uasin Gishu County, Kenya. Tables were used in presenting the findings.

4.2 Response Rate

Questionnaires Issued	ionnaires Issued Questionnaires		
	returned		
229	221	96.5%	

Table 4.1 Response Rate

Source: Research Data (2023)

229 questionnaires were issued where 221 were dully filled and returned, hence a response rate of 96.5%. As argued by Sekeran (2013), a response rate of over 65% is adequate to allow for generalization of data.

4.3 Background information

The background information sought were the type of school, age of school, number of teachers in the school, number of students as well as the advanced level of education of the teachers.

		Frequen		Valid	Cumulative
Categories		cy	%	%	%
Type of school	Mixed day	196	88.7	88.7	88.7
	Mixed boarding	11	5.0	5.0	93.7
	Segregated boarding	14	6.3	6.3	100.0
	Total	221	100.0	100.0	
Age of school	1- 15	7	3.2	3.2	3.2

Table 4.2 Background information

	16-30	32	14.5	14.5	17.7
	31-45	66	29.9	29.9	47.6
	46-60	45	20.4	20.4	68.0
	61& above	71	32.0	32.0	100.0
	Total	221	100.0	100.0	
Number of teachers	5-10	0	0	0	0
	11-20	102	46.2	46.2	46.2
	21-30	96	43.4	43.4	89.6
	31 and above	23	10.4	10.4	100.0
	Total	221	100.0	100.0	
Number of students	0-100	0	0	0	0
	101-200	2	0.9	0.9	0.9
	201-300	9	4.1	4.1	5.0
	301-400	15	6.8	6.8	11.8
	401-500	25	11.3	11.3	23.1
	501-600	61	27.6	27.6	50.7
	601-700	50	22.6	22.6	73.3
	700 and above	59	26.7	26.7	100.0
	Total	221	100.0	100.0	
Advance level of	Postgraduate	19	8.6	8.6	8.6
education	Graduate degree	47	21.3	21.3	29.9
	Diploma	132	59.7	59.7	89.6
	Certificate	23	10.4	10.4	100.0
	Total	221	100.0	100.0	

Source: Research data (2023)

The results showed that mixed day public primary schools were 196 (88.7%), while mixed boarding were 11(5.0%), whereas segregated boarding were 14(6.3%). This indicated that

majority of the schools were mixed day and majority of the pupils come from around the school. Age of school was equally important so that the researcher may determine the establishment or level of existence of the school. Those that have been in operation for 1- 15 years were 7(3.2%), those that have operated for 16-30 were 32(14.5%) while those that have been in operation for 31- 45 years were 66(29.9%). On the other hand, some 45(20.4%) have operated for 46-60 years and those that have existed for 61 years and above were 71(32.0%). This indicated that majority of the schools had existed for many years. This means that they are well equipped in terms of human and physical resources. Just a few had been in existence for less than 15 years indicating that that they haven't have adequate time to establish in many aspects including trained teachers and infrastructure.

Teachers are a very rich human resource for primary education. Establishing the number of teachers in a school was therefore important. Schools with the number of teachers ranging between 5-10 were not there. However, some 102 (46.2%) schools had about 11-20 teachers in the school. Consequently, those schools with 21-30 teachers were 96(43.4%) while 23 (10.4) had 32 teachers and above. Majority of the schools had between 11-20 teachers. This indicated that most of them don't have many streams since the number can accommodate about two streams per class. They have to use the BOM teachers as well as over dependence on those in the teaching practice. Results further indicated that a good number of the schools had between 21 and 30 teachers. This means that they are well equipped with the necessary trained teachers who are able to effectively implement the CBC.

Number of students in the schools were also determined. Schools with 101-200 were 2(0.9%), those with 201-300 were 9(4.1%) while those with a population of 301-400 were 15(6.8%). The study further established that schools with a population of 401-500 were 25(11.3%) while those with 501-600 were 61(27.6%). Additionally, the research revealed that schools with student population of 601-700 were 50(22.6%) and those having a population of 700 and above were 59(26.7%). Majority of the schools have between 501 to 600 pupils closely followed by those with over 700 pupils. In general, most schools have over 500 pupils. This indicates a crowded class especially in cases where there is inadequate infrastructure. Just a few schools had a population of less than 200. This could either mean that most of these are fairly new classes or they are deserted or are in interior areas.

This study further sought to determine the teachers level of education and the findings showed that postgraduate holders were 19(8.6%), graduate degree holders were 47(21.3%), and diploma holders were 132(59.7%), while certificate holders were 23(10.4%). Majority of the teachers have diploma with a good number of the teachers possessing bachelor degree.

4.3 Instructional Materials

The first variable was about instructional materials. Mean, standard deviation and correlation was used in the analysis of the data.

Statement	Ν	Mean	Std. Deviation
ICT infrastructure capacity is sufficient for CBC	221	2.7200	.89557
Teaching resources are readily available in good	221	3.3232	.70498
numbers			
Learning resources are available and sufficient		2.0546	.96373
The government provides teaching and learning resources in good time		3.0412	.63615
There are relevant instructional materials	221	4.0302	.66312
Teachers don't have to buy instructional materials	221	3.9701	.84269

Table 4.3 Instructional materials

Source: Research data (2023)

The study findings showed that ICT infrastructure was not sufficient for CBC as expressed with a mean of 2.7200 and standard deviation of 0.89557. This means that majority of the schools are not connected with ICT equipment. ICT has become a major component of learning and hence there is need to adopt ICT in learning in public primary schools though many public schools don't have capacity to utilize the ICT resources (Chege, 2014). This will aid learning. The study also revealed that teaching resources were not readily available in good numbers as required as per the mean of 3.3232 and standard deviation of 0.70498. It was further established that learning resources were not available and sufficient as indicated by a mean of 2.0546 and standard deviation of 0.96373. The study findings showed that there were delays in delivering learning materials thereby hindering delivery of lessons as required in the CBC system.

Majority of the respondents were not sure if the government provided teaching and learning resources in good time as shown with a mean of 3.0412 and standard deviation of 0.63615. The uncertainty of timely delivery was identified as the major problem with government delivery of the resources. However, the findings showed that there were relevant instructional materials given that the mean was 4.0302 and standard deviation of 0.66312. The available resources are relevant though they may not be adequate. Having relevant and adequate learning materials was very prudent in ensuring the continuous learning process. Consequently, the findings indicated that majority of the respondents were of the view that the role of the teachers did not include buying instructional materials as shown with a mean of 3.9701 and standard deviation of 0.84269.

Table 4.4 Correlation between instructional materials and implementation of the policy

	Value	Asymp.	Std.Approx. T ^b Approx. S	
		Error ^a		
Interval by Interval Pearson's R	.874	.023	12.822	.000 ^c
Ordinal by Ordinal Spearman Correlation	.757	.034	12.562	.000 ^c
N of Valid Cases	221			

Source: Researcher (2023)

With a Pearson's value of 0.874, there is positive relationship between instructional materials and implementation of policy. A value of over 0.7 is statistically sufficient to determine the relationship between two variables (Kothari, 2012). The findings are in agreement with the results of the study by Sitienei (2020).

4.4 Availability Of Trained Teachers On CBC

The second variable was about the availability of trained teachers on CBC. Mean, standard deviation and correlation was used in the analysis of the data.

Table 4.5 Availability of t	trained teachers on CBC
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Statement	Ν	Mean	Std. Deviation
There is good number of trained teachers on CBC	221	4.6803	.78932

Level of training of CBC teachers is appropriate		3.6940	.66442	
Am satisfied with the current teachers on CBC		4.3022	.90210	
The CBC teachers are well versed with the CBC system	221	3.9034	.74092	
Teachers are happy with the training they received on	221	3.1110	.85620	
CBC				
Training on CBC is readily available to all teachers	221	3.9822	1.0212	

Source: Research data (2023)

There is good number of trained teachers on CBC. This was established when majority of the respondents agreed with a mean of 4.6803 and standard deviation of 0.78932. This shows that majority of the teachers have attained the desires requisite skills for one to teach in public primary schools. The findings further showed that level of training of CBC teachers was appropriate as represented with a mean of 3.6940 and standard deviation of 0.66442. Majority of the teachers are either employed by the teachers' service commission or the board of management (Ondimu, 2018). These bodies only employ in accordance with the set rules. Majority of the respondents as represented with a mean of 4.3022 and standard deviation of 0.90210 were satisfied with the current teachers on CBC. Marion (2020) noted in her study that there is no doubt that the teachers employed have attained the required educational standards. At the same time, results showed that the CBC teachers are well versed with the CBC system as represented with a mean of 3.9034 and standard deviation of 0.74092. This comes at the backdrop of the findings of the study of Sitienei (2020) indicating that not all teachers have undergone training for the new CBC system. However, it wasn't very clear whether teachers are happy with the training they received on CBC as represented with a mean of 3.1110 and standard deviation of 0.85620. This is attributed to the fact that majority haven't gone for specific training on CBC system and hence they rely on the information from either the manuals or from the teachers who have undertaken the training on CBC. Nonetheless, many of the teachers sampled agreed that training on CBC is readily available to all teachers as indicated with a mean of 3.9822 and standard deviation of 1.0212.

Table 4.6 Correlation between availability of trained teachers and implementation of policy

Value	Asymp.	Std.Approx.	Approx.
	Error ^a	T ^b	Sig.

Interval	by Pearson's R	.813	.029	12.532	.000 ^c
Interval	i carson s K	.015	.029	12.332	.000
Ordinal	by	ation 701	.043	11.454	.000 ^c
Ordinal	Spearman Correl	at1011.794	.045	11.434	.000
N of Valid Cas	Ses	221			

Source: Research data (2023)

Table 4.6 depicted the relationship between availability of trained teachers and implementation of policy. The findings showed a positive correlation between availability of trained teachers and policy implementation as evidenced with a Pearson's R value of 0.813. Kothari (2012) indicated that R value of more than 0.7 statistically indicates positive relationship between variables. Trained teachers are knowledgeable and technically regarded as employees who understand the education system and therefore are able to understand the system and how to implement it (Wongnaa & Boachie, 2018).

4.5 Teachers And Parents Attitudes

Third variable was about determination of teachers and parents attitude on implementation of CBC strategy. Mean, standard deviation and correlation was used in the analysis of the data.

Statement	Ν	Mean	Std. Deviation
Parents are happy about the CBC system	221	3.1000	.89057
Teachers are upbeat about the new CBC system	221	3.9332	.79498
Teachers are cooperating about CBC implementation	221	4.1412	.53715
Teachers encourage the students about the CBC system	221	4.0302	.61212
Parents are helping the pupils to see the positive side of the CBC	221	3.9701	.74299

 Table 4.7 Teachers and parents attitude

Source: Research data (2023)

The attitude of the stakeholders is very essential in determining the success of any of implementation (Ondimu, 2018). It was not clear whether parents are happy about the CBC system as shown in table 4.5 with a mean of 3.1000 and standard deviation of 0.89057. There was a mixed reaction about the CBC system and its implementation. This could be occasioned by the feeling

that the system requires parents and teachers to work together and a lot of resources are required. Abdullahi (2019) noted that most parents are complaining that they are required to but materials for the practical and sometimes, parents feel that the teachers are abusing the provision. However, the results showed that teachers are upbeat about the new CBC system and at the same time, teachers are cooperating about CBC implementation as represented by a mean of 3.9332 and standard deviation of 0.79498 and mean of 4.1412 and standard deviation of 0.53715 respectively. Cooperation and ownership of the system by the teachers makes it easy for proper implementation (Makunja, 2016). In addition, the results indicated that teachers encourage the students about the CBC system as expressed by a mean of 4.0302 and standard deviation of 0.61212. When the pupils like the sytems then they will relay back its success to the parents . Further, findings showed with a mean of 3.9701 and standard deviation of 0.74299 that parents are helping the pupils to see the positive side of the CBC

		Value	Asymp.	Std.Approx.	Approx.
			Error ^a	T ^b	Sig.
Interval	by Pearson's R	.895	.029	14.362	.000 ^c
Interval	i carson's R	.075	.02)	14.302	.000
Ordinal	by Spearman Correlat	ion 783	.239	12.234	.010 ^c
Ordinal	Spearman Correlat	1011.785	.239	12.234	.010
N of Valid Cas	ses	221			

Table 4.8 Correlation between teachers and parents attitude and implementation of policy

Source: Research data (2023)

Table 4.8 indicated the relationship existing between teachers participation and implementation policy. Pearson's R value was 0.895 which statistically indicated that there is positive correlation between participation of teachers and implementation of policy. Cooperation and ownership of the system by the teachers makes it easy for proper implementation (Makunja, 2016).

4.6 Participation In Strategy Formulation

The forth variable determined the participation of teachers in CBC strategy formulation. Mean, standard deviation and correlation was used in the analysis of the data.

Statement	Ν	Mean	Std. Deviation
Teachers are involved in policy formulation decisions	221	2.7040	.65054
Teachers are regarded as key stakeholders in policy	221	4.1002	.98498
planning			
Teachers are cooperating about CBC implementation	221	4.2414	.75371
Teachers involve parents adequately on CBC issues	221	4.7030	.86712
There is collaborative efforts by the government on CBC policy	221	3.9788	.84244

Table 4.9 Participation in strategy formulation

Source: Research data (2023)

Table 4.6 showed the findings on participation of teachers on strategy formulation. Majority of the respondents were of the opinion that teachers are not involved in policy formulation decisions. Teachers are usually involved in the implementation but not formulation part. When employee is not involved in the conception and initial advancement of a concept, they tend to provide lukewarm approach towards it (Molapo, 2018). This was expressed with a mean of 2.7040 and standard deviation of 0.65054. The findings also indicated as depicted in the table with a mean of 4.1002 and standard deviation of 0.98498 that teachers are regarded as key stakeholders in policy planning. Key stakeholders should be integral members of the initial planning of the new system such as CBC. With a mean of 4.2414 and standard deviation of 0.75371, the findings indicated that teachers are cooperating about CBC implementation. The support that teachers' service commission is providing to the teachers makes it easy for them to cooperate on CBC implementation. The results further showed that teachers involve parents adequately on CBC issues and likewise, there is collaborative efforts by the government on CBC policy as shown in table 4.6 with a mean of 4.7030 and standard deviation of 0.86712 and mean of 3.9788 and standard deviation of 0.84244 respectively. Parents are equally important stakeholders and therefore adequate involvement of them by the teachers is desirable and critical. Molapo (2018) indicated that sufficient involvement of key stakeholders such as parents makes implementation of changes very easy and effective.

		Value	Asymp.	Std.Approx.	Approx.
			Error ^a	T ^b	Sig.
Interval	by Pearson's R	.788	.025	15.086	.000 ^c
Interval	rearson's K	./00	.025	15.000	.000
Ordinal	by Spearman Correlati	on 707	.028	15.460	.000 ^c
Ordinal	Spearman Correlati	011.797	.028	13.400	.000
N of Valid Cas	ses	221			

 Table 4.10 Correlation between participation in strategy formulation and policy

 implementation

Source: Research data (2023)

Table 4.10 showed the Pearson moment correlation results. A Pearson R value of over 0.7 statistically shows that there is significant positive relationship between two variables. The results produced a value of 0.788 indicating that there is positive relationship between participation and implementation of policy. The results are in tandem with the results of Molapo (2018) that involvement and participation makes ownership of a change. Involving the teachers in the initial stages of strategy formulation makes teachers own the system.

4.7 Comprehensive learning environment

Another variable was looking at the comprehensive learning environment. Mean, standard deviation and correlation was used in the analysis of the data.

Statement	Ν	Mean	Std. Deviation
Learning environment is priority for all the stakeholders	221	4.9066	.86557
in the school	221	1.9000	.00357
Government is sufficiently ensuring environment is	221	3.002	.78848
conducive			

Table 4.11 Comprehensive learning environment

Management of learners' conduct is easy to handle in the		2.8416	.78713
class	221	2.0410	.70715
Class environment is conducive for CBC	221	3.0000	.86242
implementation			
Learners' safety has been comprehensively tackled		3.70104	.72282

Source: Research data (2023)

Findings in table 4.7 indicated that learning environment is priority for all the stakeholders in the school as evidenced with a mean of 4.9066 and standard deviation of 0.8655. Good learning and teaching environment is essential in promoting success in policy implementation on education. However, respondents agreed to a moderate extent as evidenced with a mean of 3.002 and standard deviation of 0.78848 that government is sufficiently ensuring environment is conducive. Both the internal and external environment is crucial. Consequently, the respondents did not agree that management of learners' conduct is easy to handle in the class as evidenced by a mean of 2.8416 and standard deviation of 0.78713. This is attributed to the overcrowding in the classes. Having many pupils in classes makes controlling the pupils very difficult and sometimes it's discouraging to work in such a setup. Likewise, with a mean of 3.0000 and standard deviation of 0.86242, the respondents agreed to a moderate extent that class environment is conducive for CBC implementation. There are few classes and they are overcrowded. There is need for more classes as well as teachers. Nevertheless, findings showed that learners' safety has been comprehensively tackled as evidenced by a mean of 3.70104 and standard deviation of 0.72282. There is concerted efforts by the government agencies to ensure safety of not only the pupils but also the teachers (Abdulahi, 2019).

	1	8	1
of policy			

Table 4.12 Correlation between comprehensive learning environment and implementation

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Interval by	Pearson's R	.882	.025	11.382	.000 ^c
Interval	i carson s K	.002	.025	11.302	.000

Ordinal by	Spearman Correlation .7842	.036	11.604	.000 ^c
Ordinal	Spearman Correlation.7842	.030	11.004	.000
N of Valid Cases	221			

Source: Researcher (2023)

Table 4.12 showed the correlation between comprehensive learning environment and implementation of policy. A value of over 0.7 is statistically sufficient to determine the relationship between two variables (Kothari, 2012). With R value of 0.882, there is positive significant correlation between comprehensive learning environment and implementation of policy.

4.8 Implementation Policy

The last variable was about policy implementation. Mean, standard deviation and correlation was used in the analysis of the data.

Statement	Ν	Mean	Std. Deviation
There is clear implementation policy on CBC	221	3.9900	.79074
There is political will on CBC implementation	221	4.6432	.77798
The community are very supportive about CBC	221	2.9884	.78732
implementation			
There are sufficient resources for the CBC implementation	221	3.1416	.73714
The implementation of the CBC is on track and according to the target	221	4.9372	.91224
All stakeholders are cooperating on CBC implementation	221	4.0702	.79026

Source: Research data (2023)

Table 4.8 indicated the findings on the implementation policy of the CBC. The findings indicated that there is clear implementation policy on CBC as evidenced by a mean of 3.9900 and standard deviation of 0.79074. The formulation of the policy had a clear roadmap on the implementation stages (Sifuna & Obonyo, 2019). The findings further revealed that there is political will on CBC implementation as represented in table 4.11 with a mean of 4.6432 and standard deviation of 0.77798. Molapo (2018) noted that political will of the government is very essential in ensuring effective and efficient policy implementation. However, respondents were of the view that the community are not very supportive about CBC implementation as evidenced by a mean of 2.9884

and standard deviation of 0.78732. Abdulahi (2019) noted that there is animosity between the teachers and the parents about CBC implementation. There is a general feeling that the teachers are taking advantage of the CBC system to get material resources from parents. Accordingly, study revealed that respondents agreed to a moderate extent that there are sufficient resources for the CBC implementation as represented in the table above with a mean of 3.1416 and standard deviation of 0.73714. Piecemeal delivery of materials and other learning resources is a big problem. Conversely, the findings revealed that the implementation of the CBC is on track and according to the target and also all stakeholders are cooperating on CBC implementation as expressed with a mean of 4.9372 and standard deviation of 0.91224 and mean of 4.0702 and standard deviation of 0.79026 respectively. There are challenges though there is steady CBC implementation.

4.9 Discussion

The study findings showed that implementation of CBC strategy has been hindered by both school based and teacher factors. The study findings indicated that lack of instructional and financial resources, lack of ICT tools, and inadequate training as the main factors affecting implementation of CBC strategy. This study findings agree with a study conducted by Okongo et al (2015), which demonstrated inadequate teaching and instructional affected the implementation of CBC strategy. The study findings also showed that large class sizes derailed the implementation of CBC strategy. The findings agree with a study which was conducted by Cuseo, Joe. (2007), show that showed that the large class sizes were detrimental in implementing the CBC strategy. Lack of parental support was another factor that impeded implementation of the CBC strategy. This is in agreement with Amunga et al., (2020) study that highlighted the lack of parental support and involvement as a major determinant in the successful implementation of the CBC strategy.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter included summary of the findings, conclusions and recommendations of the study.

5.2 Summary of the Findings

The objective of this study was to identify the factors affecting the implementation of the Competency - Based Curriculum strategy in public primary schools in Uasin Gishu County, Kenya The variables under the study were: instructional materials on CBC, availability of trained teachers, teachers and parent's attitude towards CBC, participation of teachers on CBC strategy formulation as well as comprehensive learning environment. The findings of the study indicated that ICT infrastructure capacity is not sufficient for CBC. It was further established that learning resources were not available and sufficient. On matters concerning availability of teachers on CBC implementation the results showed that there was a good number of trained teachers on CBC and that the level of training of CBC teachers was appropriate. Majority of the respondents were satisfied with the current teachers on CBC while at the same time, results showed that the CBC teachers are well versed with the CBC system. However, it wasn't very clear whether teachers were satisfied with the training they received on CBC. Participation on CBC implementation was also sought and findings showed that teachers were not involved in policy formulation decisions. While there was lack of key stakeholder participation, the findings however indicated that there was a clear implementation policy on CBC. The findings further revealed that there was political goodwill on the implementation of CBC. However, findings also showed that the community was not very supportive about CBC implementation because it was viewed as very costly. Overall, the findings showed that the implementation of the CBC was on track and despite the challenges, most of the stakeholders were cooperating on CBC implementation.

5.3 Conclusion of the Study

The study showed that there was relationship between factors influencing the implementation of the Competency-Based Curriculum strategy in public primary schools in Uasin Gishu County, Kenya. The study further concluded that there was a positive relationship between instructional materials and implementation of policy. Availability of instructional materials enables effective and efficient implementation of policy. From the findings, the research concluded that the relationship between availability of trained teachers and policy implementation. Trained teachers are knowledgeable and technically regarded as employees who understand the education system and therefore are able to understand the system and how to implement it. Further, conclusion is made based on the findings that the relationship existing between teachers and parents and their attitude towards implementation of CBD strategy was critical. The attitude of both the parents and the teachers as key implementers influenced the level of implementation. Where there is good attitude them implementation of the policy is successful. Participation of teachers in strategy formulation influences policy implementation. Involvement, cooperation and ownership of the system by the teachers makes it easy for proper implementation. When teachers are thoroughly involved, they will own the process and influences the success of the policy implementation.

5.4 Limitations of the Study

Since this study was done in public primary schools in Uasin Gishu County, private primary schools were not incorporated, thus limiting the scope of the study. This study was also limited to specific factors affecting the implementation of CBC in public primary schools which included instructional materials, availability of trained teachers, teachers and parents attitudes, participation in strategy formulation, comprehensive learning environment as well as implementation policy. The study was also limited to identifying factors affecting implementation of CBC strategy and did not link them to school performance

5.5 Suggestions for Future Research

This study suggests that a comparative empirical investigation is conducted to determine factors affecting implementation of CBC strategy in all public and private primary schools in Kenya as a way of expanding the scope of the study. A further comprehensive study should be conducted to establish other factors that were not considered in this present study for generalizations. This study suggests that future research should be done to link the factors to school performance.

REFERENCES

- Abdullahi, A.O. (2019). School based factors influencing implementation of competency-based curriculum in public preschools in Garissa sub-county, Garissa County, Kenya. Unpublished thesis, University of Nairobi.
- Alanazi, A. (2019). Critical review of Constructivist Theory and the emergence of Constructionism. *African Research Journal of Humanities and Social Sciences*, 2, 1-8.
- Almendarez, L. (2013). Human capital theory: Implications for educational development in Belize and the Caribbean. Caribbean quarterly 59(4), 21-33.
- Asenahabi, B.M. (2019). Basic of research design: A guide to selecting appropriate research design. International journal of contemporary applied researches 6(5), 76-89.
- Becker, G. (1962). Investment in human capital: A theoretical analysis. Journal of political economy 70(5). 9-49.
- Byrne, J., Downey, C., & Souza, A. (2013). Teaching and learning in a competence-based curriculum: The case of four secondary schools in England. *The Curriculum Journal*, 24(3), 351-368.
- Chaudhuri, R. A., McCormick, D. R., & Jr, L. R. (2019). Standards-Based Science Institutes: Effective Professional Development that Meets Teacher and District Needs. *Science Educator*, 27(1), 15-23.
- Chege, L. M. (2014). Factors influencing teachers' readiness to use ICT in teaching in public secondary schools in Gatundu North District, Kiambu County, Kenya. Nairobi: University of Nairobi.
- Creswell, R. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* USA: SAGE Publications.
- Dailey, D., & Robinson, A. (2016). Elementary teachers: Concerns about implementing. School Science and Mathematics, 116 (3), 139-147.
- Dewey, J. (1916). *Democracy and education. An introduction to the philosophy of education.* New York: Macmillan.
- DiMaggio, P.J & Powell, W.W (2000). The iron cage revisited institutional isomorphism and collective rationality in organizational fields. Economics meets sociology in strategic management, 143-166.
- Down, B (1994). Human capital theory and secondary education. Unicorn 20(3), 54-61.

- Flick, U. (2015). Qualitative inquiry-2.0 at 20? Developments, trends, and challenges for the politics of research. *Qualitative inquiry* 21 (7), 599-608.
- Harris, E. (2017). How can Teachers put Competency-Based Curricula into Practice? *Journal of Initial Teacher Inquiry*, 3(12).
- Jippes, E., Luijk, S.J., Pols, J., Brand, P.L & Engelen, J.M. (2012). Facilitators and barriers to a nationwide implementation of competency-based postgraduate medical curricula: a qualitative study. *Medical teacher* 34 (8) 589-602.
- Kim, J. (2015). Competency-based curriculum: An effective approach to digital curation education. *Journal of Education for Library and Information Science*, *56*(4), 283-289.
- Kothari. C.R (2012). Research Methodology, 2nd Edition. New Delhi: New Age International Publishers.
- Makunja G. (2016). Challenges Facing Teachers in Implementing Competence-Based Curriculum in Tanzania: The Case of Community Secondary Schools in Morogoro Municipality. *International Journal of Education and Social Science*, 3(5), 23 - 33
- Marginson, S. (2019). Limitations of human capital theory. Studies in higher education 44(2), 287-301.
- Marion, D. (2020). Challenges experienced By Educators in the Implementation of Competency Based Curriculum Programme in Kenya: The Case of Primary Schools in Kenya (Unpublished Masters Project, the United States International University – Africa)
- Meyer, J.W. & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. American journal of sociology 83 (2), 340-363
- Molapo, M. R. (2018). Politicizing curriculum implementation: The case of primary schools. *South African Journal of Education, 38*(1), 1-9.
- Momanyi, J. M., & Rop, P. K. (2019). Teacher preparedness for the implementation of competency-based curriculum in Kenya: A survey of early grade primary school teachers' in Bomet East Sub-County. *The Cradle of Knowledge: African Journal of Educational and Social Science Research*, 7(1), 10-15.
- Mosha, H. J. (2012). Common core skills for lifelong learning and sustainable development in Africa: A case study of learning materials used to deliver knowledge and skills-or

competency-based curricula in Tanzania. A paper presented at the Triennale on education and training in Africa. Ouagadougou, Bukinafaso: ADEA.

- Mugabo L, Ozawa H., & Nkundabakura P. (2021). Science Competence-based Curriculum Implementation in Rwanda: A Multiple Case Study of the Relationship between a Schools' Profile of Implementation and its Capacity to Innovate. *African Journal of Research in Mathematics, Science and Technology Education*, 1-14.
- Nevenglosky, E. A., Cale, C., & Aguilar, S. P. (2018). Barriers to effective curriculum implementation. *Research in Higher Education Journal*, *36*, 1-31.
- Nyoni, C.N & Botma, Y. (2019). Implementing a competency-based midwifery Programme in Lesotho: A gap analysis. *Nurse education in practice* 34, 72-78.
- Ondimu, S. M. (2018). Teachers' preparedness for implementation of competency-based curriculum in private pre-schools in Dagoretti North Sub-County, Kenya. Nairobi: University of Nairobi.
- Rwigema, P.C & Andala, H. (2022). The influence of teacher related factors on the implementation of competency-based curriculum in Rwanda. A case study of public primary schools in Kicukiro District, Rwanda. *The strategic journal of business and change management* 9(1)16-30.
- Schreiber, M.L & Valle, B.E (2013). Social constructivist teaching strategies in the small group classroom. Small group research 44(4), 395-411.
- Scott, R. (2014). Institutions and organizations. Ideas, interests and identities. Journal of management 2 (3), 136-140.
- Sekaran, U. (2013). Research methods for business. John Wiley and Sons, Inc. 65.
- Sifuna, D (2012), Leadership in Kenyan Public Universities and the Challenges of Autonomy and Academic Freedom: An Overview of Trends Since Independence. *JHEA/RESA* 10(1).
- Sifuna, D. N & Obonyo, M. M. (2019). Competency Based Curriculum in Primary Schools in Kenya - Prospects and Challenges of Implementation. *Journal of Popular Education in Africa.* 3(7), 39 – 50.
- Silas, H.D. (2020). Teachers related factors influencing implementation of competency-based curriculum at lower primary in Luanda Sub-County, Vihiga county Kenya. Unpublished MBA project, University of Nairobi.

- Sitienei C. (2020). School Based Factors Influencing Implementation of CBC in Public Primary Schools in Kibera Sub-County, Nairobi City County, Kenya (Unpublished Masters Project, University of Nairobi, Kenya)
- Tahir, I. and Arif, B., 2016. Use of Technology in Pakistan Schools. *Pakistan Social Sciences Review*, 4(III), pp.155-167.
- Tan, E. (2014). Human capital theory: A holistic criticism. *Review of educational research* 84(3), 411-445.
- Venenglosky, E. A. (2019). Barriers to effective curriculum implementation. *Research in Higher Education Journal, 36.*
- Wongnaa, C.A., & Boachie, W.K. (2018). Perception and adoption of competency-based training by academics in Ghana. *International journal of STEM education* 5(1), 1-13.
- Woodwall, J. Scott-Jackson, W., Newham, T., & Gurney, M. (2009). Making the decision to outsource human resources. Personnel review 38(3), 236-252.

APPENDICES

APPENDIX I: STUDY QUESTIONNAIRE

SECTION A: BACKGROUND INFORMATION OF THE SCHOOL

1. The type of school:

Mixed day () Mixed Boarding () Segregated boarding ()

2. Age of school:

1 - 15() 16 - 30() 31 - 45() 46 - (60) 61 & above ()

3. Number of teachers:

5-10() 11-20() 21-30() 31 and above ()

4. Number of students:

0-100() 101-200() 201-300() 301-400() 401-500() 501-600() 601-700() over 701()

5. Level of education

Postgraduate () Graduate () Diploma () Certificate () Secondary ()

SECTION B: FACTORS DETERMINING IMPLEMENTATION OF CBC STRATEGY

The study seeks to know the factors that have affected the implementation of the CBC strategy in your school. To what extent do you agree with the following statements? (Please tick $\sqrt{}$ one response in each row)

INSTRUCTIONAL MATERIALS

To what extent do you agree with the following statements regarding instructional materials? (Please tick $\sqrt{}$ one response in each row)

5: Very Large Extent 4: Large Extent 3: Moderate Extent 2: Less Extent 1: Not at All

Statement	1	2	3	4	5
ICT infrastructure capacity is sufficient for CBC					
Teaching resources are readily available in good numbers					
Learning resources are available and sufficient					
The government provides teaching and learning resources in good time					

There are relevant instructional materials			
Teachers don't have to buy instructional materials			

AVAILABILITY OF TRAINED TEACHERS ON CBC

To what extent do you agree with the following statements regarding the availability of trained teachers on CBC strategy?

(Please tick $\sqrt{}$ one response in each row)

5: Very Large Extent 4: Large Extent 3: Moderate Extent 2: Less Extent

1: Not at All

Statement	1	2	3	4	5
There is good number of trained teachers on CBC					
Level of training of CBC teachers is appropriate					
Am satisfied with the current teachers on CBC					
The CBC teachers are well versed with the CBC system					
Teachers are happy with the training they received on CBC					
Training on CBC is readily available to all teachers					

PARENTS ATTITUDES

To what extent do you agree with the following statements regarding parent's attitudes towards implementation of CBC strategy?

(Please tick $\sqrt{}$ one response in each row)

5: Very Large Extent 4: Large Extent 3: Moderate Extent 2: Less Extent

1: Not at All

Statement	1	2	3	4	5
Parents are happy about the CBC system					
Parents are upbeat about the new CBC system					
Parents are cooperating about CBC implementation					
Parents encourage the students about the CBC system					
Parents are helping the pupils to see the positive side of the CBC					

PARTICIPATION IN STRATEGY FORMULATION

To what extent do you agree with the following statements regarding extent of teacher participation

in the implementation of the CBC strategy?

(Please tick $\sqrt{}$ one response in each row)

5: Very Large Extent 4: Large Extent 3: Moderate Extent 2: Less Extent

1: Not at All

Statement	1	2	3	4	5
Teachers are involved in policy formulation decisions					
Teachers are regarded as key stakeholders in policy planning					
Teachers are cooperating about CBC implementation					
Teachers involve parents adequately on CBC issues					
There is collaborative efforts by the government on CBC policy					

COMPREHENSIVE LEARNING ENVIRONMENT

To what extent do you agree with the following statements regarding the learning environment during the implementation of the CBC strategy?

(Please tick $\sqrt{}$ one response in each row)

5: Very Large Extent 4: Large Extent 3: Moderate Extent 2: Less Extent

1: Not at All

Statement	1	2	3	4	5
Learning environment is priority for all the stakeholders in the school					
Government is sufficiently ensuring environment is conducive					
Management of learners' conduct is easy to handle in the class					
Class environment is conducive for CBC implementation					
Learners' safety has been comprehensively tackled					

IMPLEMENTATION POLICY

Which of the following statements about your school do you agree with or disagree with about policy implementation?

5: Very Large Extent4: Large Extent3: Moderate Extent2: Less Extent1: Not at All

Statement		2	3	4	5
There is clear implementation policy on CBC					
There is political will on CBC implementation					
The community are very supportive about CBC implementation					
There are sufficient resources for the CBC implementation					
The implementation of the CBC is on track and according to the target					
All stakeholders are cooperating on CBC implementation					

Any other comments:

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END

APPENDIX II: LIST OF PUBLIC PRIMARY SCHOOLS IN UASIN GISHU COUNTY

No	Sub-County	Number of schools
1	Turbo	97
2	Kesses	120
3	Moiben	85
4	Kapseret	54
5	Soy	114
6	Ainabkoi	70
7	Total	540

Source: Ministry of education, Uasin Gishu County (2023)