



Impact of Situational Analysis on Implementation of Educational Innovations in Kenya: The Case of Competency Based Curriculum (CBC)

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Abstrak

Inovasi pendidikan tidak bisa dihindari di setiap masyarakat. Pergeseran sistem pendidikan dari 8:4:4 ke 2:6:3:3:3 (CBC) sedang berlangsung dan kurikulum baru menjadi pusat perhatian. Analisis situasi merupakan prasyarat untuk penerapan kurikulum baru yang efektif. Namun terdapat kesenjangan yang menghambat pelaksanaannya secara efektif. Tujuan dari penelitian ini adalah untuk menilai dampak analisis situasi terhadap implementasi CBC. Tujuannya adalah untuk menetapkan sejauh mana: sejauh mana penilaian kebutuhan kurikulum dilakukan terhadap KBK, sejauh mana intervensi yang diperlukan telah diambil untuk mengatasi temuan analisis situasi dan untuk mengetahui dampak penilaian kebutuhan kurikulum terhadap implementasi KBK. Metode dalam penelitian ini menggunakan tinjauan literatur empiris yang relevan yang meta-analisisnya dipandu oleh karya Ferrer (1998). Studi ini menetapkan bahwa analisis situasional dilakukan menjelang dispensasi kurikulum CBC namun masih ada beberapa kesenjangan yang perlu diatasi sebelum peluncurannya dan dukungan berkelanjutan jika diperlukan. Studi ini tentu akan memberikan kontribusi dengan menjelaskan isu-isu kebijakan mengenai teori dan praktik kurikulum di Kenya.

Kata kunci: Dampak Analisis Situasional, Implementasi Inovasi Pendidikan Di Kenya, CBC

Abstract

Educational innovation is inevitable in every society. A shift from 8:4:4 to 2:6:3:3:3 (CBC) system of education is ongoing and the new curriculum is taking a centre stage. Situational analysis is a prerequisite for an effective implementation of a new curriculum. However, gaps have been exhibited that are impediments to its effective implementation. The Purpose of this paper was to assess the impact of situational analysis on implementation of CBC. The objectives were to establish the extent: to which curriculum needs assessment were done towards CBC, to which necessary interventions have been taken to address the findings of the situational analysis and to find out the effects of curriculum needs assessment on implementation of CBC. This study reviewed relevant empirical literatures whose meta-analysis was guided by the work of Ferrer (1998). The study established that situational analysis was done towards dispensation of the CBC curriculum but some gaps remained that needed to be addressed before its roll out and continuous support where necessary. This study would necessarily illuminate on policy issues concerning curriculum theory and practice in Kenya.

Keywords: Impact of Situational Analysis, Implementation of Educational Innovations In Kenya, CBC

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1. INTRODUCTION

Curriculum is the means through which a nation endows its people with essential skills, knowledge and values and attitudes that enable them to be sufficiently prepared for individual's and national development agenda. Curriculum thus must fulfil the desires of the intended citizens and the country as envisaged (Johnston, 2020; Putri & Kalstum, 2022). In line with this requirement of curriculum orientation, and need to keep the curriculum in tandem with the social dreams like the sustainable development goals (SDGs) (Jacob-John et al., 2021; Wennersten et al., 2020). Curriculum reform has been thought to be urgent priority in Kenyan educational enterprise. The main aim of CBC is to emphasize the complex outcomes of learning process (i.e. knowledge, skills and attitudes to be applied by the learners) rather than mainly focusing on what the learners are expected to learn in the traditional subject centred curriculum design model (Ariani, 2020; GaGarbacz et al., 2015).

There are seven core competencies that a CBC graduate is expected to acquire namely: communication and collaboration; critical thinking and problem solving; Imagination and creativity; citizenship; learning to learn; self-efficacy and digital literacy (Blau et al., 2020; Maba, 2017).

Situational analysis is an essential stage in implementation of an educational innovation/change. It is the step one usually done to establish the following amongst other factors: that this type of information gathering is geared towards revealing the needs and feasibility of curriculum development undertaking which is intended. In so doing, needs of the learners and needs of the society are paramount (Anne Tansiongco & Ibarra, 2020; Rahdiyanta et al., 2019). Much information is collected by curriculum experts, educators, Government and Non-Governmental Organizations (NGOs), Employers, people, industrialists amongst others.

Kenya Institute of Curriculum Development (KICD,2016) carried out Curriculum needs assessment to ascertain the gaps exhibited in the 8:4:4 graduates and the requirements of a new curriculum project CBC, which in essence should meet the quality threshold expected by the Kenyan Society (Kelly et al., 2019; Silas, 2020). The assessment followed the educational reform Policy Paper of June 2015 that set a stage for educational change. The needs assessment is usually prerequisite to implementation of an educational innovation in the calibre of CBC. To date there is still confusion in the implementation of the JSS as evident in diverse fee structures in different schools of same categories including the public primary schools (Kirsch & Braun, 2020; Maison et al., 2020). CBC succinctly has the following goals to be met: to produce holistic individuals with competencies, values, knowledge and skills necessary to succeed in a highly competitive world. The objectives of CBC is to develop knowledge, skills and attitudes to prepare learners for future employment i.e. it guarantees learners' the room to choose what they want to learn, geared towards their career directions (Sulaiman et al., 2015; Wang & Degol, 2017). In view of these objectives, CBC requires the learners to identify learning opportunities and develop abilities to overcome obstacles in order to learn successfully. Once the learners acquire this competence, they will be able to build on prior learning and life experiences.

The reasons for shifting from 8:4:4 to 2:6:3: 3:3 system of education could be that the former is too much examination and teacher cantered as compared to the CBC is largely learner cantered, with self -paced learning. The manner of training serving teachers at the roll out stage of the CBC for a period of only two weeks was questioned by the Teachers' unions and more so the Kenya National Union of Teachers who are not only stakeholders in curriculum development process in Kenya but too are overlooking the quality issues of the curriculum process especially on matters affecting teachers' welfare, teachers training towards knowledge acquisition towards effectiveness of basic educational dispensation. The Purpose of this paper was to assess the impact of situational analysis on implementation of CBC.

2. METHODS

The map of various administrative locales of educational institutions in Kenya where CBC is being implemented is show in [Figure 1](#).



Figure 1. Map of Kenya Showing the Various Administrative Locales of Educational Institutions

The research involved review of 51 empirical literatures on curriculum needs assessment as a prerequisite to the operationalization of the Competency Based Curriculum (CBC). The study has utilized critical review of empirical literature, guided by the study objectives. The literature areas reviewed examined about the curriculum needs assessment a prerequisite towards effectiveness in the operationalization of the Competency Based Curriculum (CBC). The research methodology involved the use of meta-analysis through which the data from a number of independent studies that used different tools and approaches but addressing the same theme were utilized in order to determine the overall trends. The main reason for using the meta-analysis technique is to help in combining the results of a number of different reports addressing a single common theme in order to create a more precise estimate of an affect (Ferrer, 1998). The study adopted survey design and was underpinned by Dewey's Social-Constructivism Theory Some of the methods used by various researchers whose work were analysed include: Descriptive survey design; Descriptive statistics and Heckman Probit Model; Mixed method approach; Heckman Sample selective model; Focus group discussions; concurrent triangulation, Participatory and Epidemiological methods; Consensus model; Qualitative and quantitative approaches and Literature review design.

3. RESULTS AND DISCUSSION

Results

Establishment of the Extent to which Curriculum Needs Assessment were done Towards CBC

Situational analysis is in essence the first step in the process of dispensation of a new curriculum or educational innovation. It is usually done to find out the following critical issues amongst others: about the existing curriculum whether it meets the set societal goals, whether the current curriculum meets the requirements of imparting right knowledge, skills and attitudes amongst the learners; whether the teachers have correct knowledge, skills and attitudes to implement the new curriculum; whether the schools have enough infrastructure that will support the educational innovation, whether the new curriculum have published correct curricula materials (Mureneza & Ntombifikile, 2021; Wamalwa et al., 2019).

However Teachers Service Commission (TSC) reaction to the sentiment was to punitively react through undermining the role the national council of KNUT on curriculum development an quality education concerns by waging a personalized war against the former Secretary General a situation that witnessed his exit from the union through teacher mobilization to outvote him and bring into place weak leadership that cannot question the rationale behind a rushy implementation of an educational innovation to the magnitude of CBC. In the ensuing bad relationship between KNUT secretariat and the TSC, a good number of practicing teachers who for one reason or another never attended the compulsory two weeks training towards preparation for CBC implementation were interdicted by the TSC. Well the question of a rush in the implementation of CBC, though it could be noble idea towards skill development and knowledge that prepares the graduates for the job market, has also been a concern of Kenyan scholars like (Akala, 2019; Mwarari et al., 2020).

Previous study on a topic, in Kenya an account and progress to CBC Policy examines educational reforms and implementation, more specifically the new educational innovation in Kenya today (Olkishoo et al., 2019). On research topic, competency based learning curriculum for screening sustainable development (Ngwacho, 2019). Underscores the challenges that bedevilled CBC roll out in Kenya including gaps in schools' infrastructure, gaps in teachers' knowledge and skills in implementation of this new educational paradigms.

Previous study on teaching and assessment of Kenya's indigenous language in CBC: n Challenges and Way Forward (Njagi, 2020). In his study he maintains that implementation of CBC especially in regard to teaching of the indigenous languages is bedevilled by serious gaps, including lack of knowhow by the teachers to operationalize the teaching of the indigenous languages. His study recommends a more improved training for the teachers, improved formative and summative assessment arrangements and that are also gaps as to the methodology to be employed in delivery of the indigenous language content in the CBC programmes' gap in teacher training towards orientation of the CBC, the constitution 2010 and Vision 2030 and competency based approach. Previous study propose a pre-school teachers bottom-up curriculum change –invigoration and implementation in the context of CBC roll out in 2019 (Gichuru et al., 2021).

Situational instruction is a key component of the update model. The study findings indicated that: the proposed situational analysis was effective and received positive responses from the participants of the learning process. Other study on planning to reform CBC in undergraduate nursing education: a qualitative study is particular on need for training standardized medical professionals of the 21st century that require rigorous planning for successful implementation and reform towards quality is essential however, if it lacks planning and prominence it will inevitably fail (Mureneza & Ntombifikile, 2021). A study on reflection on science competence-based curriculum implementation in Sub-Saharan African Countries used qualitative study design in which critical literature review took place (Nsengimana et al., 2020). The findings were that: even though CBC has been introduced in

SAA countries the quality of education in regard to the science curriculum is still implemented in the traditional approach, consequently CBC is not addressing the socio-economic issues that it was basically intended to do at individual and national levels.

On Establishment of the Extent to which Necessary Interventions have been taken to Address the Findings of the Situational Analysis

Base on previous study competency based medical education (CBME) has emerged as core strategy to educate and assess next generation of physicians (Hawkins et al., 2015). This approach is basically-student/learner centered. Other study on an assessment of impact of situational analysis on implementation of CBC in Thailand's Public Primary Schools adopted a survey design in which 99 schools and 316 teachers were sampled for the study as the respondents (Wongthong & Nooiwong, 2023). Findings revealed that 5 key components of learners' competencies assessment, collaboration amongst others. Findings have implications on implementation of policy guidelines that will put into practices the CBC that meet the required threshold of expected quality.

Previous study on the rapid spread of CBE looked at necessary competence across learning engagement, work study experiences and into work careers CBE compel us to alter familiar pedagogical beliefs, attitudes and behaviors strengthening the limitations of the CBC worth adjusting and necessary motivational strategies to address the gaps so imminent in the CBE (Curry & Marcia, 2017). A study by previous study on a strategic design approach to art CBC art Education in Kenya collected data through interviews, observation checklist /guide, workshop exercises, Survey study design was adopted (Lunev & Petrova, 2022). The findings revealed that there were well structured strategic designs towards implementation of Art Education in CBC.

A study by previous study on Analysis of Education Reforms and Challenges in Kenya: A Historical perspective try to relate educational reforms in Kenya with those of countries such as Pakistan, Indonesia, Gambia, Benin, Malawi ,Tanzania, Uganda (Muricho, 2023). In the analytical study the researcher points out the challenges that characterize the CBC implementation in Kenya ,including lack of clear effective assessment strategy, unclear understanding of the CBC and antagonism over domiciling the Junior Secondary School (JSS) in primary schools ,gaps in teaching force, gap in curricula materials and lack of parental engagement, situations which bottlenecks the move towards attainment of the objectives of the CBC and also quality standards in the programs.

Previous study on exploring head teachers as street-level bureaucrats influencing implementation of CBC in Kenya adopted descriptive survey design in which interviews were administered to collect data both quantitative and qualitative data were collected (Bukuza, 2021). Quantitative data were analyzed using SPSS Computer software program version 22.0 while qualitative data collected through the interviews were analyzed using thematic approach. The study established that head teachers' bureaucratic approaches bottlenecks the implementation of CBC in schools.

In study entitled 'Policy reforms: A Case study for an independent inquiry of the problem adopted a concurrent mixed methods approach (Okumu, 2021). Findings demonstrated that head teachers have adopted coping mechanisms like rating resources, routinization, client interaction, by enforcing miss-processing of uniform and of cases that deal with issues of resource constraints. Implications for requirement for availing all the required material s and resources towards achievement of CBCObjectives.

There is study that influence of constructivist theory towards implementation of grade three CBC curriculum in public press-schools in Kisumu County, Kenya adopted a mixed methodology approach with a total sample size of 168 participants out of which 29 headteachers,28 panel heads,81 grade three learners and 29 Parents Teachers Association

members (Odongo, 2023). The study established that Group work pedagogical practice was limited to only 14.8% of the practicing teachers. Inadequacy of curricular materials and requisite infrastructure were reported amongst the participants. That 50% of the teachers were digitally compliant hence were able to use the Tablets that programmed for CBC programs effectively.

A study on the process and challenges of implementation of situational-based science curriculum within CBC approach in North Kivu-Educational Province, DRC adopted a descriptive survey design in which questionnaires, interview guide, Focused Group Discussions (FGDs) and document analysis were administered to collect data (Habimana & Mvikiyehe, 2020). Both quantitative and qualitative data were collected and analyzed accordingly. Findings revealed that unpreparedness of teachers for CBC implementation, lack of sufficient teacher supervisory support, lack of parental engagement. The findings have implications for multi-sectoral stakeholder support towards quality and effective operationalization of the CBC.

Base on previous study on situational analysis of teaching and learning of Medicine and Nursing Students at Makerere College of Health Sciences points out as to the reforms that characterize the Makerere College of Health Sciences (MCoHS) towards influencing the society therein. That medicine and nursing students to be equipped with best practices (Sarah et al., 2021). The assessment establishes practical gaps in the competencies of the MCoHS.

Previous study on secondary school teachers' implementation of CBC in Arusha Region, Tanzania adopted a descriptive survey design in which 8 participants gave an in-depth data in natural settings (Mussa & Muneja, 2015). Findings demonstrated that participants had limited understanding of the CBC and that they were happy with the teaching profession regardless of CBC challenges. That lack of engagement of teachers in the curriculum design and implementation, lack of curricula materials, inadequate teacher refresher courses towards retooling of the teachers bedeviled the implementation of the CBC educational initiatives.

The findings have implications on teacher trainers to provide relevant training opportunities towards sharpening their skills, knowledge and attitudes towards CBC delivery in schools. The Challenges established that CBC implementation was riddled with countless challenges including poor government support, shortage of teaching/learning materials, poor infrastructure, shortage of retooling opportunities for teachers, lack of follow up initiatives from curriculumists (Clark, 2022). The findings have implications of continuous stakeholder support for teachers' professional development, government to increase more support for teachers and schools towards CBC implementation effective and quality implementation framework for CBC.

On the Effects of Curriculum Needs Assessment on Implementation of CBC

Previous challenges in Northern Kenya on implementation of CBC and its effects on stability of education used mixed methods to explore teachers' views on implementation of CBC in Kenya (Hussen, 2023). A Close-ended Likert Questionnaire is administered to measure teachers' attitudes towards CBC. Snowball sampling techniques was used to get 53 teacher study participants and thematic analysis was applied to analyze the qualitative data.

Assessment of teachers competencies in evaluation of CBC among learners with special needs in Kenya established serious gaps in amongst teacher of special needs learners in regard to formative and summative assessment and hence recommends a need for training and continuous support for teachers of special needs schools to equip them with the right knowledge, skills and attitudes to sufficiently prepare them for the essential aspect of curriculum implementation-assessment both at formative and summative levels for special needs learners (Andiema, 2020). All these gaps were established during curriculum needs

assessment by KICD in 2016, however they have not been sufficiently addressed and hence are likely to have negative implications on the quality of assessment especially in the context of special needs institutions. These are part of the teething troubles that usually characterize implementation of new educational innovations. Scholars have addressed the topic challenges bedevilling implementation of CBC the challenges of which include: lack of sufficient teacher involvement, inadequate teacher training, gaps in learner assessment has been exhibited by practicing teachers, teachers are demotivated to attend training and development courses, gap in teaching and learning resources, lack of digital equipment in most schools, lack of awareness of parents/and guardians on the need to be engaged in the CBC (Amunga et al., 2020; Mwarari et al., 2020; Waweru, 2018).

A study by previous study on primary schools in Kenya: Prospects and challenges to implementation of CBC points out gaps in the roll out process of the educational innovation by maintaining that stakeholder involvement was indeed deficient and that Ministry of Education Science and Technology (MOEST) never created adequate framework for training of teachers and that the refresher course offered to the practicing teachers for merely two weeks was professionally inadequate for the roll out, a serious gap in schools' infrastructure, deficient published curricula materials and rigorous engagement of schools' Parent Teachers Association and Committees on matters pertaining schools' infrastructure and all that appertains to the requirements of the CBC with an intention towards efficiency in its operationalization (Sifuna & Obonyo, 2019).

Previous study on why change from 8:4:4 to CBC on a topic CBC in Kenya :reality on ground ,success, challenges and recommendations on implementation (Mwang'ombe, 2021). The researcher acknowledges the need to equip teachers with the right knowledge, skills and attitudes toward effectiveness in operationalization of the CBC. A study on the preparation of teachers for implementation of CBC in Kenya, showed that these critical educators on whom curriculum implementation largely anchors are ill-equipped towards effective dispensation of pedagogy in the new educational innovation in Kenya (Momanyi & P.K., 2020). This is based on the report by the KICD and Teachers Service Commission Teacher Preparation on implementation of CBC survey that showed that only 3% of teachers surveyed felt they were adequately prepared to handle CBC Curriculum, while 20% were not adequately prepared for CBC implementation.

Discussion

The findings established that curriculum needs assessments towards CBC were comprehensively done in regard to curricula materials, skills and knowledge and attitudes of the curriculum implementors, infrastructural development and facilities' situation, students' readiness for CBC. The study also established that gaps were found in curricula materials, infrastructure, stakeholders and students' readiness towards the CBC (Ng'eno, 2023; Olkishoo et al., 2019). That necessary interventions such as publishing curricula materials, curriculum piloting prior to roll out, organisation of training opportunities for curriculum implementers through refreshers courses were done however with certain limitations which raises eyebrows as to the effectiveness of implementation of the program, consequently a lot of questions have been raised as to how sufficient are the practicing teachers being prepared prior to the roll out of the CBC curricula and continual support to teachers (Sarah et al., 2021; Wongthong & Nooiwong, 2023). Also what is becoming apparent is that there is very limited financial support from the Government of Kenya through the Ministry of Education, Science and Technology and hence a constraint towards effectiveness in the implementation of CBC.

Moreover the question of infrastructure in regard to classroom spaces versus the number of enrolees like in the case of Junior Secondary Schools that were domiciled in primary schools is more than wanting. In brief these imminent gaps in the CBC

implementation process lives a lot to be desired as to whether the intended goals and objectives of the competencies will be met a case in point digital literacy being one of the 21st century literacy requirement towards quality education as defined by Sustainable Development Goal Number 4 on Quality Education would become a nightmare to achieve in the face of acute ICT infrastructural gaps (Ng'eno, 2023; Njagi, 2020).

The CBC implementation Kenya seems to be wanting with a lot of struggles and the teething troubles are biting deeply. The needs assessment findings revealed that 8:4:4 graduates lacked certain essential competencies including social life competencies, digital literacy, learning to learn, communication and collaboration amongst others which CBC would go a long way correcting. That CBC would be able to train holistic individuals to learn, to do and to become. That teachers needed to be trained towards acquisition of correct knowledge and skills towards dispensation of the CBC Educational curriculum either through pre-service and in-service and continuous support for these curriculum implementers become handy towards effectiveness in operationalization of the CBC educational program (Amunga et al., 2020; Mureneza & Ntombofikile, 2021). Curricula materials were to be developed towards the new educational paradigm through mass media production found at the KICD, publishing of new curricula material syllabi, teachers' guides, students' texts and other necessary curricula materials towards implementation of the CBC.

The public opinion and educationists agreed of the need to transit from 8:4:4 to CBC in light of the fact that the 8:4:4 is teacher centered, too much examination oriented, encourages too much competition amongst learners instead of creating collaboration and communication. That 8:4:4 encourage more of rote learning and cramming towards passing exams instead of emphasizing practical knowledge acquisition that could be applied in day-to-day lives of the pupils that these would be addressed by the CBC (Nsengimana et al., 2020; Waweru, 2018). In the light of the needs assessment findings, CBC is in process of implementation but with a lot of challenges including a serious gap in infrastructure in schools, a gap in curricula materials, a gap in manpower to implement for example the JSS, a gap in policy directions regarding fee structure for the JSS as such certain schools are charging too much fees because of lack of fees guidelines (Katam, 2020; Silas, 2020). The manner of training serving teachers at the roll out stage of the CBC for a period of only two weeks was questioned by the Teachers' unions and more so the Kenya National Union of Teachers who are not only stakeholders in curriculum development process in Kenya but too are overlooking the quality issues of the curriculum process especially on matters affecting teachers' welfare, teachers training towards knowledge acquisition towards effectiveness of basic educational dispensation.

The study topic of this magnitude is important to the society as it addresses the knowledge gap in the new educational dispensation in regard to the new innovation geared towards attainment of quality education within the framework of Sustainable Development Goal Number 4 on quality Education. The findings will go along address critical issues that if adequately addressed could bridge the gap between curriculum Theory and Practice in Kenya.

4. CONCLUSION

In conclusion, there is a need for more funding towards CBC by the Government if it is to meet the required quality threshold, need for mobilization of funds by the schools towards building of more infrastructures to bridge the gaps, need for recruitment and retooling of more teachers towards guaranteeing a success in the CBC implementation. That curriculum needs assessment was done by KICD in regard to the CBC and gaps to be addressed identified. That the gaps identified above have not been adequately addressed hence the implementation of the

CBC is bedeviled with a multiple challenge That CBC if well managed and implemented could go along solving the problem of structural unemployment whose magnitude has been too serious with the 8:4:4 system of education.

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