The Competency Based Curriculum Implementation: Appraisal from the Perspective of Teachers use of Resources

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ABSTRACT

Human development faces nowadays the challenges of knowledge society and requires a broadened educational approach sustained by the extension of the learning contexts. Competency-Based Education and Training which is an approach to teaching and learning more often used in learning concrete skills than abstract learning has been identified as the best curriculum that will empower the global community with skilled and competent individuals. The Ministry of National Education in Cameroon introduced the Competency-Based Teaching after the National Education Seminar held in Yaoundé in 2002 revealed an increase in the repetition rate of primary school children to the tune of 41%per an academic year which is far contrary to the expectations of the Jomtien Declaration of 2000. Since then the education family in the country has been investigating the best strategies amidst challenges in the implementation of the CBC. This study sought to appraise the implementation of the CBC from the perspective of teacher's use of resources.

The study involved a descriptive analytic research design. A literature review surveys scholarly articles, books and other sources relevant to a particular issue, area of research, or theory, and by so doing, providing a description, summary, and critical evaluation of these works.

From findings, it was realized that a majority of teachers are still to understand what the CBC is all about. It was realized that even for those who have a good knowledge of the CBC effective implementation is still a major challenge in most situations because of insufficient resources as well as lack of in-depth knowledge on how to use these resources. It is therefore very imperative for educational stakeholders to brainstorm and ensure that teachers are well apt with knowledge on the effective implementation of the CBC as well as making all required resources available.

It is only after this that we would be able to guarantee the effective implementation of the CBC as well as reaping the benefits thereof.

Keywords: Competency Based Curriculum, Resources, Curriculum Implementation

INTRODUCTION

Human development faces nowadays the challenges of knowledge society and requires a broadened educational approach sustained by the extension of the learning contexts. Therefore the educational purposes must reflect a responsive approach to the learning needs of the potential beneficiaries. Dealing with a new perspective of knowledge management in a global economy, education systems must evolve focusing on rethinking the teaching–learning process in order to prepare better individuals for meeting the changing social and economic demands

Changes in education may be due to a globally thinking but there must be a specific approach for each national education system regarding curriculum design and the specific involvement of the educational actors in the process of implementing innovation.

Competency-Based Education and Training which is an approach to teaching and learning more often used in learning concrete skills than abstract learning emerged in the 1970s in the United States of America. The Ministry of National Education in Cameroon introduced the Competency-Based Teaching after the National Education Seminar held in Yaoundé in 2002 revealed an increase in the repetition rate of primary school children to the tune of **41%**per an academic year which is far contrary to the expectations of the Jomtien Declaration of 2000. This was an indication that teaching methods and resources used in the schools were ineffective and little learning was taking place. To solve this issue, **Decision number 495/B/MINESEC/CAB of 30th August 2013** on the implementation of the new curricula of GTTCs (Government Teacher Training Colleges) describes the teacher as a reflective field practitioner, Law No 98/004 of 14 April 1998 to law down guidelines for Primary, Secondary and Teacher education stipulate that the teacher is the Principal guarantor of quality education. The teacher therefore has to be insightful in analyzing his professional practice and demonstrate evidence- based decision-making was introduced. He has to draw upon his professional knowledge to plan a course of action and determine goals that improve his practice and students' learning. He has to be an informed professional who avails himself of professional learning opportunities in order to examine critically new and emerging educational trends. The text therefore highlights four major competences of the teacher in four priority areas. These include; **Teaching, Communication, Education and Analysis and regulation**. Training to become a competency-based educator requires studying various teaching and learning theories that focus on learning outcomes (Gagne learning outcomes) with specific, measurable definitions of *knowledge, skills and learner behavior.* Competencies are a set of skills, knowledge and behaviors someone needs to have achieved in order to perform tasks, jobs or activities in the world of work. As such, an understanding of the various teaching resources and how to use it will pave the way for an effective and efficient implementation of the Competency Based Curriculum.

Despite the fact that the competence based curriculum has been implemented for some years now in Cameroon it appears that challenges related to CBC implementation have not been studied adequately. This is made evident by the scarcity of local scholarly literature on the subject. Studies which have been conducted focus more on how the competence based curriculum has been implemented in different subjects in secondary schools. In this regard, it was necessary to conduct a study on the use of resources by teachers in implementing the competence based curriculum and challenges teachers face in implementing the competence based curriculum in Cameroon.

PROBLEM STATEMENT AND OBJECTIVE
During the past decade, teaching concepts and resources have been in a state of transition. The dominance of the 'knowledge transmission' paradigm has decreased in favor of new paradigms, such as 'process-oriented' teaching and 'competency-based education' (CBE). This transition has triggered curriculum reforms in many institutions. Unfortunately, the development of learning materials for CBC, providing authentic learning experiences in a domain of competence, hasn't kept pace with these reforms. Consequently, teachers involved in curriculum implementation are expected to adopt new roles and materials or tools, in the effective use of resources in the teaching and learning process.

If the vision behind the competency based curriculum must be realized, then efforts to effective implementation are very indispensible. Effective Curriculum implementation relies on a number of factors. Teaching resources are a critical aspect of effective curriculum implementation. Considering the newness of this curriculum, it is important to appraise how teachers use resources for the implementation of the competency based curriculum. This study thus seeks to bring more light to the contribution and use of resources in the implementation of the competency based curriculum by teachers.

THEORETICAL AND CONCEPTUAL FRAMEWORK
The Competency based Approach in teaching and learning derives from some theories such as Vygotsky's Social Development theory and Constructivism theory of knowledge. These theories led some scholars to innovate teaching and learning activities to be constructed by learners

Social Development theory argues that social interaction preceded development; consciousness and cognition is the end product of socialization and social behavior. The originator of this theory was Lev Vygotsky (1896- 1934). Vygotsky's theory is one of

the foundations of constructivism. It asserts three major themes which are; the first theme is 'Social Interaction' which plays a fundamental role in the process of cognitive development. In contrast to Jean Piaget's understanding of child xx development (in which development necessarily precedes learning), Vygotsky feel social learning precedes development. He stated; every function in the child's cultural development appears twice; first, on the social level and later on the individual level. First, between people (intra psychological) and then inside the child (inter psychological) and then inside the child (intra psychological) (Vygotsky, 1978 p. 127) the second theme is 'More Knowledgeable Other' (MKO). MKO refers to anyone who has a better understanding or a higher ability level than the learner with respect to a particular task, processor concept. The MKO is normally thought of as being a teacher, coach or older adult but the MKO could also be peers, a younger person or even computers. The third theme is 'Zone of Proximal Development' (ZPD) which is the distance between a student's ability to perform a task under adult guidance and/ or with peer collaboration and the student's ability solving the problem independently. According to Vygotsky, learning occurs in this zone. Vygotsky focused on the connection between people and the social cultural context in which they act and interact in shared experiences. According to Vygotsky, humans use tools that develop from culture such as speed and writing to mediate their social environments. Initially children develop these tools to solve solely as social functional ways to communicate needs. Vygotsky believed that the interaction of these tools led to higher thinking skills. Many schools have traditionally held a transimissionist or instructionist model in which a teacher or lecturer transmits information to students' in construct Vygotsky's theory which promotes learning context in which students play an active role in learning. Roles of the teacher and students are therefore shifted as a teacher should collaborate with his or her students in order to help facilitate meaning construction in students.

Piaget (1976), states that the growth of knowledge is the result of individual constructions made by the learner's understanding. He contends that the correct state of knowledge in the past has changed. It is not a static instance: it is a process. It is a process of continual construction and reorganization. Piaget views constructivism as a way of explaining how people come to know about the world. He collected an extensive body of research of children's behavior and

witnessed children's behavior which then was used to create well supported inferences about the function of the mind. The theoretical assumption of constructivist teaching With regard to constructivist teaching, Jonassen (1990) enlisted the following theoretical assumptions: Knowledge is constructed out of sensual perspective experiences of the learner's constructive process in nature, Knowledge is a personal experience rather than the experiences of others. His internally represented knowledge becomes the basis of other structures of knowledge and a new cognitive structure of the person; Learning is an active process of developing meaning based on individual personal experiences. In other words, learning is a developing process by the learner understands of the real world, it comes from the premise that personal understanding results in various perspectives. The perspectives constructed within the individual cognitive conceptual structure attempts to share all possible various perspectives. vi. Learning creates knowledge in the context of a situational reality. Knowledge is the understanding of meaning through situational context not objective reality. In contrasting constructivist teaching from traditional teaching practice in the classroom, Kim (2005) states that traditionally learning has been thought to be nothing but a repetitive activity, a process that involves students imitating newly provided information in tests. The constructivist teaching practice on the other hand, helps learners to internalize and transform new information. Transformation of information occurs through the creation of new understanding that results from the emergence of new cognitive structures. Teachers may invite transformations but may neither mandate nor prevent them. Deep understanding is unlike the repetition of prescribed behavior, the act of transforming ideas into broader more comprehensive images which escape concise description.

Brooks and Brooks (1993) constructed five principles to guide classroom teaching and learning, which are the following; Posing problems of emerging relevance to students., Structuring learning around primary concepts; the quest for essence, Seeking and valuing student points of view, Adapting the curriculum to address students' suppositions, Assessing students learning in the context. Traditional instruction leads students to believe they are not interested in particular subject areas. The constructivist paradigm holds disinterest less as a function of a particular subject area than as a function of a particular subject area than

as a function of the ways in which students have been taught

Overview of Competence Based Education

Various appellations such as Competency Based Approach (CBA), also known as Competency Based Education (CBE), Competency Based Learning (CBL), Pedagogy of Integration, Performance Based Approach, Proficiency Based Approach, Mastery Based Approach or an Outcome Approach is associated with this new pedagogy (Ntongieh, 2016). Recent education reform introduced competence-based approach in secondary schools. This reform is prompted by the need to produce school leavers with capabilities in terms of knowledge, skills and attitudes useful for solving social and economic challenges of present society (Nkwetisama, 2012; Serdenciuc, 2013; Paulo and Tilya, 2014; Makunja, 2015;Nforbiand Siéwoué, 2015;Butova, 2015;Ntongieh, 2016). Competence-Based Education (CBE) is perceived to be desirable for aligning education provided to the dynamic social and economic demands of the society. It appears to be a panacea to the concerns raised about the capability and employability of the secondary school graduates as it emphasizes on the acquisition of knowledge, skills, attitudes and behaviors essential for effective performance of real world tasks (Maodzwa-taruvinga & Cross, 2012). The introduction of competence-based approach in secondary schools calls for comprehensive change in instructional approach in terms of teaching, learning and as well as resources used (Paulo and Tilya, 2014).

The revision process involves shift in paradigm from content-based to competence-based. The emphasis on competence-based education is due to the growing recognition of the need for development of capabilities and not just certification. This means that teaching and learning process has to change its orientation from rote memorization of content knowledge to acquisition of skills and competencies useful for solving real life problems (Woods, 2008; World Bank, 2011). CBC buttresses the application of knowledge in real life context as opposed to the content-based emphasizing students to memorize their lesson notes which was deemed crucial for passing examination, which often tests ability to recall memorized facts, knowledge and principles (Osaki, 2004).

Current competence-based education programs are characterized by learner-centred constructivist approaches to teaching and learning. Constructivism is based on the view that knowledge and skills are not products that can be transferred from teacher to learner; rather, they are the result of learning activities done by learners themselves individually or in groups(Tuxworth, 2011). Teachers are expected to use a variety of teaching strategies and resources that involve the learner. Learners are expected to be active and participate during lesson so as to construct knowledge, skills and attitudes. Piaget (1970) holds that the learner should play active role in learning. To him, knowledge construction takes place when new knowledge is actively assimilated and accommodated into existing knowledge.

With the CBA, the teacher is supposed to switch from the role of an expert who transfers knowledge to a coaching role, facilitating and guiding learning process (Biemans et al., 2004).Adjibi, Moussiliou, Briaud and Attikleme (2017) hold that in competency-based curriculum, skills are not taught but are built. The learner is necessarily the first actor in the construction of his skills. They equally advocate that learners are to participate in the evaluation of their learning so that the learner monitors the development of expected competences.

Learner-centred teaching strategies advocated for the implementation of competence-based curriculum in secondary schools include: role plays, problem solving, projects, case study, simulation, discussion, and outdoor activities. The advocated pedagogy for the implementation of the CBCC is considered to be time consuming. Thus, teachers complain that there is too much to teach within a short time (Tilya& Mafumiko, 2010).

On assessment, CBC emphasizes on use of formative assessment, focused on the prescribed competences. CBC expects teachers to assess students frequently using authentic assessment methods (Weddel, 2006; Paulo and Tilya, 2015;Makunja, 2015). Teachers are expected to use authentic assessment methods such as portfolios, classroom or field observation, projects, oral presentations, self-assessment, interviews and peer-assessment (Kitta& Tilya, 2010). Authentic assessment methods are more useful for competence-based curriculum than other forms of assessment because they provide opportunity for students to demonstrate the competencies they have mastered in real life or analogous situation. More importantly, teachers are required to change from norm referenced to criterion referenced judgment of learners' capabilities or competencies as supported by

Kouwenhoven (2013) who argued that in competence-based education, performance assessment is carried out by giving the learner a clearly defined task and a list of explicit criteria for assessing the performance or product. Criteria are often given in the form of rubrics that can be either analytic (specification of parts) or holistic (Paulo and Tilya, 2014).

In addition, a more formative assessment process done formally and informally before, during and after the learning process is usually advocated in competence-based education programs (Mulder, 2004). It is focused on both subject specific competences and key competences using authentic assessment methods and not conventional paper and pencil tests usually implored in content-based curriculum assessment. Authentic assessments engage students in tasks similar in form to the tasks in which students will engage in their life outside the classroom and probes for students' higher-order skills such as critical thinking and problem solving (Kouwenhoven, 2013). Further, assessment practice emphasizes on the provision of feedback which continuously, timely and constructively inform learners about the strength and weakness of their performance. Feedback is normally descriptive, directly linked to learning goals and pin point what is well done, what needs improvement and how to improve (Kitta& Tilya, 2010). Another important feature of assessment is that it should align with the curriculum which, in turn, is aligned to the standards, and that they measure learning in terms of how students perform, using as much as possible, a real-world situation.

Another characteristic of competency-based education is that it measures learning rather than time. Students' progress by demonstrating their competence, which means they prove that they have mastered the knowledge and skills (competences) required for a particular course, regardless of how long it takes. Competency-based learning allows us to hold learning constant and let time vary. This concurs with mastery learning theory (O'Sullivan and Burce, 2014). The psychology of individual differences is recognized in CBA. Different individuals have different learning styles and strategies; they take different amount of time to learn the same content. The main objective of the competency approach to education is not ranking the students, but teaching them to achieve their goals. This approach implements an attempt to increase the student's probability of success by providing various instructional routes, with focus on the one that suits

learners' personal learning style (Butova, 2015).

The implementation of CBCC in secondary schools is carried out sequentially. Sequential evaluation are generally formative, reason being that learners who do not demonstrate mastery of expected competences are given remedial lessons to enable them attain the expected competences while those who have developed the competences required are assigned enrichment activities. Formative evaluation and remediation is expected to be conducted repeatedly to permit learners develop competences. The same instruction is given at different times until learners acquire competences associated with the particular unit.

In summary, competency-based education is characterized by specific measurable competency statements: content is based on learner goals (outcomes/competencies), learner continues in program until demonstrates mastery, uses a variety of instructional methods and techniques geared towards targeted competencies, provide learners with immediate feedback and continuous assessment of performance and pace instruction to learner needs.

The concept of competency
De Ketele (1996) defines competence as a set of organized capacities (activities), which act on contents in a given category of situations in order to solve a problem. In this definition a competence is described as an ability to carry out a specified task or activity to predetermined standards of attainment. According to De Bueger-Vander (1996), competence refers to a state of being well-qualified to perform an activity, task or job function. Competency may be defined as the ability to do a particular activity to a prescribed standard, emphasizing what people can do rather than what they know (Cohen, 2005). When a person is competent to do something, he or she has achieved a state of competence that is recognizable and verifiable to a particular community of practitioners.

Naumescu, (2008) opines that competency can broadly be addressed to include among others: the performance of tasks, the management of a series of tasks, the ability to respond to irregularities and contingencies, the capacity to deal with the complexities of the workplace including taking responsibility and working with others, the ability to

put one's knowledge, skills and attitudes to new tasks

and to new situations, not putting aside respect of other human beings or tolerance of other values.

Pellerey (2001) holds that competency is not only the mastery of knowledge and methods, or the ability to manage them, but also the ability to integrate different kinds of knowledge, and to use them synergic ally. To be competent in an area implies the ability to mobilize one's own knowledge and to transform it into concrete doing. Competency is an individual characteristic and is built (through self-experience and formation) in a given field and in a given area. It includes the content of the learning process as well as the context where it happens and the ability to apply the grasped content (Coggi, 2002). Organization for Economic Cooperation and Development (OECD) hold a similar view as the latter authors. It defines competency to be more than just knowledge and skills. It involves the ability to meet complex demands, by drawing upon and mobilizing psychosocial resources (including skills and attitudes) in a particular context.

Rychen& Salganik (2003); González & Wagenaar, (2005); Koster& Dengerink, (2008) state that the concept of competence has features which include: tacit and explicit knowledge, cognitive and practical skills, it enables teachers to meet complex demands by mobilizing psycho-social resources in context, deploying them in a coherent way, it empowers the teacher to act professionally and appropriately in a situation, it helps ensure teachers' undertaking of tasks effectively and efficiently, and it can be demonstrated to a certain level of achievement along a continuum.

Competency actually is a fairly complicated concept and involves different attributes. These attributes are knowledge, skill, attitude, tasks, ethics and values. A competence is best described as complex combination of knowledge, skills, understanding, values, attitudes and desire which lead to effective, embodied human action in the world, in a particular domain (Deakin, 2008).

Pedagogical competence defined as "the ability of an individual to use a coordinated, synergistic combination of tangible resources (e.g. instruction materials such as books, articles, and cases and technology such as software and hardware) and intangible resources (e.g. knowledge, skills,

experience) to achieve efficiency and/ or effectiveness in pedagogy" (Madhavaram, Laverie, 2010, p. 5).

Teacher Use of Instructional Resources

Instructional resources are educational inputs that facilitate the implementation of curriculum. They are materials which the teacher uses to make conceptual abstraction more concrete and practical to the learner (Chijoke and Allegoa, 2014; Chen and Wei, 2015). Instructional materials could be regarded as the information dissemination devices used in the classroom for easy learning. Chijioke (2014) holds that the use of instructional materials promotes closer and effective communication between teacher and learners. Thus, instructional materials provide teachers with interesting platforms for conveying information that motivate learners, helps the teacher to overcome physical difficulties, create reality and supply events as well as encourage active participation of learners.

Classification of instructional materials

Different instructional materials are available for teaching chemistry. These materials are grouped differently. Chijioke (2014) classifies it as

➢ Audio or aural aids; which are those devices that make use of the sense of hearing only, such as radio, audio tape recording and television.
➢ Visual instructional materials; the devices that appeal to the sense of sight only, such as the chalkboard, chart, slide, and filmstrip.
➢ Audio-visual aids; a combination of devices which appeal to the sense of both hearing and seeing, like television, motion picture and computer.
➢ Printed materials; include textual materials such as magazines, newspapers, journals as well as programmed learning materials that students read and memorize for understanding of science concepts. Another common classification of instructional materials is into projected or electronic materials; no projected, materials and manipulative materials (Iwu, Ijioma, Onoja&Nzewuihe, 2011)

Instructional materials are derived from various sources. Chijoke (2014) hold some are purchased, others are made locally or even improvised. Whatever the source of the instructional material, the most important factor for its successful utilization is a function of the teacher's competence. Instructional

materials are not ends in themselves but means of attaining specific instructional functions. The ability of the teacher to effectively utilize the available instructional materials optimizes the attainments of instructional competence(s).

Selection or development of any instructional resource should take into consideration a given number of variables in the teaching/learning situations. The instructional objectives, content, evaluation instruments, the age, level, interest, background, learning style, physical skills, size of the target audience, the classroom social climate, sitting arrangement, viewing and listening arrangement, available time, space, are amongst other issues that should be seriously considered in the selection and development of instructional materials for use in chemistry lesson delivery (Olawale , 2013).

Educational resources utilization is very important in curriculum implementation. Learning would be difficult to lead to permanent change of behavior without the use of adequate instructional materials in teaching process. According to Saidu and Saidu (2014), to implement curriculum, requires trained teachers that are capable of delivering content with relevant and adequate educational materials. Instructional materials assist in this regard through engaging students in learning by doing as one of the best methods of teaching. Students easily remember what they do and easily forget what they are told. Using teaching material during teaching, appeals to more than one sense of the learner. Hence learning is more meaningful with use of multiple senses by the learner. Saidu and Saidu (2014) observe that all lessons require good use of instructional materials to enhance student recall. Furthermore, absence of any material facility can constitute a big barrier to learning. Instructional materials can make communication effective and lead to good performance of students.

Williams (2009) observes that a teacher that cannot communicate well, cannot teach well, cannot teach well. This is because teaching has to do with proper communication between students and teachers and is made concrete with the aid of teaching materials. Instructional materials compress and express information and make them more vivid to learners.

A systematic integration of variety of resources in a teaching-learning process produces appropriate learning experiences, which in turn results in effective and meaningful learning. In line with this view Igwe, (2015) hold that curriculum materials are indispensable in the teaching-learning process but unfortunately, he regrets the lack of instructional materials in most Nigeria secondary schools and as a result, teacher uses the talk and chalk method. The scenario of talk and chalk seems to be the most prevalent method of teaching adopted by chemistry teacher as observed by the researcher.

According to Cohen (2004) there is need to ensure that curriculum and assessment are aligned. He says that to achieve the alignment, educators must consider developing appropriate instructional materials to support learning activities including textbooks, workbooks, charts, three-dimensional models, simulations, puzzles, games, and many other items. In addition, teachers will need to be trained on how to use the new materials since the methodology of competency-based curriculum requires shifting from teacher-centered to student-centered approaches. Nkwetisama (2012) concurs that extensive use of texts, media, and real life materials and others adapted to targeted competencies should be implored in teaching. In addition he advocates the use of variety instructional techniques and group work. The CBCC advocates the use of variety methods in teaching. The central focus during teaching is the active participation of the learner. Therefore, learner centred methods should to implore by teachers. On a whole, learner centred approach is activity based pedagogy which demands lots of instructional materials.

There is a need to place greater emphasis on the correct use of multiple materials when describing and explaining chemical phenomena during classroom instruction (Chandrasegaran at al., 2007). The benefits of using instructional materials on students are enormous. Chijoke (2014) hold that instructional materials when used appropriately by teacher enable students of science to develop positive attitude, enjoy and appreciate subject, develop functional knowledge and manipulative skills, visualize or experience something, facilitate different learning styles, stimulate learners interest and curiosity, reduce verbalism or repetition and possess opportunities for individual study.

Despite the numerous benefits of using instructional materials, Iwu, Ijioma, Onoja& Nzewuih (2011) and Okeke & Okoye (2013) hold that there are some problems that inhibit the use of instructional materials. Some of the problems highlighted by these researchers include: inadequate teachers' professional knowledge and technical know-how, low teacher competence in the area of effective instructional resource utilization, insufficient awareness of types of instructional materials for use in teaching different contents, insufficient time allocation to accommodate effective instructional materials utilization, lack of finance to acquire or improvise needed instructional materials, non-availability of equipped library, laboratories, workshops, water supply, electricity and personnel also affects effective utilization of instructional materials, lack of opportunities for in-service training/refresher course for serving science teachers to update their knowledge periodically in the light of new research findings and resource development.

Selection or development of any instructional resource should take into consideration a given number of variables in the teaching/learning situations. The instructional objectives, content, evaluation instruments, the age, level, interest, background, learning style, physical skills, size of the target audience, the classroom social climate, sitting arrangement, viewing and listening arrangement, available time, space, are amongst other issues that should to be seriously considered in the selection and development of instructional materials for use in lesson delivery (Olawale , 2013).

Educational resources utilization is very important in curriculum implementation. Learning cannot lead to permanent change of behavior without the use of adequate instructional materials in teaching process. According to Saidu and Saidu (2014) to implement curriculum requires trained teachers that are capable of delivering content with relevant and adequate educational materials. Instructional materials assist in this regard through engaging students in learning by doing as one of the best methods of teaching. Students easily remember what they do and easily forget what they are told. Using teaching material during teaching, appeals to more than one sense of the learner. Hence learning is more meaningful with use of multiple senses by the learner. Saidu and Saidu (2014) observe that all lessons require good use of instructional materials to enhance student recall. Furthermore,

absence of any material facility can constitute a big barrier to learning. Instructional materials can make communication effective and lead to good performance of student. Williams (2009) observes that a teacher that cannot communicate well, cannot teach well. This is because teaching has to do with proper communication between students and teachers and is made concrete with the aid of teaching materials. Instructional materials compress and express information and make them more vivid to learners.

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METHODOLOGY
The present study involved a descriptive analytic research design. A literature review surveys scholarly articles, books and other sources relevant to a

particular issue, area of research, or theory, and by so doing, providing a description, summary, and critical evaluation of these works. Literature reviews are designed to provide an overview of sources you have explored while researching a particular topic and to demonstrate to your readers how your research fits into the larger field of study. This study has surveyed and described literature relating to competency based curriculum, implementation and the use of resources by teachers.

FINDINGS

The competency based curriculum has come to savage the seemingly insurmountable challenge of porous curriculum in our schools. For the goals of education to be achieved in a nation, the role of the teacher, the main curriculum implanter in the teaching /learning process is very vital. This becomes a reality through effective teaching and pleasant learning as basic means to nurture productive citizens. The multidinous professional roles and qualities of the teachers blend to make up an effective teacher. When a good teacher brings his abilities and visions for a better society to bear on his teaching, he or she shall become a unique and responsive professional who will continually see himself or herself accountable for the educational progress and failure of the youths entrusted into their hands. Resources management and use in this process of curriculum implementation are paramount to the realization of goals of every educational system or curriculum.

The success of the competency based curriculum centers around the effective and efficient use of resources

From literature we found out that a systematic integration of variety of resources in a teaching-learning process produces appropriate learning experiences, which in turn results in effective and meaningful learning especially within the CBC. In line with this view, Igwe (2015) hold that curriculum materials are indispensable in the teaching-learning process but unfortunately he regrets the lack of instructional materials in most Nigeria secondary schools and as a result teacher use the talk and chalk method. The scenario of talk and chalk seems to be the most prevalent method of teaching adopted by teachers in the process of implementing a curriculum as observed by the researcher.

Educational resources utilization is very important in curriculum implementation. Learning cannot lead to permanent change of behavior without the use of adequate instructional materials in teaching process. According to Saidu and Saidu (2014) to implement curriculum requires trained teachers that are capable of delivering content with relevant and adequate educational materials. Instructional materials assist in this regard through engaging students in learning by doing as one of the best methods of teaching. Students easily remember what they do and easily forget what they are told. Using teaching material during teaching, appeals to more than one sense of the learner. Hence learning is more meaningful with use of multiple senses by the learner.Saidu and Saidu (2014) observe that all lessons require good use of instructional materials to enhance student recall. Furthermore, absence of any material facility can constitute a big barrier to learning. Instructional materials can make communication effective and lead to good performance of student. Williams (2009) observes that a teacher that cannot communicate well, cannot teach well. This is because teaching has to do with proper communication between students and teachers and is made concrete with the aid of teaching materials

Instructional materials are not ends in themselves but means of attaining specific instructional functions. The ability of the teacher to effectively utilize the available instructional materials optimizes the attainments of instructional competence(s).From the literature, it is realized that must teachers do face the challenge of effectively managing teaching resources placed at their disposal.

Selection of instructional materials for a particular teaching activity has been a major challenge to a number of teachers. Thus hampering the smooth and Effective implementation of the CBC. Selection or development of any instructional resource should take into consideration a given number of variables in the teaching/learning situations. The instructional objectives, content, evaluation instruments, the age, level, interest, background, learning style, physical skills, size of the target audience, the classroom social climate, sitting arrangement, viewing and listening arrangement, available time, space, are amongst other issues that should be seriously considered (Olawale , 2013).

Educational resources utilization is very important in curriculum implementation. Learning would be difficult to lead to permanent change of behavior teachers that are capable of delivering content with relevant and adequate educational materials. Instructional materials assist in this regard through engaging students in learning by doing as one of the best methods of teaching. Students easily remember what they do and easily forget what they are told. Using teaching material during teaching, appeals to be more than one sense of the learner. Hence learning is more meaningful with use of multiple senses by the learner. Saidu and Saidu (2014) observe that all lessons require good use of instructional materials to enhance student recall .This has been a serious concern based on this study. We have been informed that teachers need to do more in terms of resources selection and management. Furthermore, absence of any material facility can constitute a big barrier to learning. Instructional materials can make communication effective and lead to good performance of students.

Williams (2009) observes that a teacher that cannot communicate well, cannot teach well. This is because teaching has to do with proper communication between students and teachers and is made concrete with the aid of teaching materials. Instructional materials compress and express information and make them more vivid to learners.

Despite the numerous benefits of using instructional materials as revealed from literature, Iwu, Ijioma, Onoja& Nzewuih (2011) and Okeke& Okoye (2013) hold that there are some problems that inhibit the use of instructional materials. Some of the problems highlighted by these researchers include: inadequate teachers' professional knowledge and technical know-how, low teacher competence in the area of effective instructional resource utilization, insufficient awareness of types of instructional materials for use in teaching different contents, insufficient time allocation to accommodate effective instructional materials utilization, lack of finance to acquire or improvise needed instructional materials, non-availability of equipped library, laboratories, workshops, water supply, electricity and personnel also affects effective utilization of instructional materials, lack of opportunities for in-service training/refresher course for serving science teachers to update their knowledge periodically in the light of

without the use of adequate instructional materials in teaching process. According to Saidu and Saidu (2014), to implement curriculum, requires trained new research findings and resource development.

From the CBCC and the sample lessons contained in the chemistry teachers' guide, one can easily discern that chemistry is activity based pedagogy. Therefore, the use of instructional is inevitable if chemistry lessons are to be successfully implemented and the expected competence(s) developed.

Conclusion

Curriculum implementation remains a pivot in the realization of each curriculum goals. The Competency Based Curriculum is indispensible in a society like ours. Efforts to effective an effective implementation of the CBC should be given maximum consideration.

Literature from this study reveals the importance of this paradigm shift in curriculum thought and engineering. The world has become a global village with virtually high level competition everywhere. Efforts to focus on a productive and sustainable curriculum are indispensible. Despite these efforts, curriculum implementation is still a major concern at all levels. Some of the key challenges revealed by literature include but not limited to

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